Pension Reform in Central and Eastern Europe

in times of crisis, austerity and beyond

Edited by
Kenichi Hirose

ILO DECENT WORK TECHNICAL SUPPORT TEAM AND COUNTRY OFFICE FOR CENTRAL AND EASTERN EUROPE

Hirose, Kenichi

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Foreword

A decade after major structural reforms, pension reform has again become a burning issue in Central and Eastern Europe.

Indisputably, social security systems have played an important role in mitigating the adverse impact of the global economic crisis on the population. However, social security systems – notably pension systems – in Central and Eastern Europe are under pressure of short-term financial consolidation due to budget constraints resulting from the global economic crisis. In addition, ageing populations pose a structural challenge for their long-term financial sustainability.

Facing these challenges both in the short and long term, countries in Central and Eastern Europe have undertaken pension reforms. These reforms aim to make the systems sustainable in the long run while fulfilling their essential function of providing adequate income protection in case of old age, invalidity or death of the breadwinner.

The ILO has actively promoted appropriate policies and provided its member States with technical assistance in improving and expanding the coverage of social security for all men and women. Recently, the ILO has intensified its efforts to achieve universal social security coverage with at least a minimum level of protection. At its 100th Session in June 2011, the International Labour Conference affirmed the need to adopt a possible Recommendation that would provide guidance in building Social Protection Floors within comprehensive social security systems.

This volume reflects the work and findings of the research project led by Mr Kenichi Hirose, Senior Specialist in Social Security of the ILO Decent Work Technical Support Team and Country Office for Central and Eastern Europe, with support from the Social Security Department of the ILO. The project analyzes the recent pension reform experiences of eight countries: Bulgaria, Croatia, the Czech Republic, Hungary, Poland, Romania, the Slovak Republic and Slovenia.

The national reports were presented at the Sub-regional Experts Meeting on Pension Reform in Central and Eastern Europe, organized jointly by the ILO and the Institute of Labour and Social Studies of Poland on 6–7 October 2011 in Warsaw. The meeting brought together pension experts from the Institute, the European Commission, the ILO, the Organisation for Economic Co-operation and Development (OECD) and the World Bank, as well as representatives of the social partners who are actively working on pension reform. The comments received at the meeting have been reflected in this final publication.

We trust that this publication, and its unique body of information on policies and quantitative facts, will be a valuable reference for those concerned with the development of better pension systems both now and in the future.

Michael Cichon
Director
Social Security Department
Geneva

Mark Levin
Director
ILO Decent Work Technical Support Team and Country Office for Central and Eastern Europe (ILO DWT/CO–Budapest)
Budapest

Introduction and acknowledgement

This book is organized in two parts. Part I reviews the recent trends in pension reform in Central and Eastern Europe and discusses the key issues related to pension reform in general, focusing in particular on the future direction of pension reforms in Central and Eastern Europe. Technical and statistical annexes supplement Part I with explanations of technical issues and detailed actuarial and statistical analyses.

Part II comprises the case studies of Bulgaria, Croatia, the Czech Republic, Hungary, Poland, Romania, the Slovak Republic and Slovenia. These national reports review the performance of the current pension systems, in particular during the global economic crisis, outline recent reform experiences, and highlight the long-term challenges facing these countries. In addition to the issues of benefit adequacy and financial sustainability, particular attention is given to the problems associated with undeclared work and the importance of social dialogue in the process of pension reform.

This publication is indebted to the authors of the national reports. This book would not have been possible without their professional input.

I would like to acknowledge and express my appreciation to the following persons for their valuable contribution in the preparation of this publication:

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- Eva Mihlic, ILO DWT/CO-Budapest Programme Assistant, who provided administrative support throughout the project; Oxana Perminova, ILO DWT/CO-Budapest Statistical Assistant, who provided statistical and editorial assistance in finalizing this book; Athena Bochanis, who edited and proofread the book; and, Tine Stanovnik, who provided technical comments on all parts of the manuscript.

Kenichi Hirose
Senior Specialist in Social Security
ILO Decent Work Technical Support Team and Country Office for Central and Eastern Europe
Budapest, Hungary

About the authors

Overview and Hungary (Editor)

Kenichi Hirose has been working in the Decent Work Technical Support Team and Country Office for Central and Eastern Europe in Budapest since 2008. As the Senior Specialist in Social Security, he is responsible for the areas of social security, in particular pension reform, as well as occupational safety and health. Prior to this assignment, Mr Hirose worked as Senior Social Protection Specialist in the ILO Sub-regional Office in Manila (2002–2008), and as Actuary in the Social Security Department of the ILO Headquarters in Geneva (1994–2002). Before joining the ILO, he worked for the Office of the Prime Minister of Japan and for the Ministry of Health and Welfare of the Government of Japan.

Mr Hirose holds a MSc. in Economics from the London School of Economics and a B.S. in Mathematics from Kyoto University.

Bulgaria

Antoaneta Gancheva is Chief Actuary of the National Social Security Institute of Bulgaria (2009–present). She served as an actuary of the National Social Security Institute from 2002 to 2009. Ms Gancheva has a degree in Informatics from Varna University. She also holds a specialized diploma in Actuarial Sciences and Their Application in Insurance, Pensions and Investment Management from the Bulgarian Actuarial Society (2007). She has been a member of the Bulgarian Actuarial Society since 2002.

Croatia

Snježana Baloković works for the Labour and Entrepreneurship Department of the Ministry of Economy of the Republic of Croatia. She is responsible for the coordination of social security schemes and the implementation of EU projects. She was the Project Leader and Project Manager on the 2009 IPA Twinning Project "Strengthening the administrative capacity of competent authorities and implementation agencies for co-ordination of social security schemes". She also served as Secretary of the Permanent Inter-institutional Group for Co-ordination of Social Security Schemes. She is an observer of the Technical Commission within the EC Administrative Commission, a coordinator for the preparation for the EESSI, a member of the Working Group for the preparation of the negotiation process between the Republic of Croatia and the EU for the freedom of movement for workers, a member of the Working Group for the Joint Memorandum on Social Inclusion for the Republic of Croatia, a member of the Working Group for legislative changes for pension insurance, a Deputy member of the Steering Committee of the CARDS Regional Programme for the South Eastern European Countries "Social Institution Support Programme" (SISP), and a member of the Steering Committee for the IPA 2008 Regional Programme on "Social Security Co-ordination and Social Security Reforms in South East Europe". She is the author of a number of social security-related publications.

The Czech Republic

Jan Skorpik is a social protection expert with specializations in pensions and sickness insurance. He serves as the Head of the Actuarial Unit in the Social Affairs Insurance Department of the Czech Ministry of Labour and Social Affairs, where he is responsible for pension system projections and social insurance system analyses. He was a member of the Pension Expert Group (the Bezděk commission) responsible for analyzing the parliamentary pension reform proposals in 2004–2005.

He serves as the Czech representative on several EU committees, including the Indicators' Sub-Group (ISG) of the Social Protection Committee (SPC) Working Group and the AGE Platform. He cooperates with international organizations such as the OECD, the ILO and the IMF. He is also a consultant for the World Bank.

Marek Suchomel is a junior member of the Actuarial Department of the Czech Ministry of Labour and Social Affairs. He specializes in the analysis of the Czech pension system, both in its current state and in its short- and long-term projections, specifically from a microeconomic perspective. Mr Suchomel graduated from the University of Economics in Prague with a Masters in Finance (M.Fin.). In 2010 he collaborated with the Expert Advisory Forum (the second Bezděk commission), and he contributed to the preparation of the Czech pension reform in 2011.

Poland

Zofia Czepulis-Rutkowska is the Director of the Social Policy Office in the Chancellery of the President of the Republic of Poland. She is also a senior researcher at the Institute of Labour and Social Studies. Her work focuses on social security, specifically on old-age pension systems, invalidity pension systems, and long-term care systems. For several years she served as the Director of the International Cooperation Department for the Social Insurance Institution. She has also served as a lecturer of social policy in the College of Insurance and Banking.

Romania

Catalin Ghinararu is the Scientific Secretary of Labour and Social Protection for the National Research Institute of Romania (INCSMPS) (2001–present). Dr Ghinararu's experience and interests range from pensions and employment policies to macroeconomics, undeclared work and economic history. He is the author of Romania's latest UNDP Human Development Report (2007) and of the country's first compendium of Social Protection Indicators (2007). Dr Ghinararu serves on the SYSDEM network of independent employment experts of the European Employment Observatory (2003–present), and works actively in forecasting the supply and demand for workers' skills with the CEDEFOP Centre of the European Commission (2005–present). He also serves as the Representative of Romania for the Social Sciences and Humanities Committee of the FP7 Program of the European Commission. He has written for the ILO and the OCED-Development Centre on numerous occasions.

Prior to 2007, Dr Ghinararu contributed to several policy papers in the process of Romania's accession into the EU. Since 2009, he has worked on Romania's Memorandum of Understanding (MoU) with the IMF, the World Bank and the EU Commission, as well as on the Integrated Mechanism for the Prevention and Combat of Undeclared Work. Between 2004 and 2010, on behalf of the INCSMPS and jointly with the National House of Public Pensions (CNPP), Dr Ghinararu coordinated the national recalculation process for pensions granted prior to April 2001.

Dr Ghinararu holds a Ph.D. in economics from the Academy of Economic Studies (ASE) in Bucharest. He has also attended courses at Ohio State University and with the ILO (on modeling pensions).

The Slovak Republic

Miloslav Hetteš is a university lecturer (on Applied Social Policy, Social Services Management and Organization, Employment Policy, Social Entrepreneurship, and CSR) at St. Elizabeth University of Health and Social Works in Bratislava and the University of Trnava in Trnava, Slovakia. Dr Hetteš is currently the governmental advisor on the Social Protection System for the Republic of Srpska in Bosnia and Herzegovina. Recently he also served as the twinning project team leader on Labour Law in the Former Yugoslav Republic of Macedonia.

Dr Hetteš was formerly a Director General at the Ministry of Labour, Social Affairs and Family of the Slovak Republic (MOLSAF) (2006–2010). He directed the Division of International Labour and Social Policy. He participated in the pension reform, in the coordination of social security schemes, and in the implementation of the free movement of workers and pre-accession issues. Prior to that, Dr Hetteš was the Deputy Permanent Representative of the Permanent Mission of Slovakia to the United Nations (1997–1999). He managed the areas of UN economic, financial, and sustainable development, as well as developmental cooperation. He was the Chairman of the UNECE Working Group on Ageing in Geneva, and was Vice-Chairman of the UN Committee on Social Development and the UN Committee on Sustainable Development in New York.

Dr Hetteš holds a Ph.D. in Human Geography and a post-baccalaureate degree in Demography. He has undertaken additional training courses at the UN (New York), with the Japan International Cooperation Agency (Japan), with the ILO (Turin), with the Council of Europe (Strasbourg), and with the European Commission (Brussels, Copenhagen, Hague, Madrid, and Stockholm).

Slovenia

Tine Stanovnik is Professor of Economics at the University of Ljubljana and research fellow at the Institute for Economic Research. He has been actively engaged in a number of ILO research projects, the following of which have been published by the ILO: "The Political Economy of Pension Reform in Slovenia" (in Pension reform in Central and Eastern Europe, vol. 2, 2002), "Combating Poverty and Social Exclusion – A Case Study of Slovenia" (co-authored with Nada Stropnik, 2002), and "The Gender Dimension of Social Security Reform in Slovenia" (co-authored with Natasa Kump and Mitja Cok, in The Gender Dimensions of Social Security Reforms, vol. 2, 2006). He also was the co-editor, with Elaine Fultz, of "Collection of Pension Contributions" (2004).

Dr Stanovnik was a Fulbright scholar for post-doctoral studies at the Institute for Social Research in Ann Arbor (1989–1990) and at Drury University in Springfield (1998–1999). He has also served as a consultant for the World Bank and the IMF.

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Part I

Overview

1. Trends and key issues of the pension reform in Central and Eastern Europe – a comparative overview

Kenichi Hirose[1]

1.1. Pension reform trends in Central and Eastern Europe since the 1990s

1.1.1. The situation at the beginning of 1990s

In Central and Eastern Europe (CEE), the need for pension reform emerged during an era of transition from a centrally planned economy towards a market-oriented one.

In the early 1990s, the national pension systems of the CEE countries had the following characteristics:

- The systems were providing low and nearly flat-rate pensions. There were small differences between the minimum pensions and the maximum pensions.
- The systems generously recognized non-contributory periods in the calculation of pensions and the practice of early retirement was widespread.
- Several groups of workers with privileged rights benefited from favourable conditions in terms of the pensionable age and the pension calculation.
- Compliance with social security systems was deteriorating due to the economic challenges that State-owned enterprises faced during the transition, and the rise in small businesses and self-employment.
- There were no clear lines of demarcation between the State budgets and the budgets of the social security systems.
- The systems applied high contribution rates as compared to Western European countries.
- Benefit levels deteriorated over time in the absence of indexation mechanisms.
- Despite these difficult circumstances, the pension systems of the CEE countries managed to avoid defaulting on benefit payments. Some countries experienced significant payment delays and backlogs, however.

1 I am grateful to Nicholas Barr, Elaine Fultz, Warren McGillivray, András Simonovits, Emmanuelle St-Pierre Guilbault, Tine Stanovnik, and John Woodall for their helpful comments on earlier versions of this chapter. However, I am solely responsible for any errors that remain.

In the 1990s, the early retirement pension was used to absorb the large number of unemployed workers that resulted from massive economic restructuring. This is made evident in the sharp decrease in the number of contributors and simultaneous increase in the number of pensioners during this period. As a result, the system dependency rate (defined by the ratio of the number of pensioners to the number of contributors) increased rapidly in the 1990s. The ageing of the population in many countries across the region also contributed to the increase in the system dependency rates via the increase in the old-age dependency rates (defined by the ratio of the population aged 65 years and over to the population aged between 20 and 64 years).

In addition, the disability pension was often considered to be an alternative to retirement for persons failing to meet the requirements for an early retirement pension. The substantial share of disability pensioners, particularly at higher ages, suggests that those who were not eligible for old-age pensions applied for disability pensions and managed to get them. This was made possible by a broad definition of disability (incapacity for performing work) and the tendency of medical doctors to make generous assessments of disability.

Although the benefits provided by the pension systems met the immediate needs of displaced workers who were negatively affected by the privatization process, the rapid deterioration of the system dependency rates resulted in a significant increase in the pension cost rates. The CEE countries responded by adopting a number of measures that adjusted the contribution and benefit structure and improved the administrative efficiency of the pension systems. Nonetheless, the further ageing of the population, the continuous increase in pensioners, the stagnation of contributors, and the deterioration of the income capture rate due to growing informal work all led to higher pension cost rates, which resulted in growing deficits in the pension systems.

1.1.2. From the mid-1990s to the mid-2000s: a wave of paradigmatic reform

Since the mid-1990s, the CEE countries have carried out structural reforms of their pension systems. Notably, several countries have introduced a Chilean-type of mandatory, privately managed pension system (the so-called second-pillar pension system). The CEE countries that implemented this type of pension system include Hungary (1998), Kazakhstan (1998), Poland (1999), Latvia (2001), Bulgaria (2002), Croatia (2002), Estonia (2002), the Former Yugoslav Republic of Macedonia (2003), the Slovak Republic (2005), and Romania (2008) (the numbers in brackets indicate the years of implementation)[2].

As these countries had pre-existing state pension systems, the reforms resulted in scaling down the state pension systems and partially replacing them with privately managed individual savings accounts. At the same time, the state pension systems (now called the first-pillar pension systems) were also reformed by changing some key scheme parameters (e.g. the extension of the qualifying period for pensions, the increase in the pensionable age, and the transition from wage indexation to price indexation). Some countries (including Poland, Latvia, Sweden and Italy) introduced notional defined-contribution

2 Notable exceptions were the Czech Republic and Slovenia, two of the highest income countries in the region. However, these countries have voluntary private pension funds covering a substantial number of workers. Recently, the Czech Government decided to introduce a new type of voluntary, privately managed pension system with a partial opt-out from the state pension system.

accounts (sometimes referred to as non-financial defined-contribution accounts) for their state pension systems[3].

The multi-pillar pension reform strategy advocated for in a seminal report by the World Bank (1994) played a very influential role in the policy debate. This strategy was strongly promoted through the World Bank's technical assistance that was provided to many countries in CEE and the Commonwealth of Independent States (CIS)[4]. The key argument supporting the multi-pillar pension reform strategy was that privatization with pre-funding would produce favourable macroeconomic impacts such as risk diversification in investment portfolios, increased savings, capital market development, and better labour market incentives.

The lack of social consensus in the pension reform process of many countries raised serious concerns. A well-informed and participatory reform process is critical for making rational decisions based on broad consensus. Yet social dialogue was weak or sometimes absent in the pension reform processes of many countries, and many workers' and employers' organizations attempted to search for ways to influence pension policy with only limited success[5].

1.1.3. The current financial status of the pension systems

In 2010, the public pension expenditure of the EU-27 countries was 10.2 percent of GDP, ranging between 4.1 percent (Ireland) and 14.0 percent (Italy). The 12 new EU member States spent 9.2 percent of GDP on public pensions.

The relatively high pension-to-GDP ratios of the CEE countries are attributed to the significantly high system dependency rates which are generally above 50 percent indicating that less than two contributors are supporting one pensioner[6].

Contributions from insured workers and employers constitute the main source of revenue for financing the pension expenditure. Recently, however, the contribution income has largely fallen short of meeting the expenditure of the pension systems in many countries (see Figure 1.1). The current pension deficit is up to 4 percent of the country's GDP. The deficits are mainly financed through transfers from the State budgets. These deficits are due in part to the transition costs associated with the redirection of pension contributions into the second-pillar pension system[7].

3 Under certain plausible assumptions, it can be shown that the notional defined-contribution pension formula is in fact equivalent to the traditional defined-benefit pension formula. For detail, see Note 1.A.4 in Annex A.

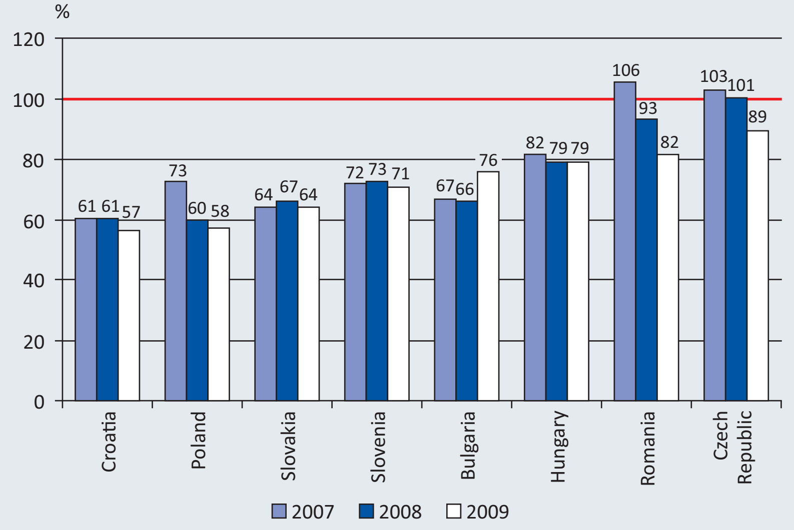
4 From 1994 to 2004, 12 CEE and CIS countries with mandatory private funded pillars received USD 1,115.8 million in pension component loans from the World Bank, while 13 countries in the same region without this pension pillar received USD 422.3 million, which is 37.8 percent of the former group (source: World Bank, 2006).

5 See Ghellab, 2008.

6 Note 1.A.1 in Annex A explains the framework of the factor analysis of the pension-to-GDP ratio and Annex C presents the results of the analysis for EU-27 countries.

7 In August 2010, nine EU member States (Bulgaria, the Czech Republic, Hungary, Lithuania, Latvia, Poland, Romania, the Slovak Republic and Sweden) requested that the EU allow their transition costs associated with the mandatory private pension systems to be deducted from their budget deficits. In December 2010, the Commission reached an agreement with Poland on allowing for temporary flexibility without changing the accounting rules of the EU. The member States that do not overly exceed the EU's criteria (a Government deficit within 3 percent of GDP and a Government debt less than 60 percent of GDP) and are implementing pension reforms are permitted to deduct the transition costs from their deficits for up to five years.

Figure 1.1
Percentage of the state pension expenditure covered by contributions in eight CEE countries, 2007–2009



Source: National Social Security Institute of Bulgaria; Croatian Pension Insurance Institute; The Czech Social Security Administration; Social Insurance Institution of Poland; National House of Public Pension of Romania; Central Administration of National Pension Insurance of Hungary; Social Insurance Agency (State Pension Fund) of Slovak Republic; Institute for Pension and Disability Insurance of Slovenia.

Note: In 2009, Bulgaria introduced a statutory Government contribution (at 12 percent of the contributory base). The contributions to the state pension funds do not include contributions diverted to mandatory private pension funds.

1.1.4. Impact of the global economic crisis in 2008–2009

The global economic crisis in 2008–2009 resulted in the dramatic decline in economic output and an increase in unemployment in the region. The crisis affected different types of pension schemes in different ways. Notably, the experiences of the crisis exposed the sensitivity of pension levels in fully funded defined-contribution schemes with respect to the volatility of financial markets and the way its consequences had to be borne by workers. According to OECD data, private pension funds in OECD countries lost 23 per cent of their asset value on average in 2008.

In the CEE countries, both mandatory and voluntary private pension funds recorded significant losses in their asset values from 2008 to 2009. However, since a large portion of the assets of the mandatory pension funds was invested in Government bonds pursuant to conservative investment regulations, the loss was relatively smaller than for those whose investment portfolios were heavily exposed to riskier assets such as stocks. Thanks to a swift economic recovery in 2009, the asset values of the pension funds regained their pre-crisis levels, but they still have not fully returned to their previous growth paths.

This experience has led some countries to consider making pension management companies offer multiple portfolios in terms of exposure to investment risk and requiring them to introduce a default portfolio selection based on the age of the pension fund member[8].

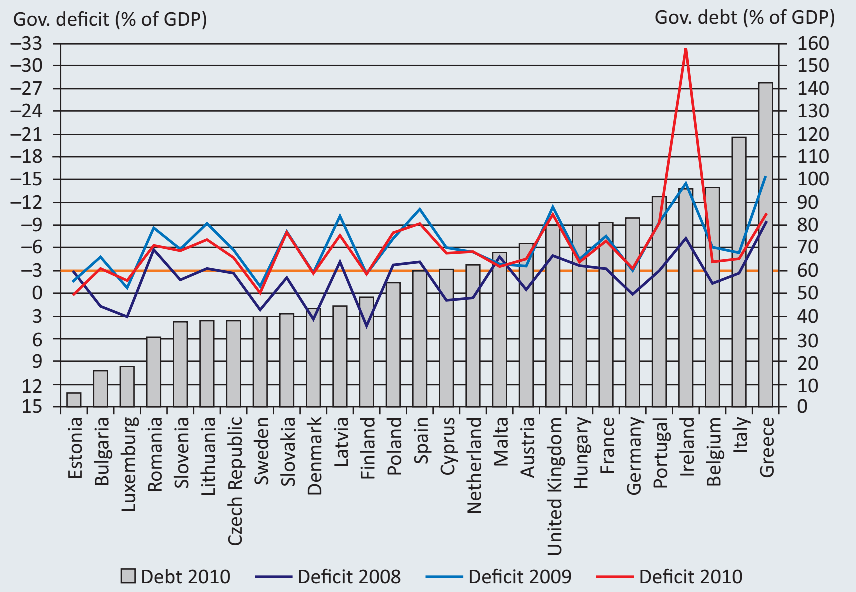
8 In CEE, only Hungary and the Slovak Republic require that the second-pillar pension funds offer three portfolio types. Recently, the Slovak Republic has introduced a fourth portfolio type.

In the pay-as-you-go state pension systems, the immediate impact was less severe than in the private pension systems, where benefits are directly linked to contributions and the interest accruing on their investment. It should also be noted that the second-pillar pension systems in most CEE countries were still in the accumulation phase and did not disburse substantial benefit amounts when the global crisis hit. However, long-term contractions in employment and thus in the number of contributors will also necessitate that adjustments be made to the pay-as-you-go state pension systems.

The global crisis has resulted in a significant increase in Government deficits and cumulative Government debts as Governments spent large resources attempting to stabilize their financial sectors and stimulate their economies (Figure 1.2). Several countries had to resort to emergency financial assistance from international financing institutions, notably the IMF and the EU.

With a view to improving their fiscal position, many Governments imposed fiscal austerity measures. Pension systems were particularly vulnerable to cutbacks in Government spending due to their heavy dependency on Government budgets to cover their deficits. The resulting cuts in pension rights led to social unrest across Europe.

Figure 1.2
Government deficit and debt as a percentage of GDP in EU-27 countries, 2008–2010



Source: Eurostat.

1.1.5. Pension reforms in CEE from 2009 to 2011

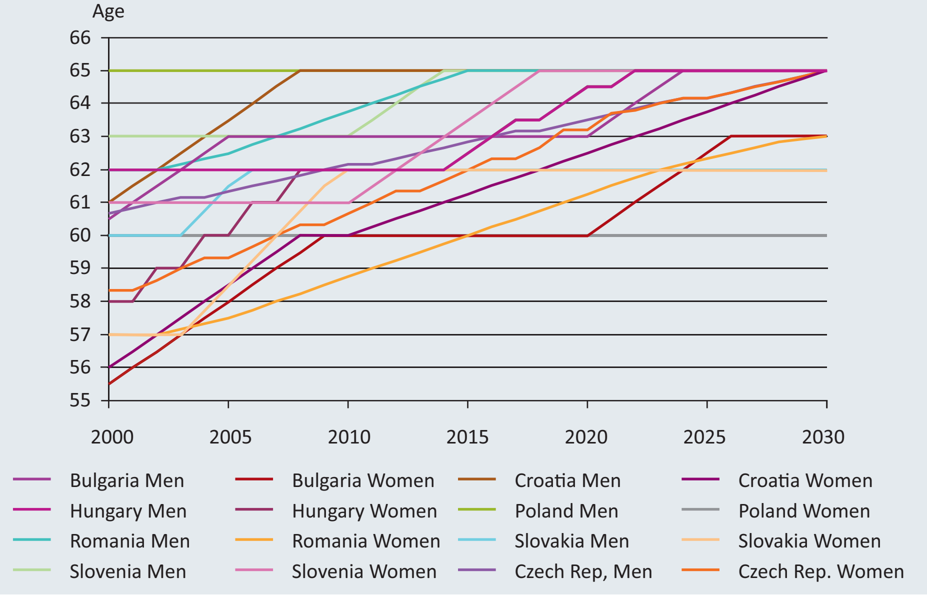
The CEE countries have implemented or have been planning pension reforms since 2009. The following descriptions summarize the key features of these reform measures in the eight countries covered by this study, but they by no means constitute an exhaustive list of the reform measures of each country[9]. For detailed country information, reference should be made to the national reports in Part II.

9 In Slovenia, the Pension and Disability Insurance Act of 2010, which was passed by Parliament on 14 December 2010, was put under referendum. In the referendum held on 5 June 2011, voters rejected this Act by a large majority.

(i) Measures mandating later retirement:

- The normal pensionable age for men in most countries will gradually be raised to 65 years by 2030. The difference in the normal pensionable age between men and women will become more equalized (see Figure 1.3). Croatia and Hungary will increase the normal retirement age for women to 65 years, and Bulgaria[10] and Romania[11] to 63 years by 2030. Poland did not change the normal pensionable age for women, leaving it at 60 years[12].
- The Czech Republic has adopted a new schedule for increasing the normal pensionable age. This schedule accelerates the increase in the normal pensionable age for women as set out in the previous schedule. Moreover, the increase in the normal pensionable age for both sexes will further continue beyond 65 years without any maximum.
- In the Slovak Republic, the normal pensionable age for both sexes is 62 years, but it has been proposed that the normal pensionable age be increased in line with the life expectancy.
- The qualifying conditions for early retirement pensions were further tightened in Bulgaria (for women), Croatia (for women), Poland and the Slovak Republic. Romania, on the other hand, decreased the required insurance period by two years.
- Croatia, Hungary and Romania modified the reduction rates for early retirement pensions and the rates of increase for deferred pensions.

Figure 1.3
Schedule of normal pensionable ages by sex in eight CEE countries, 2000–2030



Source: ILO survey.

Note: For the Czech Republic, Hungary and Romania, retirement ages are defined according to one's year of birth. The figures refer to the lowest possible age for retirement during that year. For the Czech Republic, the indicated retirement age refers to women with no children.

10 In December 2011, the Bulgarian Government decided to start this increase in 2012, nine years earlier than the schedule agreed in 2010.

11 In Romania, the original Bill included a proposal to increase the normal pensionable age of women to 65 years. However, it was reduced to 63 years through legislative amendment following the President's veto over the original Bill.

12 In November 2011, the re-elected Polish Government proposed to gradually raise the normal pensionable age to 67 years by 2020 for men and by 2040 for women.

(ii) Measures to reduce the deficit of the state pension systems by increasing contribution rates or by adjusting the contributions of the mandatory funded pension systems:

- Romania increased its pension contribution rate by 3.8 percentage-points in 2009[13]. The scheduled phased increase in the second-pillar contribution rate was temporarily frozen in 2009, but resumed in 2010.
- Bulgaria decreased its pension contribution rate by 4 percentage-points in 2009 and by an additional 2 percentage-points in 2010. Since 2009, the State has become a "third insurer" that pays statutory contributions of 12 percent of the total contributory base. In 2011, the combined contribution rate of employers and employees was increased by 1.8 percentage-points. Starting in 2017, the contribution rate for the second-pillar system will be increased by 2 percentage-points.
- Poland has decreased the contribution rate of the second pillar from 7.3 percent to 2.3 percent. This will remain in force until 2012, when it will gradually increase to 3.5 percent by 2017. The difference in the contributions has been retained by the state pension system to finance its deficit. These contributions are registered with separate special individual accounts and adjusted in line with the growth of GDP.
- The re-nationalization of the second-pillar pensions in Hungary may represent an extreme case. It was first decided that, from November 2010 until December 2011, the 8 percent contribution rate paid into the second-pillar pension will cease and be used to finance the state pension system. The Government next proposed to restore full state pension rights[14] for members of private pension funds in exchange for the balances that had accrued in their individual accounts. By the end of January 2011, only 3 per cent of the members had declared their intention to voluntarily remain in the private pension funds[15]. The process of switching back to the state pension system, including the transfer of assets from the private pension funds (worth HUF 2.8 trillion or 10 percent of GDP), is taking place in 2011.
- In contrast, the Czech Republic decided to introduce a new voluntary funded pillar financed by a 2 percent contribution rate paid by employees and supplemented by a 3 percent contribution rate redirected from employees' contributions to the state pension system.

(iii) Measures changing the pension indexation rules:

- In Romania, pension indexation is frozen for 2011. From 2012 to 2020, pensions shall be indexed according to full price increases plus 50 percent of real wage growth. Starting in 2021, the partial wage indexation will gradually taper off until pensions are indexed according to prices only from 2030 onwards.
- Hungary abolished the 13th month pension and introduced indexation rules linked to GDP growth. Price indexation shall be applied if GDP growth is less than 3 percent, while the Swiss formula shall be applied if GDP growth is more than 5 percent.

13 Romania previously reduced the contribution rate from 2006 to 2008. The current contribution rate (31.3 percent) is still lower than its 2005-level (31.5 percent).

14 These include not only the pension rights that would have accrued during the period of their membership in the second pillar, but also those that would have accrued prior to the introduction of the second pillar (rights that members would have lost if they remained in the second pillar).

15 A controversial condition was placed on those members who decided to stay in the second-pillar system. After 2011, they can allocate the entire employees' contributions (10 percent instead of the previous 8 percent) to the private pension fund of their choice, but the remaining contributions paid by their employers at a rate of 24 percent shall be transferred to the state pension system without earning any further state pension rights.

- The Czech Republic will strictly adhere to the statutory minimum rate of indexation (full price increases plus one-third of real wage growth) and will cease making discretionary increments to the statutory rates of indexation.
- According to its draft Law on pension reform, the Slovak Republic proposes to change its indexation rules to reflect changes in the ratio of contributors to pensioners.
- As an emergency measure, Slovenia indexed pensions only by 50 percent of the average nominal wage growth in 2010, and by 25 percent of the average nominal wage growth in 2011. The Government proposed a freeze on pension indexation for 2012[16].
- As an emergency measure, Bulgaria has suspended pension indexation from 2000 until the end of 2012. Croatia also suspended its pension indexation in 2010 and 2011.

(iv) Measures modifying the qualifying conditions and benefit formula[17]:

- Starting in 2012, Bulgaria will gradually extend the insurance period required for a pension (currently 37 years for men and 34 years for women) to 40 years for men and 37 years for women by 2020.
- In the Czech Republic, following the Constitutional Court ruling stating that the current pension formula results in an inadequate replacement level for high-income persons, the Government changed the calculation of the personal assessment base by applying only one reduction threshold to the average revaluated earnings. This new pension formula produces higher replacement rates for workers earning more than 1.5 times the average earnings but induces less redistribution as compared to the previous pension formula.
- The Slovak Republic proposes to introduce a flat-rate benefit structure in the state pension. The Government has also changed the so-called Christmas bonus for old-age pensioners, focusing on low-income pensioners.
- According to the Pension and Disability Insurance Act of 2010 which was rejected by referendum, Slovenia planned to gradually extend the period for calculating the reference salary for pensions from one's best 18 years to the best 30 years. The accrual rates and the uniform revaluation coefficient were also to be changed so that the pension formula would produce 60 per cent of the reference salary for men with 40 years of insurance and women with 38 years of insurance.

(v) Measures eliminating privileged pension rights for special groups of workers:

- In Romania, the special pension scheme for military, police, and national security officials has been integrated into the public pension system. Other pensions regulated by special pension laws (except for the special pension scheme for magistrates) will be recalculated based on the individual's average salary during their whole career and will be paid by the state pension system.
- Croatia decreased the amount of pension benefits obtained under special conditions by 10 percent. However, it postponed the gradual suspension of privileged pensions, including the pensions for parliamentary deputies, military and police officers, and war veterans.
- The Slovak Republic and Hungary are considering reforming their army pension systems.

16 The Pension and Disability Insurance Act of 2010 which has been rejected by referendum included a provision stipulating that pensions are indexed by 70 percent of nominal wage growth and 30 percent of price increases.

17 In 2009, Romania proposed a15 percent cut in the value of the pension point. However, the Constitutional Court ruled that this measure was unconstitutional, and it was subsequently withdrawn from the draft Bill.

(vi) Measures improving benefits:

- Bulgaria will increase the accrual rate used in the pension formula from 1.1 percent to 1.2 percent in 2017, abolish the maximum pension for pensions granted after 2014, and increase pension supplements for surviving spouses from 20 percent to 26.5 percent of the deceased spouse's pension starting in September 2011.
- Romania introduced a tax-financed minimum pension (called the social old-age benefit). The amount of the minimum pension was RON 300 (about 70 euro) in March 2009 and was subsequently increased to RON 350 (about 80 euro) in September 2009.

(vii) Measures related to the second pillar not involving contribution rates:

- In Poland, when the first payments from the second-pillar old-age pensions were expected to be disbursed in 2009 (for women born in 1949), the arrangements necessary to effectuate payment were not ready. As a temporary measure, Poland introduced a special benefit (the periodic-funded pension) for women between 60 and 65 years of age, paid by the Social Insurance Institution with funds transferred from members' individual accounts.
- In Bulgaria, the second-pillar system (Professional Fund) is intended to provide early retirement pensions for workers in hazardous or physically strenuous jobs. However, these benefits will continue to be paid from the State Pension Fund until the end of 2014 with fund transfers from the individual account balances of the Professional Fund.
- The Croatian Government has faced demands that the Government pay the pension supplements (which were originally introduced to supplement the state pension) to the beneficiaries of the second pillar as well.
- In September 2011, the Croatian Government allowed those insured persons who voluntarily opted for the second-pillar system (who were between 40 and 49 years of age at the date of implementation and chose to join the system) to return to the state pension system.
- Since the introduction of the second-pillar system in 2005, the Slovak Republic has made frequent changes, with one overriding the next (although the contribution rate for the second-pillar has never changed from its initial rate of 9 percent). In 2008 and 2009, the Government provided all insured persons with two opportunities to switch systems. In 2008, participation in the second pillar became optional for new entrants in the pension system. However, the most recent amendment again mandates automatic enrolment in the second pillar for new entrants to the labour market with the option to opt out within two years. In 2008, the qualifying period for pensions was extended from 10 years to 15 years for state pensions. In the same year, it was decided that members of second-pillar system retiring with 15 years of membership or more should purchase annuities. However, the minimum period of second-pillar membership required to purchase annuities was recently shortened to 10 years.
- In general, countries with second-pillar systems implemented measures to further reduce the maximum rates of various types of administrative fees that pension funds could charge.

To sum up, the following common characteristics emerge from the aforementioned recent pension reform measures implemented by the eight CEE countries. First, these reforms were mainly initiated in response to fiscal pressures exerted by financial authorities and the international institutions to contain current Government deficits, caused partly by the pension systems. Second, none of the eight countries effectively increased their total contribution rate in consideration of avoiding further decreases in the aggregate demand. However, several countries with second-pillar systems decreased – or delayed the planned increase in – the contribution rates of the second-pillar systems, thereby allocating more contributions to the state pension systems. Third, all countries focused on measures reducing the pension benefits. Two typical measures include the modification of the indexation rules towards price indexation (or the temporary suspension of indexation in some cases), which has both short- and long-term impacts, and the gradual increase in the pensionable age (and the equalization of the pensionable ages for men and women), the effects of which emerge in the long-term due to its phased implementation.

1.2. Key pension reform issues in Central and Eastern Europe

In this section we will discuss the key issues of pension reform in general, particularly focusing on the future direction of pension reforms in the CEE countries.

1.2.1. Basic objectives of pension reform

The public pension system is a societal measure that provides income support to the members of society against the risks of old age, disability and survivorship. As a means to achieve this, it essentially relies on the intergenerational income transfer enforced by law.

Pension systems need to be sustainable in the long run and credible for future generations, while fulfilling their main function of providing adequate income security for the elderly, the disabled, and survivors. In view of the demographic, economic and social challenges facing a range of countries including the CEE countries, these requirements can probably only be met by reforming the systems.

Under any type of pension system, the goods and services that pensioners purchase to meet their basic needs and maintain their standard of living must come from current national production (except housing). The magnitude of the pension transfer in the national economy is thus measured by the percentage of the pension expenditure in the national output, or the "pension-to-GDP ratio". Therefore, a pension system is affordable if the pension-to-GDP ratio does not diverge in the foreseeable future (see Note 1.A.2 in Annex A)[18].

Since a public pension system essentially relies on intergenerational transfers, its sustainability critically depends on whether the working generation is committed to paying contributions for the elderly generation. In this sense, the notion of sustainability embodies the principle that the current generations should equally respect the rights of future generations. Therefore, the pension reform should be supported not only by the current workers and pensioners but also by future working generations who will be asked to pay contributions for their elderly generations.

For a defined-benefit pay-as-you-go pension system, there are in principle two ways to restore its financial balance:

- reduce benefit expenditure by modifying the pension formula, raising the pensionable age, and changing the indexation method, whilst minimizing administrative expenses;
- increase revenues by increasing the contribution rate, or by extending the contributory base through improved compliance with the law and efficient contribution collection. Economic growth will help increase the size of the contributory base.

18 Note 1.A.3 in Annex A explains another approach to defining the long-term sustainability of public pension systems.

In contrast, the benefit level of a defined-contribution funded pension system is determined by the contributions paid by the worker and employer and the profits or losses of their investment throughout one's career, as well as the life expectancy at the pensionable age (based on unisex life tables). In the case of the private provision of life annuities, it is inherently difficult to guarantee certain minimum pensions or fully indexed benefits. Therefore, the focal issue becomes how to safeguard an adequate benefit level[19].

In the CEE countries, however, the range of options available to policymakers is limited. Because these countries apply relatively high pension contribution rates and have already eliminated the generosity of benefits to a considerable extent, there is little room for further adjustment of these key policy parameters (although there are no *a priori* limits). The long-term trends of demographic ageing further narrow the range of possible policy options.

1.2.2. Coverage, compliance and contribution collection

In CEE, the transition to a market economy in the 1990s resulted in the proliferation of private enterprises including small businesses and self-employment. This, coupled with weak enforcement and contribution collection mechanisms, resulted in a considerable deterioration of compliance with the pension legislation.

Failure to comply with pension legislation diminishes the effectiveness of policy intervention and seriously undermines the credibility and legitimacy of pension systems. In particular, the prevalence of undeclared work and the widespread practice of underreporting wages not only put a significant strain on social security and tax systems but also render these workers and their families unprotected against substantial social risks (see Table 1.1).

In view of the recent reforms enacted to tighten the link between contributions and benefits, the non-payment or underpayment of social security contributions will directly result in greater numbers of elderly persons receiving low pensions or no pension rights at all, thereby increasing the poverty risk amongst the elderly population. This could eventually require States to spend more resources on social assistance and other social protection programmes.

Extending pension system coverage through enhanced law enforcement and efficient contribution collection mechanisms will bring about an extension of the contributory base, thereby creating an additional fiscal space in the short run[20]. Even through these additional contributors will earn benefit rights and raise payout levels in the long run, these additional costs will offset the need for social assistance for poor and low-income elderly persons due to non-coverage.

19 In Poland, for example, it is estimated that under the wage indexation of the minimum pension 3.3 percent of men (aged 60–64) and 41.1 percent of women (aged 55–59) would receive the minimum pension, while under the current indexation rule (indexation in line with price increases plus 20 percent of real wage growth) only 0.3 percent of men and 2.4 percent of women in the same age groups are estimated to receive the minimum pension. For details, see Chlon and Strzelecki, 2010.

20 Several CEE countries have recently implemented the joint collection of contributions and taxes by transferring the contribution collection function to their tax authority. A notable exception is Poland, where the Social Insurance Institute, ZUS, collects and registers social security contributions. The publication by Fultz and Stanovnik (2004) further analyzes the *pros* and *cons* of this issue based on case studies of five CEE countries.

Table 1.1
The estimated size of the shadow economy as a percentage of GDP in 21 transition countries, 1999–2007

Country	1999	2000	2001	2002	2003	2004	2005	2006	2007	Average 1999–2007
Slovak Republic	18.9	18.9	18.8	18.6	18.3	18.1	17.6	17.2	16.8	18.1
Czech Republic	19.3	19.1	18.9	18.8	18.7	18.4	17.8	17.3	17.0	18.4
Hungary	25.4	25.1	24.8	24.5	24.4	24.1	24.0	23.7	23.7	24.4
Slovenia	27.3	27.1	26.7	26.6	26.4	26.2	25.8	25.3	24.7	26.2
Poland	27.7	27.6	27.7	27.7	27.5	27.3	26.9	26.4	26.0	27.2
Latvia	30.8	30.5	30.1	29.8	29.4	29.0	28.4	27.7	27.2	29.2
Estonia	—	32.7	32.4	32.0	32.4	31.1	30.5	29.8	29.5	31.2
Turkey	32.7	32.1	32.8	32.4	31.8	31.0	30.0	29.5	29.1	31.3
Lithuania	33.8	33.7	33.3	32.8	32.0	31.7	31.0	30.4	29.7	32.0
Croatia	33.8	33.4	33.2	32.6	32.1	31.7	31.3	30.8	30.4	32.1
Romania	34.3	34.4	33.7	33.5	32.8	32.0	31.7	30.7	30.2	32.6
Albania	35.7	35.3	34.9	34.7	34.4	33.9	33.7	33.3	32.9	34.3
Bulgaria	37.3	36.9	36.6	36.1	35.6	34.9	34.1	33.5	32.7	35.3
Macedonia	39.0	38.2	39.1	38.9	38.4	37.4	36.9	36.0	34.9	37.6
Kyrgyz Republic	41.4	41.2	40.8	41.4	40.5	39.8	40.1	39.8	38.8	40.4
Kazakhstan	43.8	43.2	42.5	42.0	41.1	40.6	39.8	38.9	38.4	41.1
Tajikistan	43.5	43.2	42.9	42.7	42.1	41.7	41.5	41.2	41.0	42.2
Russian Federation	47.0	46.1	45.3	44.5	43.6	43.0	42.4	41.7	40.6	43.8
Moldova	45.6	45.1	44.1	44.5	44.6	44.0	43.4	43.4	43.4	44.5
Ukraine	52.7	52.2	51.4	50.8	49.7	48.8	47.8	47.3	46.8	49.7
Georgia	68.3	67.3	67.2	67.2	65.9	65.5	65.1	63.6	62.1	65.8
Country Average	**36.9**	**36.3**	**36.1**	**35.8**	**35.3**	**34.8**	**34.3**	**33.7**	**32.6**	—

Source: Schneider, F.; Buehn, A.; Montenegro, C. 2010. "Shadow Economies All over the World: New Estimates for 162 countries from 1999 to 2007". Policy Research Working Paper, World Bank.

Note: The above paper defines the shadow economy as "all currently unregistered economic activities that contribute to the officially calculated (or observed) Gross National Product".

1.2.3. The relation between adequacy and sustainability

The adequacy of benefit levels and the sustainability of a pension system are interrelated. In general, the cost rate of pension systems depends on the system replacement rate and the system dependency rate (see Note 1.A.1 in Annex A). With the benefit level being held constant, any increase in the system dependency rate will increase the pension cost rate. Alternatively, in order to contain the increase in the pension cost rate under demographic pressures, reductions in the benefit level in broad terms are unavoidable.

As pension financing becomes more constrained by demographic ageing, the benefit level needs to be reviewed in light of the balance between the living standards of pensioners and the living standards of contributors, and by taking into account the self-supporting efforts of individuals. From an equity point of view, the provisions of public pensions should treat all protected persons under equal conditions and thus eliminate unjustifiable special treatment for special groups where possible.

Nevertheless, when implementing sustainability-enhancing measures, it is critically important to safeguard the adequacy of the benefit level through internationally accepted standards. In the CEE countries, pensions are the only source of income for most pensioners and the pension systems play the single most important role in reducing poverty amongst the elderly[21].

In this regard, the principles set out in the ILO Social Security (Minimum Standards) Convention, 1952 (No. 102) – which has been ratified by most CEE countries – will serve as a benchmark and reference for ensuring minimum standards for pension benefits[22]. Convention No. 102 is the flagship of the ILO social security conventions, as it is the only international instrument that sets global minimum standards for all nine branches of social security including old-age, disability and survivors' benefits. Convention No. 102 has also had significant influence at the regional level. It was used as the blueprint for instruments such as the European Code of Social Security and the European Social Charter.

In view of renewed support for the provision of a basic level of social security through establishing Social Protection Floors[23] within comprehensive social security systems, the International Labour Conference in 2011 concluded that there is a need to adopt a possible Recommendation complementing the existing ILO social security standards[24].

1.2.4. Pension indexation

Recently many CEE countries have changed their pension indexation rules from full wage indexation to partial wage indexation (using the weighted average of prices and wages, known as the Swiss formula and its variations) or, even further, to price indexation. Changing from wage indexation to price indexation could improve the balance of the pension fund if there is positive real wage growth in the long run. However, the pension level will decrease in relation to the average wage during the later stages of

21 In Romania, for example, the income transfer under the pension system removes 61.9 percent of the population aged 65 years and above out of poverty. The income transfer of other social benefits further reduces the poverty incidence rate by 2.6 percentage-points.

22 The countries that have ratified and accepted Part V (old-age benefit) of Convention No. 102 are bound to apply its provisions and to provide replacement rates for old-age benefits at least at the level prescribed in the Convention. Annex B summarizes the basic principles and requirements regarding old-age benefits under Convention No. 102 and provides the list of ratifications of Convention No. 102 and related social security conventions.

23 The Social Protection Floor is defined as "a basic set of social rights, services and facilities that every person should enjoy". It corresponds in many ways to the existing notion of "core obligations", to ensure the realization of minimum essential levels of rights embodied in human rights treaties. See ILO, 2011a.

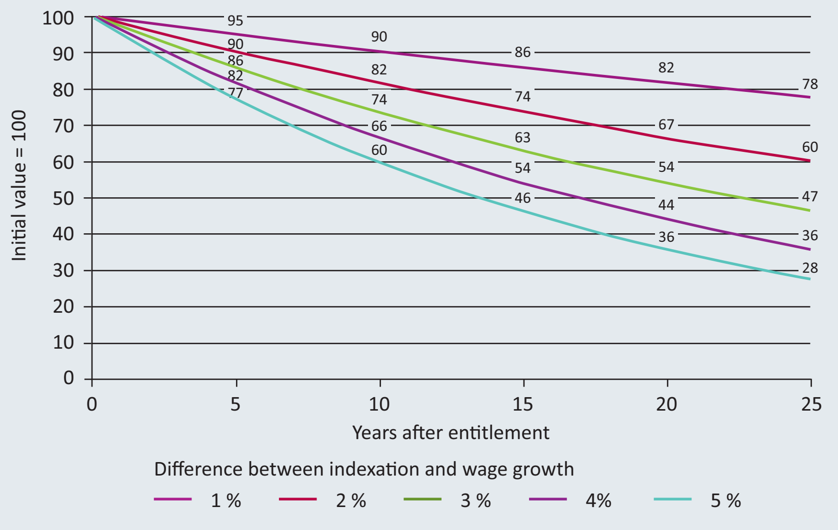
24 Annex B summarizes the contents of the possible ILO Recommendation on Social Protection Floors. This possible Recommendation will be discussed at the International Labour Conference in 2012.

retirement life, in which there is a higher need for medical care and long-term care. As shown in Figure 1.4, if the rate of pension indexation is constantly 2 percentage-points lower than the rate of increase of the average wage, then the pension as a percentage of the average wage will have decreased by one-third in 20 years of its entitlement[25].

Recent experiences in some CEE countries have shown a pattern whereby pensions are increased by rates higher than the rates of indexation prescribed by law, followed by a period of reduced indexation or even a temporary freeze placed on pension indexation. However, such frequent, *ad hoc* amendments render the system unpredictable and inconsistent and may erode the public trust in the pension system.

Figure 1.4

Devaluation of initial pension values due to partial wage indexation



Source: ILO calculations.

1.2.5. Employment and retirement of older workers

The primary function of old-age pensions is to provide income security for those who are incapable of working due to old age. Since pensions are paid for one's whole life after retirement, if the pensionable age is fixed, pensioners will on average receive pensions for longer periods as the life expectancy extends. The fact that people are living longer is a great human achievement. However, as this trend is likely to continue into the future, pension systems are more exposed to the longevity risk.

From the point of view of pension financing, in order to maintain the current benefit level without increasing the contribution rate, raising the effective pensionable age is one of the few tangible options available to policymakers.

25 A case study of Poland shows that under the current indexation rules the percentage of the minimum pension to the average wage is estimated to decrease from its current level of 22 percent to below 15 percent by 2027 if the real wage increase is 3 percent per annum. See Chlon and Strzelecki, 2010.

Demographic ageing also affects labour markets. The working age population (the population aged between 15 and 64 years) in the EU-27 is projected to decline from 2012 onwards. In view of the shrinking working age population, keeping sustainable growth requires improved productivity and higher employment rates, in particular for older people and women.

At the turn of the twenty-first century the early retirement trend has started to reverse in the CEE countries. As explained earlier, many CEE countries have further tightened the eligibility conditions for early retirement and disability pensions and plan to increase the normal pensionable age to 65 years for both men and women by 2030. However, the average exit age from the labour market is still less than 65 years of age (see Tables 1.2a and 1.2b).

The challenge is to find a new work–retirement balance in the face of changing life cycles (characterized by prolonged life expectancies and late entries in the labour market due to longer education) and changing social and economic roles for both sexes. To tackle this challenge, effective coordination and concerted action between pension policy and employment policy are needed to create labour markets and pension systems which encourage people to stay active longer and allow for a flexible transition from working life to retirement in view of the wide individual differences in the health status and ability to work of older workers.

From an employment policy perspective, steps should be taken to improve the labour market's capacity to absorb and better utilize the human resource of older workers. These could include the introduction of flexible working time arrangements or the adaptation of jobs to the capacities and skills of older workers, the provision of adequate vocational training and lifelong learning programmes to maintain older workers' employability, and the removal of various labour market barriers (such as ageism or the discrimination of older workers, and seniority wage systems which make it costly to hire older workers)[26].

In addition to constraining early exits from the labour market through increasing the pensionable age or restricting early retirement options, pension systems can adjust their design to reduce labour market distortion and increase incentives for insured persons to prolong their working lives and thereby achieve higher effective retirement ages. Nevertheless, workers who are engaged in hazardous and physically strenuous jobs should be given appropriate options to supplement their income during early retirement.

As evidenced in several countries, strong popular resistance to Governments proposing higher pensionable ages highlights a significant gap between policy goals and workers' preferences. To understand such strong objections, one must consider the cultural, cognitive and emotional factors underlying workers' behavioural patterns. Pension reform strategies should choose an approach that addresses these factors.

26 In the context of globalization and the expansion of the free movement of labour in Europe, the number of migrant workers is likely to increase in the future. It is important to ensure the equality of social security treatment for migrant workers through effective coordination between countries. This will in turn foster labour mobility, which is an essential element for an efficient global labour market. See Hirose et al., 2011.

Table 1.2a
Employment and retirement of older workers in EU-27 countries, men

Country	Employment rates of older workers (aged 55–64)		Average exit age		Normal pensionable age			Life expectancy at 65 (in years)		
	2000	2010	2001	2009	2009	Further increases		2009	Projected increase 2010–2030	Projected increase 2010–2050
						age	by			
Bulgaria	33.2%	50.3%	59.8	64.1	63	65	2024	13.8	2.7	5.4
Czech Republic	51.7%	58.4%	60.7	61.5	62	65	2030	15.2	2.4	4.8
Hungary	33.2%	39.6%	58.4	60.1	62	65	2022	14.0	2.8	5.5
Poland	36.7%	45.3%	57.8	61.4	65	—	—	14.8	2.6	5.1
Romania	56.0%	50.3%	60.5	65.5	63.5	65	2015	14.0	2.7	5.3
Slovakia	35.4%	54.0%	59.3	60.4	62	—	—	14.1	2.8	5.4
Slovenia	32.3%	45.5%	59.3	60.9	63	65	2014	16.4	2.3	4.5
Estonia	55.9%	52.2%	61.1	62.6	63	65	2026	14.0	2.7	5.3
Latvia	48.4%	47.6%	62.4	62.7	62	65	2021	13.4	3.0	5.9
Lithuania	50.6%	52.3%	58.9	59.9	62.5	65	2026	13.4	2.9	5.6
Cyprus	67.3%	71.2%	62.3	63.5	65	—	—	18.1	1.9	3.8
Malta	50.8%	47.9%	57.6	60.3	61	65	2026	16.8	2.2	4.3
EU-12	**45.9%**	**51.2%**	**59.8**	**61.8**				**14.2**	**2.6**	**5.1**
Austria	41.2%	51.6%	59.9	62.6	65	—	—	17.7	2.0	3.9
Belgium	36.4%	45.6%	57.8	61.2	65	—	—	17.5	2.1	4.0
Denmark	64.1%	62.7%	62.1	63.2	65	67	2022	16.8	2.2	4.2
Finland	42.9%	55.6%	61.5	62.3	65	—	—	17.3	2.1	4.1
France	33.6%	42.1%	58.2	60.3	60	67	2023	18.7	2.0	3.8
Germany	46.4%	65.0%	60.9	62.6	65	67	2029	17.6	2.1	4.1
Greece	55.2%	56.5%	61.1	61.3	65	—	—	18.1	2.0	3.8
Ireland	63.2%	58.1%	63.4	63.5	65	68	2028	17.2	2.2	4.3
Italy	40.9%	47.6%	59.9	60.8	65	68	2050	18.5	2.0	3.8
Luxembourg	37.2%	47.7%	56.8	59.4	65	—	—	17.6	2.7	4.0
Netherlands	50.2%	64.5%	61.1	63.9	65	67	2025	17.6	2.1	4.0
Portugal	62.1%	55.7%	62.3	62.9	62	65	2015	17.1	2.1	4.1
Spain	54.9%	54.7%	60.6	61.2	65	67	2025	18.3	2.0	3.9
Sweden	67.8%	74.2%	62.3	64.7	61–67	—	—	18.2	1.9	3.7
United Kingdom	60.1%	65.0%	63.0	64.1	65	68	2046	18.1	2.2	4.1
EU-15	**48.0%**	**56.2%**	**60.7**	**61.9**				**17.9**	**2.1**	**4.7**
EU-27	**47.1%**	**54.6%**	**60.4**	**61.8**				**17.2**	**2.2**	**4.2**

Source: Eurostat (employment rates of older workers; average exit age; life expectancy at 65); ILO survey and European Commission (normal pensionable age).

Note: In Finland, the national pension is payable from 65 years and the pensionable age for statutory earnings-related pensions is between 63 and 68 years. In Sweden, the pensionable age is flexible between 61 and 67 years. For Estonia, Latvia, Lithuania, Cyprus and Malta, the average exit ages for both sexes are presented. For the Czech Republic, the normal pensionable age will further be increased beyond 65 years.

Table 1.2b
Employment and retirement of older workers in EU-27 countries, women

Country	Employment rates of older workers (aged 55–64)		Average exit age		Normal pensionable age			Life expectancy at 65 (in years)		
	2000	2010	2001	2009	2009	Further increases		2009	Projected increase 2010–2030	Projected increase 2010–2050
						age	by			
Bulgaria	10.3%	37.7%	57.6	64.1	60	63	2026	17.0	2.8	5.4
Czech Republic	22.4%	35.5%	57.3	59.6	60.3	65	2030	18.8	2.4	4.7
Hungary	13.3%	30.1%	57.0	58.7	62	65	2022	18.2	2.7	5.1
Poland	21.4%	24.2%	55.5	57.5	60	—	—	19.2	2.4	4.6
Romania	43.8%	33.0%	59.2	63.2	58.5	63	2030	17.2	2.8	5.4
Slovakia	9.8%	28.7%	56.0	57.5	61.5	62	2010	18.0	2.7	5.2
Slovenia	13.8%	24.5%	55.5	58.0	61	65	2018	20.5	2.2	4.1
Estonia	39.0%	54.9%	61.1	62.6	61	65	2026	19.2	2.5	4.8
Latvia	26.7%	48.7%	62.4	62.7	62	65	2021	18.2	2.7	5.2
Lithuania	32.6%	45.8%	58.9	59.9	60	65	2026	18.4	2.5	4.9
Cyprus	32.1%	43.0%	62.3	63.5	65	—	—	20.9	2.3	4.4
Malta	8.4%	13.0%	57.6	60.3	60	65	2026	20.6	2.3	4.5
EU-12	**22.8%**	**34.9%**	**58.4**	**60.6**				**18.1**	**2.5**	**4.9**
Austria	17.2%	33.7%	58.5	59.4	60	65	2034	21.2	2.0	3.8
Belgium	16.6%	29.2%	55.9	61.9	65	—	—	21.1	2.0	3.9
Denmark	46.6%	52.5%	61.0	61.4	65	67	2022	19.5	2.3	4.5
Finland	40.4%	56.9%	61.3	61.1	65	—	—	21.5	1.9	3.7
France	26.3%	37.5%	58.0	59.8	60	67	2023	23.2	1.7	3.3
Germany	29.0%	50.5%	60.4	61.9	65	67	2029	20.8	2.1	4.0
Greece	24.3%	28.9%	61.5	61.6	60	65	2015	20.2	2.0	3.8
Ireland	27.2%	42.0%	63.0	64.7	65	68	2028	20.6	2.3	4.5
Italy	15.3%	26.2%	59.8	59.4	60	63.5	2050	22.2	1.8	3.5
Luxembourg	16.4%	31.3%	56.8	59.4	65	—	—	21.4	2.1	3.9
Netherlands	26.1%	42.8%	60.8	63.1	65	67	2025	21.0	2.1	4.0
Portugal	40.6%	43.5%	61.6	62.3	62	65	2015	20.5	2.0	3.9
Spain	20.2%	33.2%	60.0	63.4	65	67	2025	22.4	1.8	3.6
Sweden	62.1%	66.7%	61.9	64.0	61–67	—	—	21.2	2.0	3.8
United Kingdom	41.7%	49.5%	61.0	62.0	60	68	2046	20.8	2.3	4.4
EU-15	**28.0%**	**40.9%**	**59.9**	**61.3**				**21.5**	**2.0**	**3.9**
EU-27	**27.4%**	**38.6%**	**59.4**	**61.0**				**20.7**	**2.1**	**4.2**

Source: Eurostat (employment rates of older workers; average exit age; life expectancy at 65); ILO survey and European Commission (normal pensionable age).

Note: In Finland, the national pension is payable from 65 years and the pensionable age for statutory earnings-related pensions is between 63 and 68 years. In Sweden, the pensionable age is flexible between 61 and 67 years. For Estonia, Latvia, Lithuania, Cyprus and Malta, the average exit ages for both sexes are presented. For the Czech Republic, the indicated pensionable age refers to women with no children. For the Czech Republic, the normal pensionable age will further be increased beyond 65 years.

1.2.6. Securing necessary resources to finance the benefits

Despite the number of cost-containing measures that have already been implemented, current contributions are still insufficient to cover the expenditure in many CEE countries. Future demographic ageing will put additional pressure on the pension expenditure growth.

If any gaps remain in the financial balance of a pension system after implementing all possible cost-containing measures, further steps should be taken to mobilize reliable and necessary resources to enhance the revenue structure. Financing by borrowing will simply pass the burden on to future generations. More importantly, the current fiscal situation in the CEE countries no longer allows for this debt-financing option.

Both contributions and taxation are recognized as suitable methods for financing social security benefits. However, since contributions are collected for the purpose of social security benefits, there is a more transparent link between contributions and benefits.

Pension systems that rely heavily on transfers from the State budget will be constrained by the Government's fiscal policies and short-term discretionary objectives. Currently, pension systems in European countries are largely affected by austerity measures aiming to restore the fiscal stability in the face of growing Government deficits and Government debts following the global economic crisis.

If coverage remains low, the State subsidies covering pension system deficits may become more distortional. Moreover, low pension system coverage may result in a greater number of elderly persons with low pensions or no pensions, which in turn could raise the demand for social assistance for the poor elderly. This would erode the legitimacy of the current contributory pension system and may result in transforming the existing system to a *de facto* non-contributory pension system aiming at the poverty reduction for the entire population.

1.2.7. Consideration of the second-pillar pension system

The influential publication of the World Bank in 1994 provoked a series of intensive policy debates on the pension reform policy and strategy[27]. The recent article by Barr and Diamond (2008) has identified a number of analytical errors in the pension reform policies proposed in the above World Bank publication from an economic theory standpoint.

An independent evaluation report by the World Bank (2006) presents evidence to suggest that many of the countries in Central and Eastern Europe and in Latin America which introduced the mandatory private pension tier had not met the initial conditions of macroeconomic stability, financial market readiness, moderate indebtedness, and low corruption risk for this type of pension reform to be effective in the national context. The introduction of mandatory private pension systems in these countries has not resulted in their intended macroeconomic impact and has failed to expand coverage to the population outside the formal employment sector. The significant transition costs associated with the introduction of these systems also added to the fiscal deficits of those countries.

27 See, for instance, Beattie and McGillivray, 1995; Orszag and Stiglitz, 2001; Gillion et al, 2000; Barr, 2000; and, Barr and Diamond, 2008.

In the CEE countries, the main argument for introducing mandatory private pension systems was that they would improve the security of benefits by diversifying risks. However, it was controversial that the private funded pensions were mandatorily introduced to partially substitute, rather than supplement, state pensions.

In terms of benefit adequacy, such reforms have invited a number of instabilities in the benefit design. First, workers are exposed to investment risks and management risks. This renders future benefit levels – which should, in principle, replace part of the state pension –unpredictable. Second, as the system of individual accounts limits income redistribution, the inequalities between high- and low-income earners, full and partial career workers, and men and women are likely to increase. Third, it is inherently difficult for private markets to provide life annuities and the full indexation of annuities[28].

In terms of financing, the diversion of contributions to the private pension systems created a substantial financial gap in the state pension systems. In many countries, the transitional deficits in the state pension systems did not decrease as estimated, partly because these estimates had been based on optimistic assumptions. As a result, these transition costs had to be financed by the Government borrowing which in turn increased the Government debt.

The implementation of the second-pillar systems also raised a number of challenges. The authorities of many countries had not properly developed their capacity to effectively supervise the private pension funds. As a result, private funds in many countries charge high administrative fees for individual account operation and assets management. In the first years of implementation, efforts focused mainly on regulating the investment of the pension assets. Attention was not given to the design of the payout phase until later, when members started to receive annuities.

Since large benefit increases in public pensions cannot be anticipated due to the pressures associated with demographic ageing, both occupational pensions and private pensions are expected to play a more positive role in the future, supplementing the public pensions and responding to the various needs of the elderly persons who were engaged in different occupations.

1.2.8. The central role of social dialogue in pension governance and in reform processes

Tripartite and social dialogue is an important means for ensuring democratic policymaking processes. In practice, however, one often faces the situation in which the process reaches an impasse due to insurmountable conflicts of interest between different stakeholders.

Any measures to restore the stability of a pension system would likely to ask all of the relevant stakeholders to share the burden either by paying more contributions or receiving lower pensions. These reform measures affect tripartite stakeholders differently. In practice, however, there is firm opposition against

28 Many pension fund members exhibit a preference for receiving their individual account balance as a lump sum rather than in life annuities.

raising contribution rates, as higher contribution rates are considered to negatively affect a country's competitiveness[29]. There is also strong opposition to benefit cuts and increases in the pensionable age.

Partial privatization of state pension benefits and the introduction of automatic balancing mechanisms (adjusting indexation rates or changing the pensionable age according to the life expectancy) are understood to be an attempt to circumvent these political obstacles in some countries. However, the recent contraction or abolishment of second-pillar pension systems demonstrates that privatized systems are not immune to political influence. Also, without adequate mechanisms to guarantee minimum benefit levels, automatic balancing mechanisms may result in significantly lower benefit levels.

Pension reforms affect both the current generation and future generations. Since reform measures require phased implementation to avoid abrupt changes in the lifetime plans of workers close to retirement, the full effect of the pension reforms will only be felt by future generations.

A lasting solution to the long-term stabilization of pension systems can be agreed upon only if there is nation-wide societal consensus based on full understandings of short- and long-term implications of the reform. Such consensus can be sustained only through continuous commitment and permanent monitoring of the reform implementation.

Governments and pension institutions, which are responsible for administrating pension systems, should help the key stakeholders make rational decisions in the pension reform process. In particular, the Government's role is crucial in formulating different policy options and informing key stakeholders of these options and their financial impacts[30].

Social partners play an important role. They monitor the adequacy of benefits, financial sustainability, and efficiency of the management and administration of the pension system, and provide feedback to ensure that the system meets the basic requirements. To be more actively involved in pension governance and the pension reform debate, the social partners should further strengthen their technical capacities to analyze the proposed measures and evaluate their impacts.

To reach an agreement on a balanced reform package, key stakeholders should take a long-term view of the development of pension systems and be prepared to make pragmatic compromises, rather than routinely insisting upon the protection of vested rights or the primacy of international competitiveness. Pension reform cannot be accomplished without a willingness on the part of all relevant stakeholders to achieve consensus.

29 While the payment of social security contributions is normally mandated by law, the question often arises as to who actually bears the cost of contributions. In a competitive market, the effective distribution of social security contributions between workers and employers depends on the relation between the wage elasticity of labour demand and that of labour supply. Many economic analyses have shown that a certain part of the employers' share of social security contributions is borne by workers. This question is somewhat controversial, however, and there is no universal agreement amongst economists and jurists.

30 In particular, there will be an increasing need for distributional analyses of pension reform measures in future pension reform debates.

1.2.9. The autonomy of the pension policy and its synergy with other policies

A national pension system does not operate in isolation from a country's economy. Instead, it is an important socioeconomic and political subsystem which interacts with other actors in the national and global economy. Sustainable growth and higher levels of employment promote an enabling environment for pension systems. Likewise, decent working conditions that facilitate a better balance between work and family responsibilities for women and men could contribute to reversing declines in fertility rates and mitigate the pressures of future demographic ageing. Therefore, it is indispensable that pension policy creates positive synergies with labour market policies, fiscal and macroeconomic policies, and social protection policies as a part of an integrated national policy.

To a large extent, the pension reform in CEE since the 1990s has been driven by external forces. These include the massive wave of unemployment following the collapse of the planned economies in the 1990s, the need to develop capital markets and bolster economic growth through increased savings (with the support of the World Bank) from the mid-1990s to the mid-2000s, and the pressure to contain Government deficits and Government debts (especially to meet the EU's Stability and Growth Pact criteria or the conditions attached to IMF financial assistance) following the global crisis in 2008–2009.

The European Commission has recently launched an open debate on the EU level pension framework by inviting parties to comment on the Green Paper on pensions. Such supranational initiatives may affect the future course of pension reform, especially for new EU member States and those on the path to accession that are making efforts to harmonize their pension systems with those of more advanced member States.

However, options are also available within the realm of pension policy to achieve adequate and sustainable pension systems. Although pension reforms are constrained by external forces, Governments and pension institutions must develop their capacity to analyze current policies and propose new pension policies that are consistent with other relevant policies.

1.2.10. Conclusion and the way forward

In the face of ageing population, the CEE countries are facing the difficult challenge of improving the long-term sustainability of their pension systems without jeopardizing their main objective: to secure adequate pensions and maintain their value over time, relying on a limited range of policy options.

There is no panacea or one-size-fits-all solution to this challenge. A country should find a policy package that is most suitable to its particular national context. The task of carrying out pension reform is therefore likely to remain an important issue for decades to come. However, due to the long-term nature of pension systems, the implementation of reform requires a sufficiently long transition period. Therefore, it is crucial that policymakers take proactive steps by 2020 when the demographic ageing is projected to intensify. In the future, particular attention should be given to the following issues.

First, it should be stressed that extending pension system coverage through improved law compliance and efficient contribution collection is crucial not only for their short-term financial implications but also to ensure workers' pension rights in the long-term.

Second, future policy measures should focus on extending the working lives of insured persons and achieving higher effective retirement ages. The challenge is to find a new work–retirement balance in the face of changing life cycles and changing social and economic roles for both sexes. Effective coordination and concerted action between pension policy and employment policy are required in order to create labour markets and pension systems which encourage people to stay active longer and allow for a flexible transition from working life to retirement.

Third, although pension financing is constrained by future demographic ageing, public pensions should continue to serve as a backbone of income protection for the elderly, disabled and survivors. With this in mind, key stakeholders should agree on the future benefit levels and mechanisms to safeguard them (such as minimum pension guarantees and indexation rules that maintain the value of pensions). The ILO Social Security Minimum Standards Convention No. 102 and the prospective Recommendation on Social Protection Floors will serve as useful policy guidelines for this purpose.

Fourth, related to the previous issue, both occupational pensions and private pensions are expected to play a more positive role in supplementing public pensions and responding to the various needs of elderly persons who were previously engaged in different occupations. Authorities should design incentives that effectively encourage individuals to save more and implement measures to promote the proper development of occupational pensions and private pensions. It is important to improve the general public's financial literacy, especially in relation to retirement planning, through effective education and informational campaigns.

Fifth, the policymaking process is an important aspect of pension reform. A well-informed and participatory dialogue lays the foundations for democratic process in policymaking. To achieve nation-wide consensus, key stakeholders should take a long-term view of the development of a pension system and exhibit a willingness to make pragmatic compromises. To effectively lead and manage the reform process, Governments and pension institutions must strengthen their policymaking capacity. Social partners should also strengthen their technical capacities to play a more active role in pension governance and the pension reform debate.

A well-functioning pension system is an important social system that protects its members against income loss due to old-age, disability or survivorship. Today's generations have an ethical obligation to preserve this societal asset and hand it over to the next generations in good shape.

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Annex A. Technical notes

Note 1.A.1
Factor analysis of the pension-to-GDP ratio

The pension expenditure as a percentage of GDP, called the pension-to-GDP-ratio, can be expressed as follows.

$$\frac{P}{Y}=\frac{Pens}{Cont}\cdot\frac{AvePens}{AveSal}\cdot\frac{T}{Y}=\frac{Pop_{65+}}{Pop_{20-64}}\cdot\frac{Pens}{Pop_{65+}}\cdot\left(\frac{Cont}{Pop_{20-64}}\right)^{-1}\cdot\frac{AvePens}{AveSal}\cdot\frac{T}{Y}$$

where

P	:	Pension expenditure
Y	:	GDP
T	:	Total contributory base
Pop_{65+}	:	Population aged 65 years and above
Pop_{20-64}	:	Population aged 20–64 years
$Cont$	:	Number of contributors
$Pens$	:	Number of pensioners
$AvePens$	:	Average pension
$AveSal$	:	Average contribution base.

This decomposition enables us to account for changes in the pension-to-GDP ratio in terms of changes in the component factors.

The meaning of each factor in the formula above is as follows:

- The first factor, the ratio of the population aged 65 years and above to the population aged 20–64 years, is the **old-age dependency rate (ratio)**, which measures the level of demographic ageing at the national level.
- The second factor, the ratio of the number of pensioners to the population aged 65 years and above, is the **pensioners coverage rate**.
- The inverse of the third factor, the ratio of the number of contributors to the population aged 20–64 years, is the **contributors coverage rate**.
- The forth factor, which measures the level of average pension in terms of the average contribution base, is the **system replacement rate (ratio)**.
- The last factor, the ratio of the total contribution base to GDP, is called the **taxable income capture rate**.

The product of the first three factors is equal to the ratio of the number of pensioners to the number of contributors, or the **system dependency rate (ratio)**.

The product of the first four factors is equal to the pension expenditure as a percentage of the total contribution base, or *P/T*, which is the **pension cost rate**. The pension cost rate is a product of the system dependency rate and the system replacement rate. The pension cost rate is comparable with the contribution rate levied on the contribution base.

In this analysis, the age thresholds applied to the definition of the old-age dependency rate are 20 and 65 years. However, there are old-age, disability and survivors' pensioners who are younger than 65 years old, as well as contributors who are 65 years and older or younger than 20 years old.

Note 1.A.2
Dynamics of the pension-to-GDP ratio and the affordability condition

The percentage of the pension expenditure in the total economic output is an indicator that measures the magnitude of the pension transfer in the national economy. In 2010, the pension expenditure of the EU-12 countries was 9.2 percent of GDP.

Regarding the change in this indicator, the following formula holds:

$$\Delta\left(\frac{P}{Y}\right) = \frac{N - D}{Y} + (i - g)\,\frac{P}{Y}\,,$$

where

Y : GDP
P : Pension expenditure
N : Pensions for newly awarded pensioners
D : Pensions for deceased pensioners
g : Rate of GDP growth
i : Rate of pension indexation.

For a pension system to be affordable in the long run, this indicator should not increase continually. Hence, the requirement that P/Y does not increase, namely $\Delta(P/Y) \leq 0$, is described by the following condition:

$$\frac{N - D}{P} \leq g - i.$$

This means that the pension-to-GDP ratio does not increase if the natural rate of increase in the pension expenditure is bounded by the real rate of economic growth with respect to the rate of indexation.

The above condition implies that in order to avoid further increases in the pension-to-GDP ratio, one should

- reduce the amount of newly awarded pensions (through a lower pension formula, tighter qualifying conditions and a higher pensionable age),
- apply lower rates of pension indexation, or
- achieve greater economic growth (through, for example, increased savings and investment).

Note 1.A.3
The actuarial long-term solvency of a public pension system

From an actuarial point of view, a pension system is solvent if the long-term actuarial pension liabilities are adequately met by the expected contributions. The actuarial balance sheet is used to test long-term solvency. A typical actuarial balance sheet of a pension system looks as follows:

Assets	Liabilities
– Fund at the date of evaluation: F_0	– Present value of benefits: $PV[B(t)] = \sum_{t \geq 1} \frac{B(t)}{(1+r)^t}$
– Present value of contributions: $PV[C(t)] = \sum_{t \geq 1} \frac{C(t)}{(1+r)^t}$	– Actuarial balance: $F_0 + PV[C(t)] - PV[B(t)]$

The actuarial balance sheet compares the sum of the initial fund F_0 and the expected present value of future contributions $PV[C(t)]$ against the expected present value of future benefit expenditure $PV[E(t)]$. If a negative actuarial balance is detected, its absolute value is called an unfunded pension liability or sometimes an implicit pension debt.

There are several bases of evaluation in respect of the scope of liabilities. The above example adopts the open fund basis (or the "going-concern" basis), which takes into account not only past service liabilities but also the benefit liabilities corresponding to future contribution credits by currently active workers and new entrants to the scheme. Alternatively, one can adopt the accrued-to-date basis (or the "scheme termination" basis) which only takes into account the liability corresponding to past contribution credits. In this case, the accrued-to-date basis liabilities are compared to the initial fund, since future contributions are not considered.

The interpretation of the actuarial balance sheet requires some caution. First, present values are sensitive to the discount rate (r) used for translating the values of future cash flows to the values at the date of evaluation. Second, on the assets side, future contributions are ultimately guaranteed by the Government's right to levy social security contributions on workers' payroll. Third, this balance sheet approach does not capture the liquidity requirements of a fund's year-to-year operations.

Despite these caveats, the actuarial balance sheet is a useful tool to evaluate the long-term pension liabilities under current legislation. It can also identify the need to reduce future benefits or increase future contributions in order to remove any unfunded liability.

Note 1.A.4
Equivalence between NDC and DB pension formulae

Consider a notional defined-contribution (NDC) scheme which provides interest equal to the average wage growth. Under this scheme, one's pension at the age of retirement is calculated as follows:

$$\text{NDC Pension} = \left(\sum_{x=e}^{r-1} c \cdot W_x \cdot (1 + w)^{r-x} \right) \Big/ \ddot{a}_r$$

where

- c : Contribution rate
- W_x : Past contributory wage of the individual at x years of age
- w : Rate of growth of the average wage (assumed to be constant over time for simplicity)
- e : Entry age in the pension system
- r : Retirement age
- $\ddot{a}_r$: Annuity factor at the retirement age.

Suppose that one's past wages are revaluated in line with increases in the average wage. The above NDC pension formula can then be rewritten as:

$$\text{NDC Pension} = (c / \ddot{a}_r) \cdot (r - e) \cdot AW,$$

where AW is the average revaluated wage of one's whole career and $r - e$ is the length of one's contribution period.

This shows that the NDC pension formula is equivalent to a defined-benefit (DB) formula which accrues $c / \ddot{a}_r$ times the average revaluated wage for each year of contribution.

In Sweden, for example, the contribution rate is 16 percent and the annuity factor is 16.0 (c = 16%, $\ddot{a}_{65}$ =16.0). Therefore, the Swedish NDC pension formula is equivalent to a defined-benefit formula that produces pensions equaling 1 percent of the average revaluated wage per year of contribution.

Annex B. The ILO social security standards

B.1 ILO minimum standards on old-age benefits according to Convention No. 102

According to Part V of the ILO Social Security (Minimum Standards) Convention, 1952 (No. 102), the basic principles and requirements regarding old-age benefits are as follows:

(1) Definition of the contingency

- The contingency covered is survival beyond a prescribed age, which should not normally be higher than 65 years. However, there is a possibility of fixing a higher age with due regard to the working ability of elderly persons.

(2) Persons protected

- The persons protected must comprise one of the following: at least 50 percent of all employees, prescribed classes of the economically active population comprising at least 20 percent of all residents, or all residents whose income in old-age does not exceed certain prescribed limits.

(3) Benefit

- The benefit should be a periodical payment provided throughout the contingency (i.e. for life).
- The benefit level must attain 40 percent of the reference wage[31] for a standard beneficiary (a man with a wife of pensionable age) after the completion of the qualifying period of 30 years of contribution or employment or 20 years of residence. The percentage may be decreased by up to ten points where benefit is secured to a person protected who has completed ten years of employment or contribution, or five years of residence.
- The benefit rates should be adjusted following substantial changes in the general levels of earnings or cost of living.

In addition, Convention No. 102 sets forth the following principles for partial-career workers and beneficiaries other than standard beneficiaries.

- For partial-career workers, a reduced benefit shall be secured at least after 15 years of contribution or employment.
- For other beneficiaries, the benefit shall bear a reasonable relation to the benefit for the standard beneficiary.

(4) Financing

- The costs of the benefits and of administration should be borne collectively by way of insurance contributions or taxation.

31 The reference wage can be the wage of a skilled manual male employee (which can be calculated as 125 percent of the average earnings of all the persons protected) for an earning-related pension formula, or the wage of an ordinary adult male labourer (which can be calculated as the average wage of unskilled labourers) for a flat rate pension formula.

- For contributory schemes, the total insurance contributions (including pension contributions) to be borne by employees should not exceed 50 per cent of the total financial resources allocated for protection (excluding family benefits and employment injury benefits if provided by a special branch).

(5) Governance

- The State should assume at least a general responsibility for the due provision of benefits and for the proper administration of the institutions.
- Representatives of the persons protected should participate in the management of a scheme, or at least be associated with it in a consultative capacity, in all cases where the administration is not entrusted to an institution regulated by the public authorities or to a government department. In these cases, representatives of employers and of the public authorities may also participate in the management of the scheme.

The Invalidity, Old-Age and Survivors' Benefits Convention, 1967 (No. 128) sets higher standards for old-age benefits and other pensions.

B.2 List of ratifications of the ILO Convention No. 102 and related conventions

Country	Date of ratification of C.102	Branch									Date of ratification of higher ILO conventions			Date of ratification of relevant ILO conventions	
		Medical care	Sickness benefit	Unemploy-ment	Old age benefit	Employment injury	Family benefit	Maternity benefit	Invalidity benefit	Survivors benefit	C.121	C.128	C.130	C.168	C.183
Albania	18.01.2006	√	√	√	√	√		√	√	√				04.08.2006	24.07.2004
Austria	04.11.1969	√		√	(C.128)		√	√				04.11.1969			30.04.2004
Azerbaijan															29.10.2010
Barbados	11.07.1972		√		(C.128)	√			(C.128)	√		15.09.1972			
Belarus															10.02.2004
Belgium	26.11.1959	√	√	√	√	(C.121)	√	√	√	√	22.04.1970				
Belize															09.11.2005
Plurinational State of Bolivia	31.01.1977	√	(C.130)		(C.128)	(C.121)	√	√	(C.128)	(C.128)	31.01.1977	31.01.1977	31.01.1977		
Bosnia and Herzegovina	02.06.1993	√	√	√	√	(C.121)		√		√	02.06.1993				18.01.2010
Brazil	15.06.2009	√	√	√	√	√	√	√	√	√				24.03.1993	
Bulgaria	14.07.2008	√	√		√	√	√	√		√					06.12.2001
Chile											30.09.1999				
Democratic Republic of the Congo	03.04.1987				√		√		√	√	05.09.1967				
Costa Rica	16.03.1972	√			√	√	√	√	√	√			16.03.1972		
Croatia	08.10.1991	√	√	√	√	(C.121)		√		√	08.10.1991				
Cuba															01.06.2004
Cyprus	03.09.1991		√	√	√	(C.121)			√	(C.128)	28.07.1966	07.01.1969			12.01.2005
Czech Republic	01.01.1993	√	(C.130)		(C.128)		√	√	√	√		01.01.1993	01.01.1993		
Denmark	15.08.1955	√		√	√	√			√				06.06.1978		

Country	Date of ratification of C.102	Branch									Date of ratification of higher ILO conventions			Date of ratification of relevant ILO conventions	
		Medical care	Sickness benefit	Unemploy-ment	Old age benefit	Employment injury	Family benefit	Maternity benefit	Invalidity benefit	Survivors benefit	C.121	C.128	C.130	C.168	C.183
Ecuador	25.10.1974		(C.130)		(C.128)	(C.121)			(C.128)	(C.128)	05.04.1978	05.04.1978	05.04.1978		
Finland											23.09.1968	13.01.1976	03.09.1974	19.12.1990	
France	14.06.1974	√		√	√	√	√	√	√						
Germany	21/02/1958	√	(C.130)	√	(C.128)	(C.121)	√	√	(C.128)	(C.128)	01.03.1972	15.01.1971	08.08.1974		
Greece	16.06.1955	√	√	√	√	√		√	√	√					
Guinea											11.08.1967				
Hungary															04.11.2003
Iceland	20.02.1961				√		√		√						
Ireland	17/06/1968		√	√						√	09.06.1969				
Israel	16.12.1955				√	√				√					
Italy	08.06.1956				√		√	√							07.02.2001
Japan	02.02.1976		√	√	√	(C.121)					07.06.1974				
Latvia															09.02.2009
Libyan Arab Jamahiriya	19.06.1975	√	(C.130)	√	(C.128)	(C.121)	√	√	(C.128)	(C.128)	19.06.1975	19.06.1975	19.06.1975		
Lithuania															23.09.2003
Luxembourg	31.08.1964	√	(C.130)	√	√	(C.121)	√	√	√	√	24.07.1972		03.07.1980		08.04.2008
Mali															05.06.2008
The former Yugoslav Republic of Macedonia	17.11.1991	√	√	√	√	(C.121)		√		√	17.11.1991				
Mauritania	15.07.1968				√	√	√		√	√					
Mexico	12.10.1961	√	√		√	√		√	√	√					
Republic of Moldova															28.08.2006

Montenegro	03.06.2006	√	√	√	√	(C.121)		√		√	03.06.2006				
Morocco															13.04.2011
Netherlands	11.10.1962	√	(C.130)	√	(C.128)	(C.121)	√	√	(C.128)	(C.128)	02.08.1966	27.10.1969	17.01.2006		15.01.2009
Niger	09.08.1966				√	√	√	√							
Norway	30.09.1954	√	(C.130)	√	(C.128)	√	√					01.11.1968	15.02.1972	19.06.1990	
Peru	23.08.1961	√	√		√			√	√						
Poland	03.12.2003	√			√		√	√		√					
Portugal	17.03.1994	√	√	√	√	√	√	√	√	√					
Romania	15.10.2009	√	√		√		√	√						15.12.1992	23.10.2002
Senegal	22.10.1962					(C.121)	√	√			25.04.1966				
Serbia	24.11.2000	√	√	√	√	(C.121)		√		√	24.11.2000				31.08.2010
Slovakia	01.01.1993	√	(C.130)		(C.128)		√	√	√	√		01.01.1993	01.01.1993		12.12.2000
Slovenia	29.05.1992	√	√	√	√	(C.121)		√		√	29.05.1992				01.03.2010
Spain	29.06.1988	√	√	√		√									
Sweden	12.08.1953	√	(C.130)	√		(C.121)	√	√			17.06.1969	26.07.1968	14.05.1970	18.12.1990	
Switzerland	18.10.1977				(C.128)	√	√		(C.128)	(C.128)		13.09.1977		17.10.1990	
Turkey	29.01.1975	√	√		√	√		√	√	√					
United Kingdom	27/04/1954	√	√	√	√		√			√					
Uruguay	14.10.2010	√			√			√	√		28.06.1973	28.06.1973	28.06.1973		
Bolivarian Republic of Venezuela	05.11.1982	√	(C.130)	√	(C.128)	(C.121)	√	√	(C.128)	(C.128)	10.08.1982	01.12.1983	10.08.1982		
Number of Current Ratifications	47	34	33	26	43	35	27	33	27	33	24	16	15	7	22

Source: ILOLEX (http://www.ilo.org/ilolex/) as of 1 December 2011.

C.102: Social Security (Minimum Standards) Convention, 1952 (No.102)
C.128: Invalidity, Old-Age and Survivors' Benefits Convention, 1967 (No.128)
C.168: Employment Promotion and Protection against Unemployment Convention, 1988 (No.168)
C.121: Employment Injury Benefits Convention, 1964 (No.121)
C.130: Medical Care and Sickness Benefits Convention, 1969 (No.130)
C.183: Maternity Protection Convention, 2000 (No.183)

B.3 Elements of a possible Recommendation on Social Protection Floors[32]

(1) General context

Everyone as a member of society has the right to social security as stated in the Universal Declaration of Human Rights, Article 22. Social security is a social and economic necessity, a prerequisite of social and economic development, and an element of Decent Work for all women and men. It can make a major contribution to the achievement of the Millennium Development Goals and targets.

(2) Objective

The Recommendation would focus on the extension of coverage to wider groups of the population (horizontal extension of coverage), and thereby supporting the implementation of national social protection floors. With respect to progressively ensuring higher levels of protection (vertical extension of coverage), the Recommendation would encourage member States to ratify and those that have ratified to ensure the effective implementation of the Social Security (Minimum Standards) Convention, 1952 (No. 102), and other up-to-date ILO social security Conventions.

The objective of the Recommendation would be to provide guidance to member States to develop a social security extension strategy compatible with, and supportive of, wider national social, economic and employment policy strategies and seek in particular to contribute to poverty reduction and the formalization of informal employment.

(3) Principles for the implementation

The extension of social security should be country-led and responsive to national needs, priorities and resources. In order to support member States in this task, the Recommendation would specify a number of principles for the design and implementation of national social security extension strategies in line with the conclusions of this Committee.

(4) Scope of the instrument

The Recommendation should encourage member States to design, through an effective national social dialogue process, a social security strategy that identifies gaps in the achievement of nationally pursued levels of protection and seeks to close those gaps and build a comprehensive social security system in a coordinated and planned manner over a period of time giving due regard to the workers in the informal economy.

The horizontal dimension of the social security extension strategy should prioritize the implementation of a national social protection floor, consisting of four basic social security guarantees, i.e. nationally-defined minimum levels of income security during childhood, working age and old age, as well as affordable access to essential health care. These guarantees set the minimum levels of protection that all members of a society should be entitled to in case of need. Focusing on outcomes achieved, these guarantees do not prescribe specific forms of benefits, financing mechanisms or the organization of benefit delivery.

32 Appendix to the Conclusions concerning the recurrent discussion on social protection (social security), International Labour Conference, 100th Session, 2011 (Reprinted in ILO, 2011b).

The Recommendation could encourage member States to close coverage gaps of populations with contributory capacity through contributory schemes. It would encourage member States to ratify up-to-date ILO social security Conventions as early as possible in national social and economic development processes, and to ensure their effective implementation.

The Recommendation should encourage member States to establish appropriate mechanisms to monitor the extension of social security and the implementation of their national basic social security guarantees. It could also invite member States to establish mechanisms, based on effective national social dialogue, to further extend social security coverage on the basis of Convention No. 102 and other up-to-date Conventions and build comprehensive social security systems in line with national social needs, and economic and fiscal capacities.

Annex C. Statistical annex

Table 1.C.1
Estimated pension-to-GDP ratios in select EU-12 countries, 1990–2009 (%)

Country	1990	1995	2000	2005	2009
Bulgaria	8.8	8.0	9.0	8.2	9.4
Czech Republic	13.0	7.7	8.9	8.2	9.3
Hungary	9.1	9.2	8.5	9.8	10.9
Poland	6.6	11.1	9.8	9.9	9.9
Romania	6.3	5.8	6.6	6.2	8.2
Slovakia	11.7	8.0	8.2	7.6	8.2
Slovenia	9.7	11.4	11.2	10.5	10.9

Note: Some missing data of 1990 and 1995 have been estimated as follows:
(1) For Slovenia, the data of 1990 refer to 1991.
(2) For the Czech Republic, the values of the contributor coverage rate, system replacement rate and taxable income capture rate in 1990 have been assumed to be the same as those in Slovakia in 1990.
(3) For Hungary, the values of the system replacement rate and taxable income capture rate in 1990 have been assumed to be the same as those in 1995.
(4) For Romania, the taxable income capture rates in 1990 and in 1995 have been assumed to be the same as the values for Bulgaria in those respective years.

Source: ILO calculations.

Table 1.C.2
Estimated pension cost rates in select EU-12 countries, 1990–2009 (%)

Country	1990	1995	2000	2005	2009
Bulgaria	21.3	24.8	41.1	36.2	34.1
Czech Republic	24.0	24.4	27.6	24.9	30.1
Hungary	22.7	30.4	32.9	36.0	42.3
Poland	22.3	34.2	24.2	31.2	26.4
Romania	15.3	17.9	30.4	45.0	45.5
Slovakia	21.6	23.6	25.5	29.8	30.9
Slovenia	23.6	29.9	29.9	28.9	28.6

Note: Some missing data of 1990 and 1995 have been estimated as follows:
(1) For Slovenia, the data of 1990 refer to 1991.
(2) For the Czech Republic, the values of the contributor coverage rate, system replacement rate and taxable income capture rate in 1990 have been assumed to be the same as those in Slovakia in 1990.
(3) For Hungary, the values of the system replacement rate and taxable income capture rate in 1990 have been assumed to be the same as those in 1995.
(4) For Romania, the taxable income capture rates in 1990 and in 1995 have been assumed to be the same as the values for Bulgaria in those respective years.

Source: ILO calculations.

Figure 1.C.1
Estimated pension-to-GDP ratios in select EU-12 countries, 1990–2009 (%)

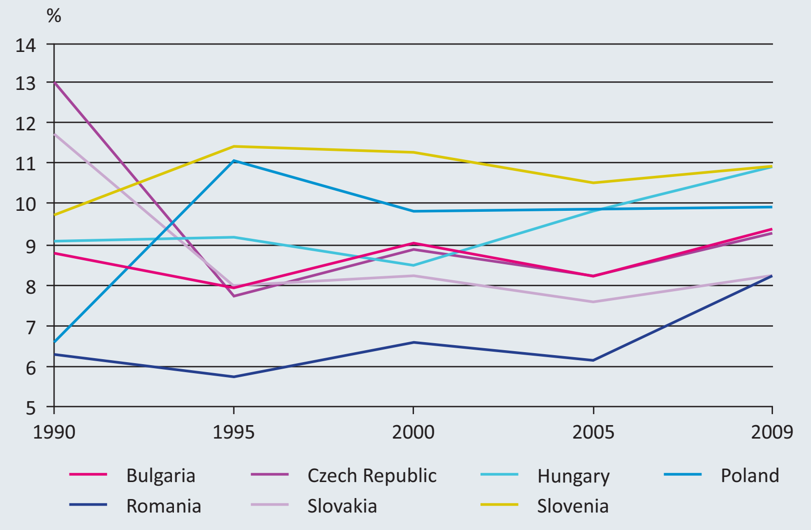


Figure 1.C.2
Estimated pension cost rates in select EU-12 countries, 1990–2009 (%)

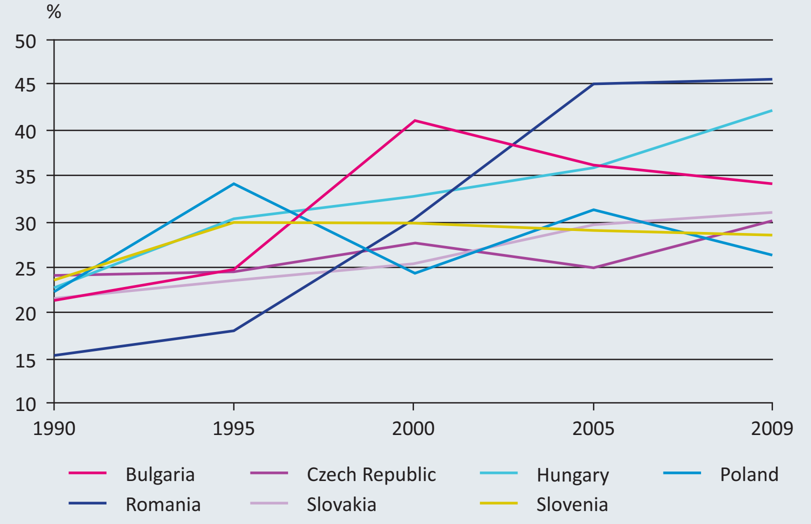


Table 1.C.3
Estimated old-age dependency rates in select EU-12 countries, 1990–2009 (%)

Country	1990	1995	2000	2005	2009
Bulgaria	21.9	25.0	26.5	27.5	27.5
Czech Republic	21.5	22.1	22.0	21.7	22.9
Hungary	22.5	23.8	24.4	25.0	26.1
Poland	17.3	19.0	20.2	21.1	21.0
Romania	17.9	20.1	21.8	23.8	23.3
Slovakia	18.3	18.8	18.8	18.3	18.5
Slovenia	17.3	19.5	22.0	23.9	25.6

Note: Some missing data of 1990 and 1995 have been estimated as follows:
(1) For Slovenia, the data of 1990 refer to 1991.
(2) For the Czech Republic, the values of the contributor coverage rate, system replacement rate and taxable income capture rate in 1990 have been assumed to be the same as those in Slovakia in 1990.
(3) For Hungary, the values of the system replacement rate and taxable income capture rate in 1990 have been assumed to be the same as those in 1995.
(4) For Romania, the taxable income capture rates in 1990 and in 1995 have been assumed to be the same as the values for Bulgaria in those respective years.

Source: ILO calculations.

Table 1.C.4
Estimated system dependency rates in select EU-12 countries, 1990–2009 (%)

Country	1990	1995	2000	2005	2009
Bulgaria	55.1	77.9	103.3	89.1	77.5
Czech Republic	47.1	47.8	55.4	54.8	57.1
Hungary	49.0	65.5	64.0	62.2	61.4
Poland	39.3	54.2	55.3	54.7	48.0
Romania	41.2	79.8	117.5	115.9	99.5
Slovakia	42.3	51.1	54.2	54.4	57.3
Slovenia	51.3	59.8	59.7	62.8	62.6

Note: Some missing data of 1990 and 1995 have been estimated as follows:
(1) For Slovenia, the data of 1990 refer to 1991.
(2) For the Czech Republic, the values of the contributor coverage rate, system replacement rate and taxable income capture rate in 1990 have been assumed to be the same as those in Slovakia in 1990.
(3) For Hungary, the values of the system replacement rate and taxable income capture rate in 1990 have been assumed to be the same as those in 1995.
(4) For Romania, the taxable income capture rates in 1990 and in 1995 have been assumed to be the same as the values for Bulgaria in those respective years.

Source: ILO calculations.

Figure 1.C.3
Estimated old-age dependency rates in select EU-12 countries, 1990–2009 (%)

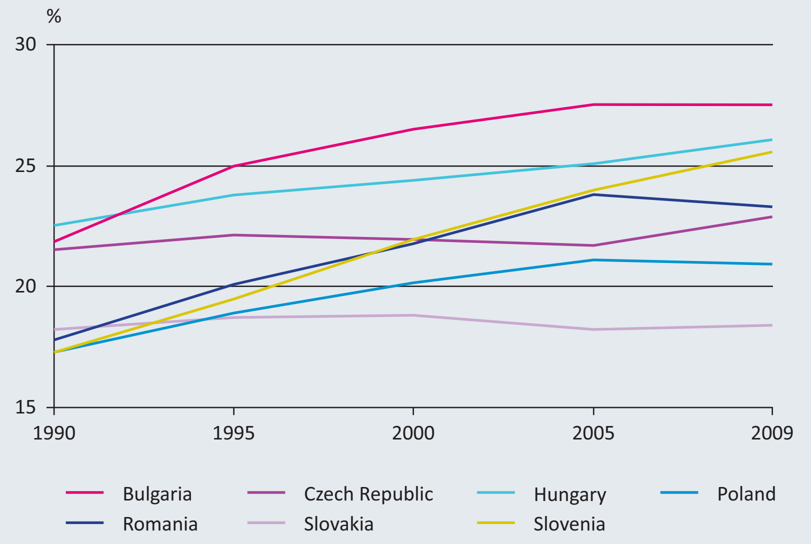


Figure 1.C.4
Estimated system dependency rates in select EU-12 countries, 1990–2009 (%)

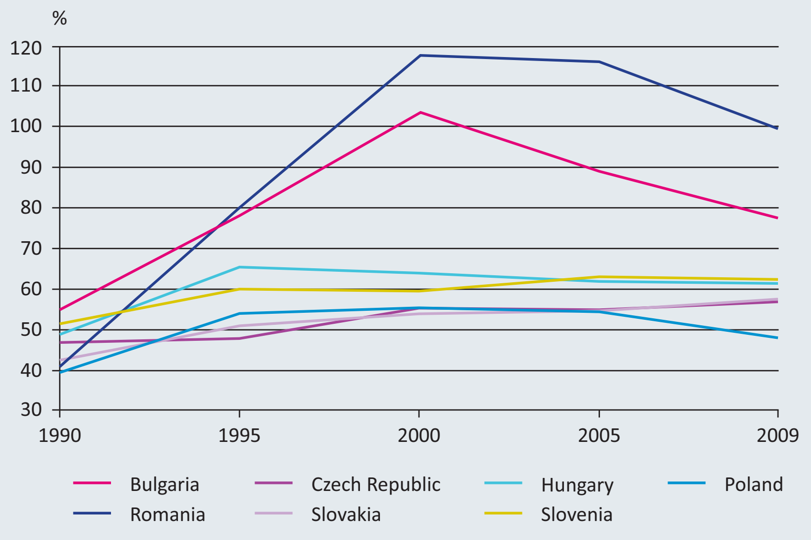


Table 1.C.5
Estimated pensioners coverage rates in select EU-12 countries, 1990–2009 (%)

Country	1990	1995	2000	2005	2009
Bulgaria	200.1	192.4	179.5	173.9	165.6
Czech Republic	187.5	184.2	181.1	184.3	179.3
Hungary	183.4	190.1	182.0	173.9	167.4
Poland	146.7	166.1	154.7	143.2	144.7
Romania	142.4	196.6	205.0	191.2	177.7
Slovakia	199.4	202.1	194.6	194.2	195.1
Slovenia	197.6	191.7	175.3	173.5	167.7

Note: Some missing data of 1990 and 1995 have been estimated as follows:
(1) For Slovenia, the data of 1990 refer to 1991.
(2) For the Czech Republic, the values of the contributor coverage rate, system replacement rate and taxable income capture rate in 1990 have been assumed to be the same as those in Slovakia in 1990.
(3) For Hungary, the values of the system replacement rate and taxable income capture rate in 1990 have been assumed to be the same as those in 1995.
(4) For Romania, the taxable income capture rates in 1990 and in 1995 have been assumed to be the same as the values for Bulgaria in those respective years.

Source: ILO calculations.

Table 1.C.6
Estimated contributors coverage rates in select EU-12 countries, 1990–2009 (%)

Country	1990	1995	2000	2005	2009
Bulgaria	79.4	61.6	46.1	53.7	58.8
Czech Republic	85.7	85.0	71.8	73.1	72.0
Hungary	84.3	69.0	69.3	70.0	71.1
Poland	64.7	58.2	56.6	55.2	63.2
Romania	61.7	49.5	38.0	39.2	41.6
Slovakia	86.1	74.4	67.6	65.4	62.9
Slovenia	66.8	62.5	64.5	66.1	68.6

Note: Some missing data of 1990 and 1995 have been estimated as follows:
(1) For Slovenia, the data of 1990 refer to 1991.
(2) For the Czech Republic, the values of the contributor coverage rate, system replacement rate and taxable income capture rate in 1990 have been assumed to be the same as those in Slovakia in 1990.
(3) For Hungary, the values of the system replacement rate and taxable income capture rate in 1990 have been assumed to be the same as those in 1995.
(4) For Romania, the taxable income capture rates in 1990 and in 1995 have been assumed to be the same as the values for Bulgaria in those respective years.

Source: ILO calculations.

Figure 1.C.5
Estimated pensioners coverage rates in select EU-12 countries, 1990–2009 (%)

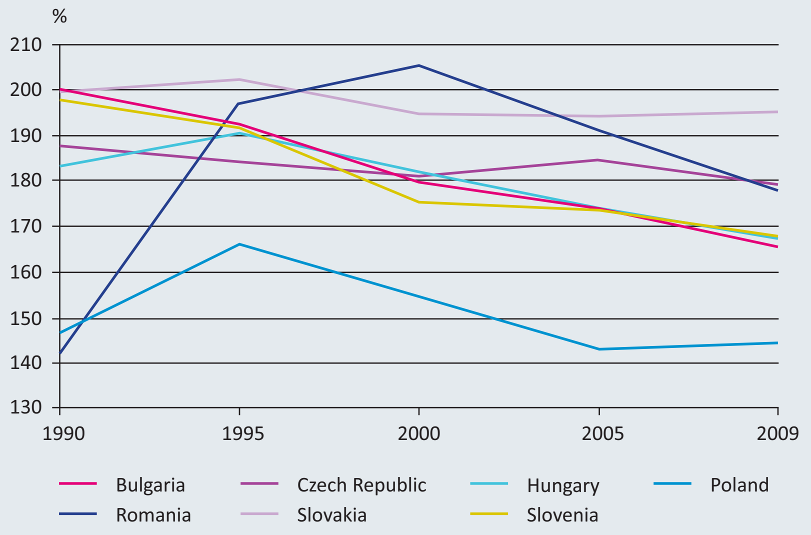


Figure 1.C.6
Estimated contributors coverage rates in select EU-12 countries, 1990–2009 (%)

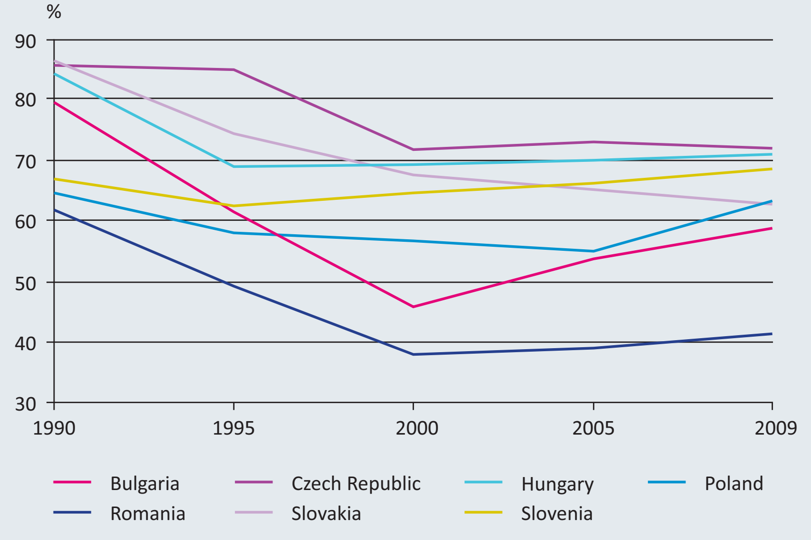


Table 1.C.7
Estimated system replacement rates in select EU-12 countries, 1990–2009 (%)

Country	1990	1995	2000	2005	2009
Bulgaria	38.7	31.8	39.8	40.6	44.1
Czech Republic	51.0	51.0	49.9	45.4	52.8
Hungary	46.4	46.4	51.4	57.9	68.8
Poland	56.8	63.1	43.8	57.0	55.0
Romania	37.1	22.5	25.9	38.8	45.8
Slovakia	51.0	46.1	47.1	54.8	53.9
Slovenia	46.1	50.0	50.1	46.1	45.7

Note: Some missing data of 1990 and 1995 have been estimated as follows:
(1) For Slovenia, the data of 1990 refer to 1991.
(2) For the Czech Republic, the values of the contributor coverage rate, system replacement rate and taxable income capture rate in 1990 have been assumed to be the same as those in Slovakia in 1990.
(3) For Hungary, the values of the system replacement rate and taxable income capture rate in 1990 have been assumed to be the same as those in 1995.
(4) For Romania, the taxable income capture rates in 1990 and in 1995 have been assumed to be the same as the values for Bulgaria in those respective years.

Source: ILO calculations.

Table 1.C.8
Estimated taxable income capture rates in select EU-12 countries, 1990–2009 (%)

Country	1990	1995	2000	2005	2009
Bulgaria	41.2	32.1	21.9	22.7	27.5
Czech Republic	54.2	31.7	32.1	33.2	30.8
Hungary	40.0	30.3	25.8	27.2	25.8
Poland	29.6	32.3	40.5	31.7	37.7
Romania	41.2	32.1	21.7	16.4	21.7
Slovakia	54.2	34.0	32.3	25.5	26.6
Slovenia	41.1	38.1	37.6	36.4	38.2

Note: Some missing data of 1990 and 1995 have been estimated as follows:
(1) For Slovenia, the data of 1990 refer to 1991.
(2) For the Czech Republic, the values of the contributor coverage rate, system replacement rate and taxable income capture rate in 1990 have been assumed to be the same as those in Slovakia in 1990.
(3) For Hungary, the values of the system replacement rate and taxable income capture rate in 1990 have been assumed to be the same as those in 1995.
(4) For Romania, the taxable income capture rates in 1990 and in 1995 have been assumed to be the same as the values for Bulgaria in those respective years.

Source: ILO calculations.

Figure 1.C.7
Estimated system replacement rates in select EU-12 countries, 1990–2009 (%)

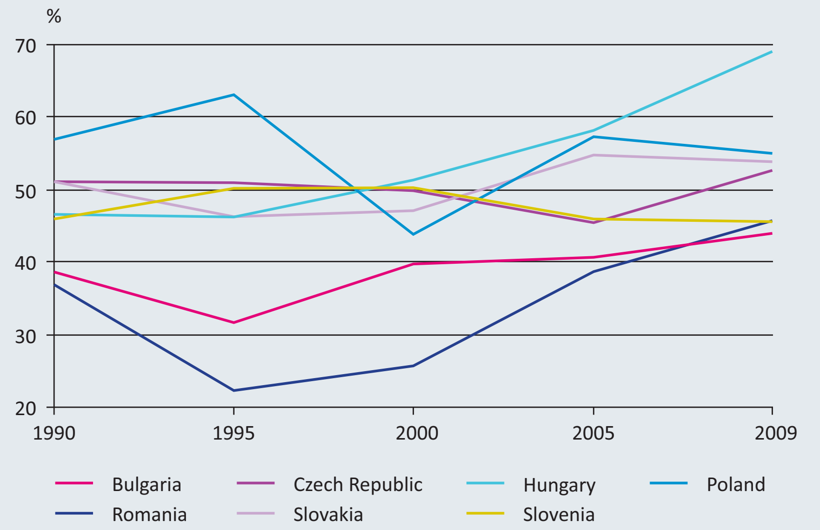


Figure 1.C.8
Estimated taxable income capture rates in select EU-12 countries, 1990–2009 (%)

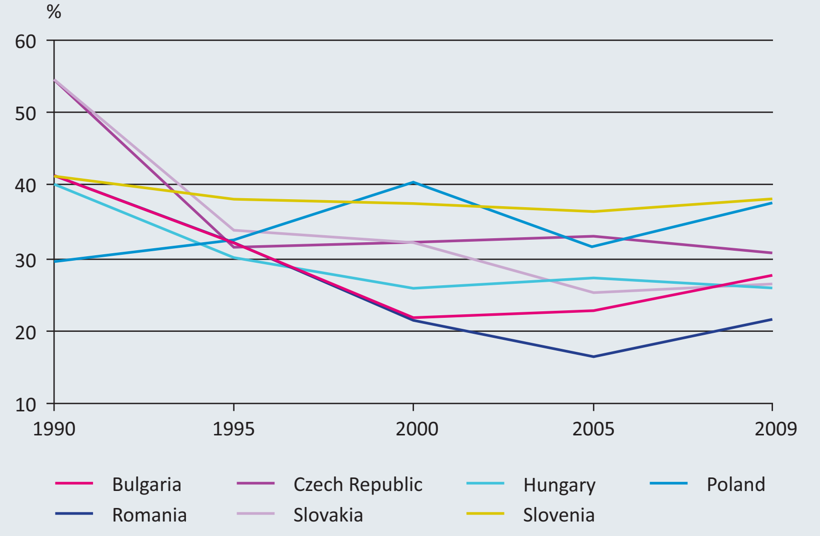


Table 1.C.9
Projected pension-to-GDP ratios in EU 27 countries, 2010–2060 (%)

Country	2010	2015	2020	2025	2030	2035	2040	2045	2050	2055	2060
Bulgaria	9.1	8.6	8.4	8.4	8.6	9.0	9.5	10.1	10.8	11.2	11.3
Czech Rep.	7.1	6.9	6.9	7.0	7.1	7.6	8.4	9.4	10.2	10.8	11.0
Hungary	11.3	10.9	11.0	10.9	11.0	11.4	12.2	12.7	13.2	13.7	13.8
Poland	10.8	9.6	9.7	9.7	9.4	9.3	9.2	9.1	9.1	9.0	8.8
Romania	8.4	8.5	8.8	9.4	10.4	11.5	12.6	13.7	14.8	15.3	15.8
Slovakia	6.6	6.3	6.3	6.9	7.3	7.8	8.3	8.8	9.4	9.9	10.2
Slovenia	10.1	10.6	11.1	12.0	13.3	14.7	16.1	17.3	18.2	18.6	18.6
Estonia	6.4	6.2	5.9	5.8	5.6	5.4	5.4	5.3	5.3	5.2	4.9
Latvia	5.1	4.8	5.2	5.6	5.9	6.1	6.1	5.9	5.8	5.6	5.1
Lithuania	6.5	6.5	6.9	7.6	8.2	8.7	9.1	9.6	10.4	11.0	11.4
Cyprus	6.9	7.8	8.9	9.8	10.8	11.7	12.8	14.0	15.5	16.8	17.7
Malta	8.3	9.1	9.3	9.1	9.3	9.7	10.5	11.3	12.0	12.7	13.4
EU-12	**9.2**	**8.6**	**8.8**	**9.0**	**9.2**	**9.6**	**10.1**	**10.6**	**11.1**	**11.4**	**11.5**
Austria	12.7	12.8	13.0	13.4	13.8	13.9	13.9	14.0	14.0	13.9	13.6
Belgium	10.3	10.9	11.8	13.0	13.9	14.4	14.6	14.7	14.7	14.8	14.7
Denmark	9.4	10.2	10.6	10.5	10.6	10.5	10.4	10.0	9.6	9.3	9.2
Finland	10.7	11.8	12.6	13.4	13.9	13.9	13.6	13.4	13.3	13.3	13.4
France	13.5	13.5	13.6	13.9	14.2	14.5	14.4	14.3	14.2	14.1	14.0
Germany	10.2	10.1	10.5	11.0	11.5	11.9	12.1	12.2	12.3	12.5	12.8
Greece	11.6	12.2	13.2	14.8	17.1	19.4	21.4	23.0	24.0	24.3	24.1
Ireland	4.1	4.3	4.6	5.0	5.4	5.8	6.4	7.1	8.0	8.4	8.6
Italy	14.0	14.0	14.1	14.3	14.8	15.2	15.6	15.4	14.7	14.2	13.6
Luxembourg	8.6	8.9	9.9	12.1	14.2	16.6	18.4	20.7	22.1	23.7	23.9
Netherlands	6.5	7.2	7.8	8.4	9.3	10.0	10.3	10.3	10.3	10.4	10.5
Portugal	11.9	12.1	12.4	12.6	12.6	12.3	12.5	12.8	13.3	13.1	13.4
Spain	8.9	9.2	9.5	10.1	10.8	11.9	13.2	14.6	15.5	15.6	15.1
Sweden	9.6	9.5	9.4	9.4	9.5	9.5	9.4	9.1	9.0	9.2	9.4
United Kingdom	6.7	6.8	6.9	7.2	7.6	7.8	8.0	7.9	8.1	8.6	9.3
EU-15	**10.3**	**10.4**	**10.7**	**11.0**	**11.6**	**12.0**	**12.3**	**12.4**	**12.4**	**12.5**	**12.6**
EU-27	**10.2**	**10.3**	**10.5**	**10.9**	**11.4**	**11.8**	**12.1**	**12.2**	**12.3**	**12.4**	**12.5**

Note: The pension-to-GDP ratio is defined as the pension expenditure as a percentage of GDP.

Source: European Commission, 2009 Ageing Report; Economic and budgetary projections for EU-27 Member States (2008–2060), Statistical Annex.

Figure 1.C.9
Projected pension-to-GDP ratios in select EU-12 countries, 2010–2060 (%)

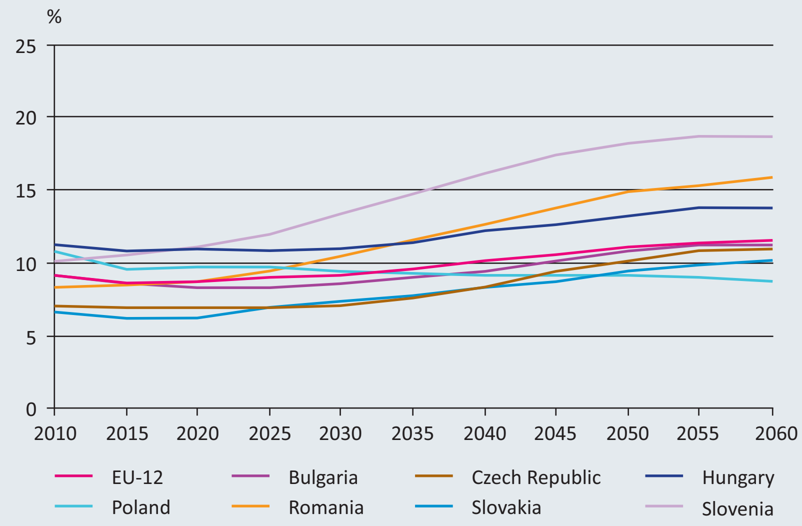


Figure 1.C.10
Projected pension-to-GDP ratios in select EU-15 countries, 2010–2060 (%)

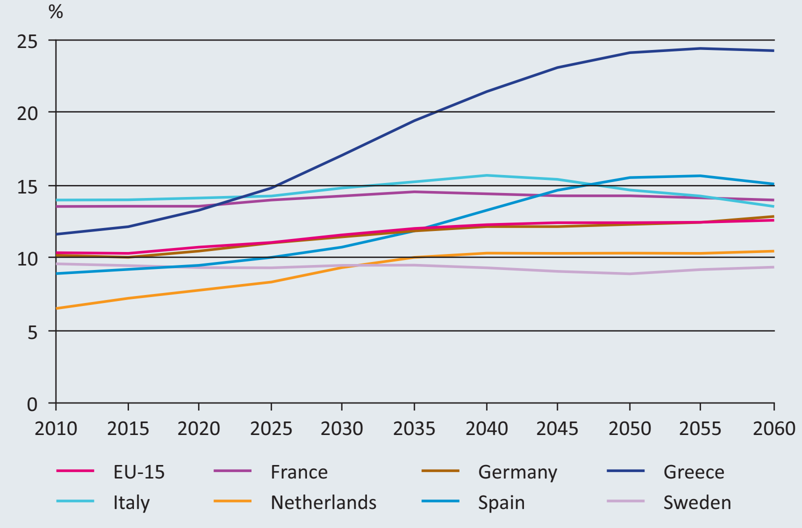


Table 1.C.10
Projected pension cost rates in EU-27 countries, 2010–2060 (%)

Country	2010	2015	2020	2025	2030	2035	2040	2045	2050	2055	2060
Bulgaria	37.0	34.7	33.2	33.0	33.3	34.8	36.8	37.7	40.5	42.0	43.3
Czech Rep.	22.8	22.3	22.3	22.3	22.8	24.6	27.0	30.0	32.5	34.6	35.1
Hungary	31.0	30.4	30.7	30.1	30.3	31.4	33.7	35.0	36.6	38.0	38.1
Poland	33.3	29.3	29.9	30.1	29.5	29.4	29.0	28.7	29.3	28.7	27.6
Romania	32.7	31.4	31.9	32.6	35.0	37.8	40.5	42.4	44.4	44.7	45.2
Slovakia	21.7	20.9	20.9	22.7	24.1	25.7	27.6	29.1	31.0	32.6	33.8
Slovenia	24.7	25.9	27.1	29.5	32.7	36.0	39.3	42.4	44.7	45.4	45.3
Estonia	18.1	17.9	16.8	16.5	16.1	15.5	15.3	15.3	15.0	14.7	13.8
Latvia	11.6	10.8	12.0	13.0	13.6	14.1	14.1	13.4	13.1	12.5	11.5
Lithuania	20.2	20.2	21.3	23.4	25.1	26.4	27.6	29.2	31.3	33.1	34.3
Cyprus	18.4	20.9	23.8	26.3	29.3	31.6	34.7	38.1	42.4	46.0	48.5
Malta	21.3	23.0	23.1	22.4	22.7	23.4	25.1	27.0	28.5	30.0	32.0
EU-12	**29.8**	**27.2**	**27.4**	**28.2**	**28.5**	**29.6**	**30.8**	**32.2**	**33.6**	**34.0**	**34.3**
Austria	32.4	32.9	33.3	34.2	35.3	35.5	35.4	35.7	35.6	35.4	34.6
Belgium	27.3	28.7	31.1	34.4	36.7	38.0	38.6	38.9	38.8	39.1	38.8
Denmark	19.4	21.0	21.9	21.7	21.9	21.7	21.5	20.6	19.9	19.2	19.0
Finland	29.1	32.2	34.4	36.7	38.1	38.2	37.2	36.6	36.4	36.5	36.8
France	36.6	36.6	36.8	37.6	38.5	39.1	38.9	38.6	38.3	38.0	37.8
Germany	31.4	30.9	32.1	33.5	35.0	36.2	36.8	37.1	37.4	38.0	38.9
Greece	40.5	42.6	46.1	51.8	59.5	67.7	74.4	79.5	82.8	83.4	82.1
Ireland	7.9	8.3	9.0	9.7	10.6	11.3	12.6	14.0	15.8	16.6	16.9
Italy	46.4	46.4	46.5	47.3	48.8	50.3	51.5	50.7	48.4	46.9	44.9
Luxembourg	17.9	17.2	18.8	23.0	27.0	31.5	34.8	39.2	41.9	45.0	45.3
Netherlands	12.7	13.7	14.4	15.0	15.9	16.5	16.7	16.8	16.9	17.0	16.9
Portugal	37.5	39.1	41.1	42.8	43.9	43.6	45.0	47.0	48.8	48.1	49.5
Spain	22.9	24.1	25.2	26.8	28.6	31.4	34.8	38.7	41.1	41.4	40.0
Sweden	19.3	19.7	19.6	19.6	19.8	19.8	19.7	19.0	18.7	19.2	19.6
United Kingdom	—	—	—	—	—	—	—	—	—	—	—
EU-15*	**28.1**	**28.3**	**29.2**	**29.9**	**31.4**	**32.2**	**32.9**	**33.0**	**32.9**	**33.0**	**33.2**
EU-27*	**28.3**	**28.6**	**29.2**	**30.2**	**31.4**	**32.3**	**32.8**	**32.7**	**32.7**	**32.7**	**32.6**

Note: The pension cost rate is defined as the pension expenditure as a percentage of the total contribution base.

* Not including UK data.

Source: European Commission, 2009 Ageing Report; Economic and budgetary projections for EU-27 Member States (2008–2060), Statistical Annex; Eurostat; and ILO calculations.

Figure 1.C.11
Projected pension cost rates in select EU-12 countries, 2010–2060 (%)

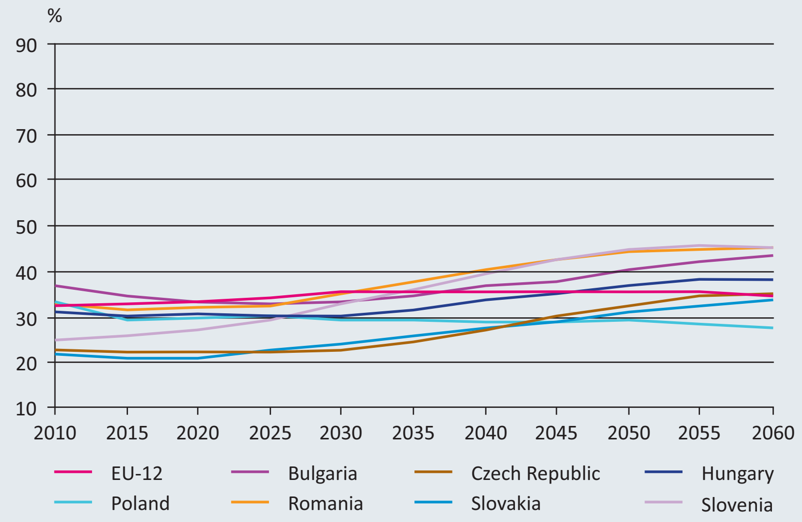


Figure 1.C.12
Projected pension cost rates in select EU-15 countries, 2010–2060 (%)

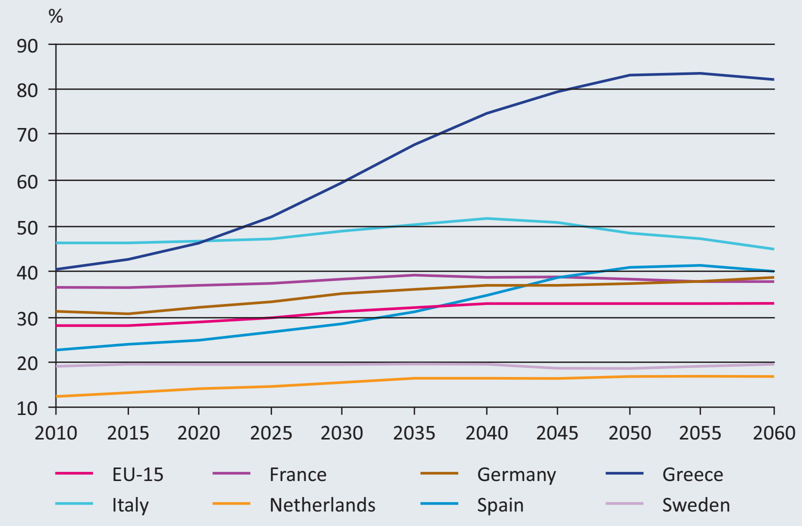


Table 1.C.11
Projected old-age dependency rates in EU-27 countries, 2010–2060 (%)

Country	2010	2015	2020	2025	2030	2035	2040	2045	2050	2055	2060
Bulgaria	27.5	30.2	33.4	36.7	39.5	42.3	47.0	53.5	60.1	66.9	69.4
Czech Rep.	23.8	28.4	33.4	36.8	38.7	40.9	46.0	54.1	59.1	64.0	67.1
Hungary	26.5	28.4	32.8	36.2	37.1	39.3	43.5	50.5	55.0	59.2	62.8
Poland	21.0	23.7	29.2	35.6	39.2	41.2	44.6	50.7	59.8	68.6	75.0
Romania	23.3	24.3	27.7	31.6	32.9	38.2	43.9	51.4	58.2	67.9	71.0
Slovakia	18.7	20.9	25.6	30.8	35.0	38.2	43.0	51.1	59.5	68.0	74.3
Slovenia	25.8	28.2	33.5	39.1	44.5	49.3	53.5	59.2	64.4	67.9	68.1
Estonia	27.5	28.8	31.7	35.0	37.9	39.7	42.6	45.8	51.3	59.0	61.2
Latvia	27.8	28.0	30.2	33.9	37.9	40.5	44.1	48.2	55.3	65.3	70.6
Lithuania	25.8	26.1	27.9	32.0	37.7	42.3	46.5	49.6	55.1	63.9	71.6
Cyprus	20.1	21.8	24.1	27.2	30.1	32.0	33.7	36.4	41.0	45.1	48.8
Malta	23.5	29.2	33.7	39.0	42.5	43.5	45.4	49.1	54.0	59.0	64.3
EU-12	**23.3**	**25.2**	**30.1**	**34.8**	**37.8**	**42.1**	**44.2**	**51.1**	**58.4**	**66.5**	**71.4**
Austria	28.6	29.8	31.7	35.4	41.4	47.4	50.2	51.1	52.7	53.8	55.4
Belgium	28.7	30.8	33.4	37.2	41.4	44.6	46.5	47.4	48.2	49.1	49.9
Denmark	27.7	32.1	35.1	38.0	41.5	45.2	47.2	47.3	45.8	45.4	46.9
Finland	28.4	34.7	40.2	44.8	48.5	50.7	49.8	50.2	51.3	52.3	54.4
France	28.4	32.3	36.3	39.8	43.4	46.3	48.7	49.0	49.5	50.3	50.1
Germany	33.9	34.7	38.0	42.4	49.8	57.2	59.5	59.9	61.2	63.2	64.2
Greece	30.6	32.9	35.4	38.6	41.9	46.8	52.2	57.6	61.9	62.9	62.6
Ireland	18.3	20.2	22.4	24.7	27.5	30.3	33.9	38.8	44.6	47.6	48.5
Italy	33.4	36.3	38.3	41.1	46.0	48.8	58.3	62.7	64.2	64.5	64.4
Luxembourg	23.2	24.6	26.6	29.6	33.8	37.8	40.1	41.1	41.7	41.9	43.1
Netherlands	25.1	29.8	33.8	38.2	43.7	48.7	51.5	50.9	50.1	50.4	51.8
Portugal	28.9	31.0	33.4	36.1	39.9	43.5	48.2	53.7	57.6	59.0	59.8
Spain	26.3	27.8	29.8	32.9	37.4	43.2	50.3	58.5	63.9	65.7	64.7
Sweden	31.1	34.4	36.9	39.1	41.3	43.9	45.3	45.3	46.0	48.4	51.7
United Kingdom	27.4	29.7	31.2	33.4	36.5	39.7	40.7	40.4	41.8	44.2	46.4
EU-15	**29.8**	**32.1**	**34.8**	**38.0**	**42.6**	**46.8**	**50.7**	**52.6**	**54.3**	**55.6**	**56.3**
EU-27	**28.4**	**30.6**	**33.8**	**37.4**	**41.6**	**45.9**	**49.4**	**52.4**	**55.0**	**57.5**	**58.7**

Note: The old-age dependency rate is defined as the ratio of the population aged 65 years and above to the population aged between 20 and 64 years.

Source: European Commission, 2009 Ageing Report; Economic and budgetary projections for EU-27 Member States (2008–2060), Statistical Annex; and ILO calculations.

Figure 1.C.13
Projected old-age dependency rates in select EU-12 countries, 2010–2060 (%)

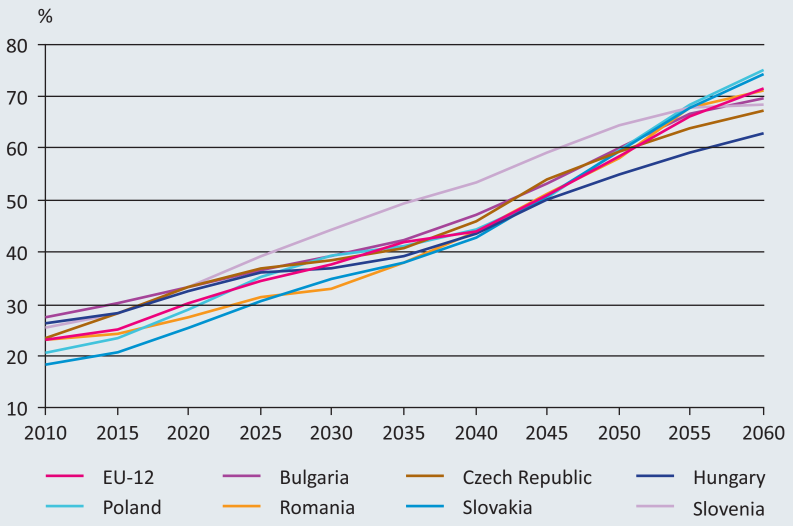


Figure 1.C.14
Projected old-age dependency rates in select EU-15 countries, 2010–2060 (%)

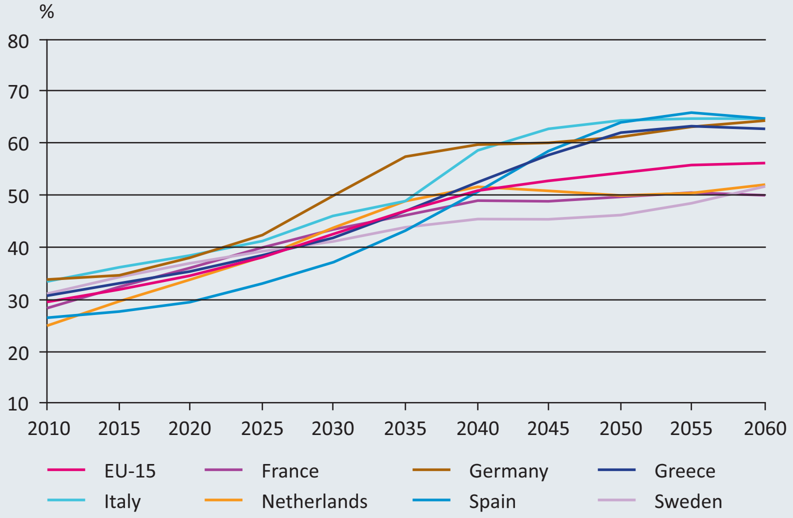


Table 1.C.12
Projected system dependency rates in EU-27 countries, 2010–2060 (%)

Country	2010	2015	2020	2025	2030	2035	2040	2045	2050	2055	2060
Bulgaria	74.3	74.5	76.1	79.8	84.1	90.8	98.2	105.8	113.7	119.4	122.3
Czech Rep.	54.5	56.9	59.8	62.5	64.8	68.1	74.2	80.8	86.6	91.5	93.9
Hungary	73.9	72.8	73.9	75.6	78.7	83.3	89.7	94.9	100.0	104.5	107.1
Poland	56.4	53.9	57.5	61.5	65.4	70.0	76.6	85.6	94.9	102.6	107.2
Romania	86.2	81.2	79.5	80.7	87.4	94.2	102.0	110.3	118.4	120.9	121.7
Slovakia	48.0	47.2	48.3	54.0	59.0	64.9	72.3	80.2	89.2	97.2	102.3
Slovenia	60.9	65.2	69.7	76.6	85.4	94.3	102.7	110.3	119.5	117.8	117.7
Estonia	54.6	55.4	57.4	61.1	64.1	66.8	70.1	74.6	81.0	87.0	87.9
Latvia	44.6	42.5	46.6	53.0	57.5	61.4	65.7	71.8	82.0	90.6	90.5
Lithuania	61.0	61.8	65.9	73.2	80.1	86.4	91.4	98.3	108.4	117.9	123.1
Cyprus	31.9	35.3	39.5	45.2	50.6	55.0	58.7	64.7	72.8	79.8	85.7
Malta	50.0	53.9	57.4	60.6	61.0	61.6	62.9	65.7	69.2	74.5	80.1
EU-12	**62.7**	**61.2**	**63.5**	**67.1**	**71.5**	**76.6**	**83.3**	**91.0**	**99.1**	**105.0**	**108.1**
Austria	53.8	54.7	57.1	61.1	66.0	70.7	74.8	77.8	79.8	81.3	81.7
Belgium	58.3	60.5	64.9	71.0	76.4	80.6	83.5	85.5	87.3	88.9	90.0
Denmark	49.3	54.1	57.4	57.1	57.0	57.1	57.1	55.5	52.9	51.0	50.2
Finland	57.3	61.6	66.3	70.6	74.0	75.0	74.4	74.3	75.1	76.6	78.3
France	57.7	60.5	64.1	68.2	72.5	75.7	77.5	78.8	79.4	79.7	79.8
Germany	62.4	62.2	64.2	70.0	76.5	82.3	85.5	86.5	88.0	89.9	91.3
Greece	56.2	57.0	59.1	63.6	69.5	77.3	85.6	93.3	98.8	101.6	102.1
Ireland	27.8	28.7	30.2	32.3	34.6	37.2	40.7	45.0	50.1	52.6	53.3
Italy	65.2	64.5	66.2	70.1	76.3	83.2	89.5	93.0	93.9	95.1	94.9
Luxembourg	43.1	45.2	50.6	58.6	68.4	77.2	84.9	91.7	97.5	101.3	102.8
Netherlands	30.4	32.8	35.0	37.1	39.3	41.0	41.7	41.5	41.4	41.6	42.1
Portugal	76.8	81.1	87.0	94.6	104.2	113.4	123.3	133.3	141.9	147.9	151.4
Spain	36.7	36.6	38.6	42.2	46.9	53.2	61.2	69.4	75.1	77.3	76.7
Sweden	40.2	43.8	47.7	50.8	54.1	56.7	58.6	58.9	60.0	63.1	65.1
United Kingdom	—	—	—	—	—	—	—	—	—	—	—
EU-15*	**53.8**	**54.7**	**57.1**	**61.1**	**66.0**	**70.7**	**74.8**	**77.8**	**79.8**	**81.3**	**81.7**
EU-27*	**55.7**	**56.1**	**58.5**	**62.4**	**67.1**	**71.9**	**76.5**	**80.3**	**83.4**	**85.5**	**86.3**

Note: The system dependency rate is defined as the ratio of the number of pensioners to the number of contributors.

* Not including UK data.

Source: European Commission, 2009 Ageing Report; Economic and budgetary projections for EU-27 Member States (2008–2060), Statistical Annex; and ILO calculations.

Figure 1.C.15
Projected system dependency rates in select EU-12 countries, 2010–2060 (%)

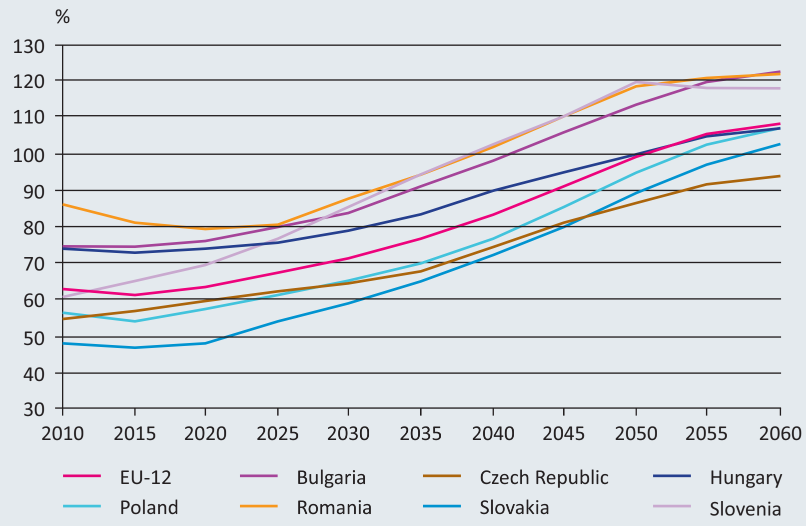


Figure 1.C.16
Projected system dependency rates in select EU-15 countries, 2010–2060 (%)

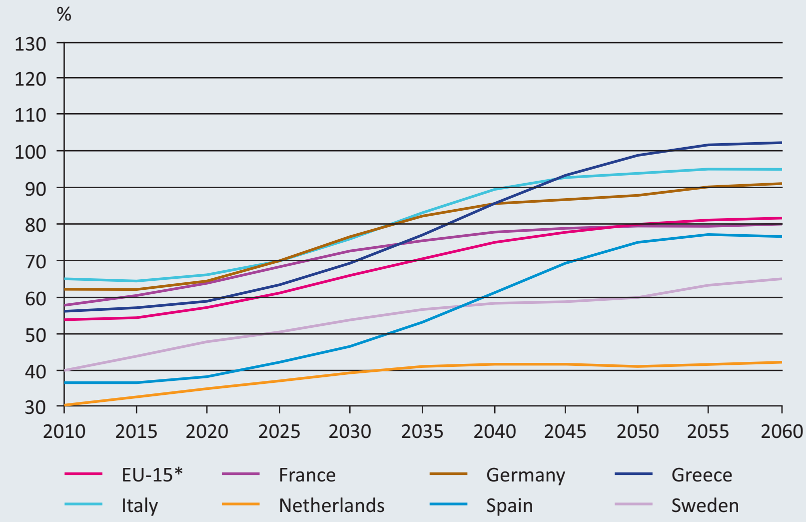


Table 1.C.13
Projected pensioners coverage rates in EU-27 countries, 2010–2060 (%)

Country	2010	2015	2020	2025	2030	2035	2040	2045	2050	2055	2060
Bulgaria	166.9	156.4	148.0	142.8	140.1	141.2	138.8	133.9	130.1	124.3	121.1
Czech Rep.	172.1	154.8	141.6	133.9	130.7	129.8	126.3	120.2	118.4	116.2	114.5
Hungary	180.1	170.9	155.7	145.4	145.4	143.8	138.7	128.1	123.7	120.4	117.0
Poland	180.2	155.7	136.3	121.9	116.9	116.9	116.2	113.3	107.7	103.3	100.0
Romania	172.0	161.1	145.4	134.0	138.9	133.2	129.1	123.0	120.1	111.1	108.8
Slovakia	178.0	163.4	144.5	135.4	129.9	129.1	126.2	119.0	114.0	109.8	106.8
Slovenia	159.9	157.3	145.3	137.8	134.4	133.0	132.3	129.3	130.4	123.4	122.9
Estonia	162.8	154.6	146.9	142.6	138.2	136.6	133.3	131.2	127.9	121.8	118.8
Latvia	140.9	130.7	129.7	130.7	127.0	126.0	123.9	122.5	120.8	115.6	110.6
Lithuania	171.6	171.8	171.9	167.0	156.3	150.2	144.7	144.5	143.4	137.4	130.9
Cyprus	132.4	137.1	140.4	143.1	145.4	147.8	148.7	150.9	151.2	150.9	150.3
Malta	130.7	117.5	111.9	105.8	100.5	99.7	98.1	95.2	91.1	90.3	89.2
EU-12	**172.7**	**159.3**	**141.6**	**131.5**	**128.4**	**122.8**	**127.2**	**121.4**	**117.0**	**111.2**	**107.8**
Austria	169.9	168.3	165.4	157.2	144.2	134.1	132.0	134.3	135.7	138.6	140.4
Belgium	142.7	141.7	141.6	139.8	135.9	133.7	132.7	133.0	133.4	133.4	133.6
Denmark	154.9	147.0	141.2	130.3	119.7	112.3	108.6	106.2	103.9	101.0	96.5
Finland	152.8	137.7	130.6	126.2	122.7	119.4	119.9	119.1	118.1	117.9	116.4
France	142.4	134.1	128.8	125.5	122.9	120.5	118.2	119.0	118.7	117.7	118.2
Germany	119.6	119.5	115.8	113.3	107.9	104.0	103.0	102.8	102.7	102.0	102.0
Greece	124.4	119.9	117.7	116.2	116.5	116.2	115.8	115.5	115.3	117.1	118.9
Ireland	155.9	148.9	142.3	138.9	135.0	131.3	127.7	123.5	120.4	118.8	118.3
Italy	129.5	121.9	120.6	121.0	119.1	123.3	111.7	108.3	106.7	107.2	107.1
Luxembourg	226.4	241.8	253.2	262.5	269.1	274.4	286.0	300.1	314.3	323.4	319.1
Netherlands	136.5	129.6	125.6	121.4	118.2	115.9	114.4	114.3	114.7	114.5	113.8
Portugal	172.8	170.1	168.2	165.8	163.1	160.2	155.8	151.2	149.6	150.9	152.1
Spain	108.3	105.0	105.1	104.9	103.8	102.8	101.7	100.0	99.5	99.6	100.2
Sweden	134.9	130.7	132.5	133.8	134.9	133.5	133.6	134.4	134.8	134.6	131.6
United Kingdom	125.6	118.4	112.9	110.0	110.2	106.9	107.4	103.8	100.7	100.3	101.7
EU-15	**129.6**	**124.9**	**121.9**	**119.8**	**117.0**	**115.0**	**112.3**	**111.0**	**110.1**	**110.0**	**110.4**
EU-27	**137.3**	**130.9**	**125.5**	**122.0**	**119.0**	**116.5**	**114.9**	**112.9**	**111.4**	**110.2**	**109.9**

Note: The pensioners coverage rate is defined as the ratio of the number of pensioners to the population aged 65 years and above.

Source: European Commission, 2009 Ageing Report; Economic and budgetary projections for EU-27 Member States (2008–2060), Statistical Annex; and ILO calculations.

Figure 1.C.17
Projected pensioners coverage rates in select EU-12 countries, 2010–2060 (%)

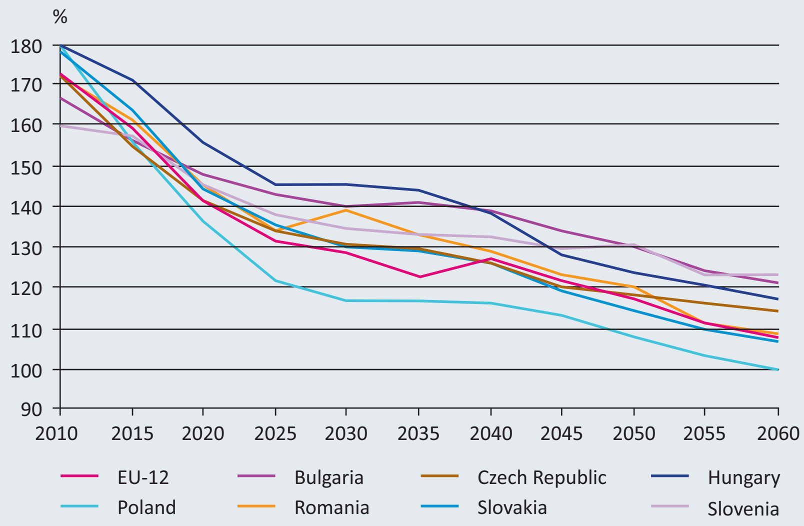


Figure 1.C.18
Projected pensioners coverage rates in select EU-15 countries, 2010–2060 (%)

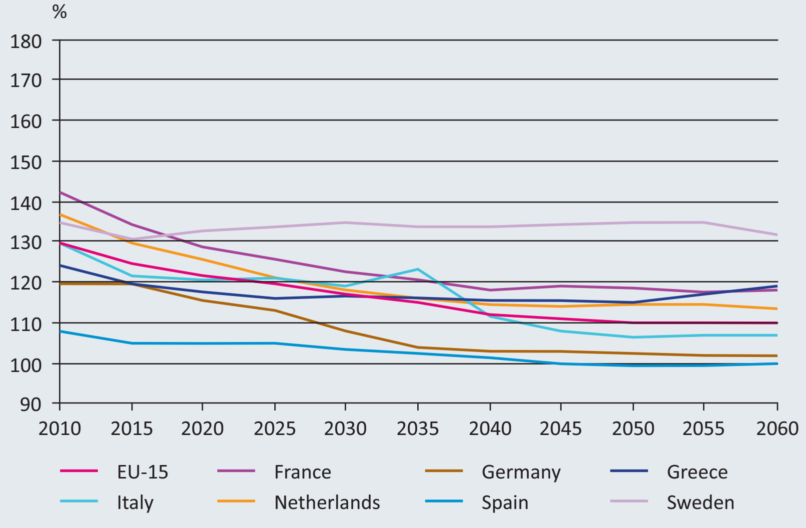


Table 1.C.14
Projected contributors coverage rates in EU-27 countries, 2010–2060 (%)

Country	2010	2015	2020	2025	2030	2035	2040	2045	2050	2055	2060
Bulgaria	61.9	63.3	65.0	65.6	65.8	65.7	66.4	67.8	68.7	69.6	68.7
Czech Rep.	75.2	77.1	79.1	78.9	78.1	77.9	78.3	80.5	80.8	81.2	81.8
Hungary	64.7	66.7	69.1	69.7	68.6	67.8	67.2	68.1	68.1	68.2	68.6
Poland	67.0	68.3	69.2	70.5	70.0	68.8	67.6	67.0	67.9	69.0	70.0
Romania	46.4	48.2	50.6	52.4	52.3	54.0	55.5	57.3	59.0	62.4	63.5
Slovakia	69.4	72.2	76.4	77.3	77.2	75.9	75.1	75.7	76.2	76.9	77.6
Slovenia	67.9	68.1	69.9	70.4	70.0	69.6	68.9	69.4	70.3	71.1	71.1
Estonia	82.0	80.4	81.1	81.7	81.7	81.2	80.9	80.5	81.0	82.5	82.8
Latvia	87.9	86.2	84.1	83.5	83.7	83.1	83.1	82.1	81.5	83.4	86.3
Lithuania	72.6	72.6	72.8	73.1	73.6	73.5	73.5	72.9	72.9	74.5	76.1
Cyprus	83.4	84.7	85.7	86.2	86.3	86.0	85.3	84.9	85.1	85.3	85.6
Malta	61.5	63.5	65.7	68.0	70.1	70.4	70.8	71.1	71.1	71.5	71.6
EU-12	**64.1**	**65.6**	**67.2**	**68.2**	**67.8**	**67.6**	**67.5**	**68.1**	**69.0**	**70.4**	**71.2**
Austria	81.4	81.3	81.5	82.3	83.8	85.8	86.4	85.7	85.8	85.9	86.5
Belgium	70.2	72.1	73.0	73.2	73.6	73.9	74.0	73.7	73.7	73.7	74.0
Denmark	87.1	87.3	86.3	86.8	87.2	88.9	89.8	90.6	90.0	89.8	90.2
Finland	75.9	77.6	79.2	80.0	80.4	80.7	80.3	80.5	80.7	80.5	80.9
France	70.0	71.7	73.0	73.3	73.5	73.8	74.3	74.0	74.0	74.2	74.2
Germany	65.0	66.7	68.5	68.6	70.3	72.2	71.7	71.2	71.3	71.7	71.7
Greece	67.7	69.3	70.4	70.5	70.2	70.3	70.7	71.4	72.3	72.6	72.9
Ireland	102.8	104.7	105.8	106.6	107.1	107.0	106.5	106.5	107.1	107.4	107.5
Italy	66.4	68.6	69.9	70.9	71.8	72.3	72.8	73.1	72.9	72.7	72.7
Luxembourg	121.7	131.6	133.4	132.6	133.0	134.4	135.0	134.7	134.5	133.7	133.8
Netherlands	112.6	117.7	121.3	125.2	131.2	137.6	141.4	140.2	138.9	138.7	140.1
Portugal	65.0	65.1	64.6	63.3	62.4	61.4	60.9	60.9	60.7	60.2	60.0
Spain	77.6	79.7	81.0	81.9	82.9	83.4	83.7	84.3	84.6	84.6	84.5
Sweden	104.3	102.6	102.4	103.1	103.0	103.4	103.4	103.4	103.5	103.4	104.5
United Kingdom	—	—	—	—	—	—	—	—	—	—	—
EU-15*	**73.2**	**75.1**	**76.5**	**77.2**	**78.4**	**79.5**	**79.9**	**79.8**	**79.9**	**80.1**	**80.2**
EU-27*	**70.2**	**72.1**	**73.0**	**73.2**	**73.6**	**73.9**	**74.0**	**73.7**	**73.7**	**73.7**	**74.0**

Note: The contributors coverage rate is defined as the ratio of the number of contributors to the population aged between 20 and 64 years.

* Not including UK data.

Source: European Commission, 2009 Ageing Report; Economic and budgetary projections for EU-27 Member States (2008–2060), Statistical Annex; and ILO calculations.

Figure 1.C.19
Projected contributors coverage rates in select EU-12 countries, 2010–2060 (%)

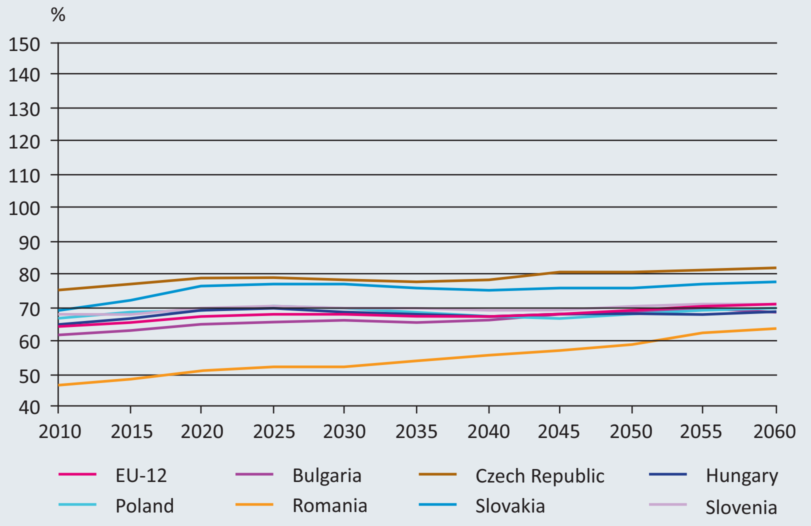


Figure 1.C.20
Projected contributors coverage rates in select EU-15 countries, 2010–2060 (%)

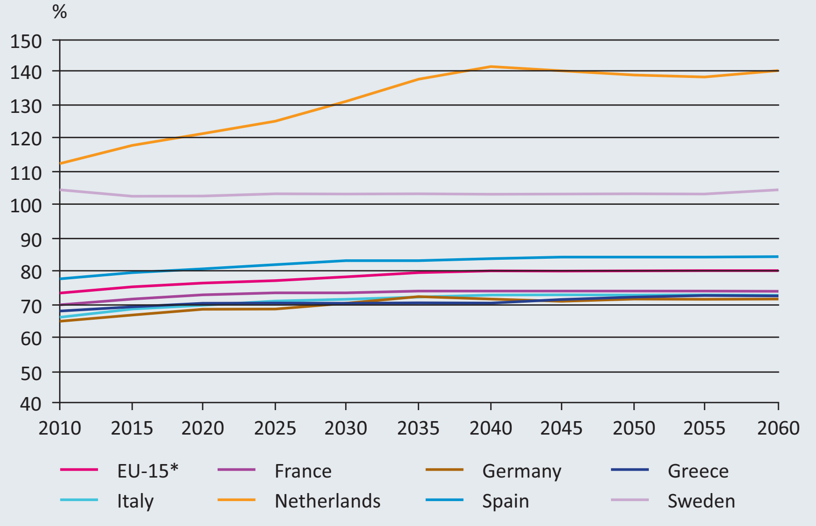


Table 1.C.15
Projected system replacement rates in EU 27 countries, 2010–2060 (%)

Country	2010	2015	2020	2025	2030	2035	2040	2045	2050	2055	2060
Bulgaria	49.9	47.1	44.3	42.2	40.3	38.7	37.3	36.2	35.6	35.6	35.6
Czech Rep.	41.6	38.7	36.8	35.7	35.4	35.7	36.5	37.4	37.6	37.7	37.6
Hungary	42.3	41.6	41.3	40.1	38.8	38.1	37.7	37.2	36.6	36.2	35.8
Poland	59.6	54.1	51.7	48.8	45.1	41.6	37.9	34.0	30.6	27.9	25.8
Romania	37.6	39.2	40.1	40.7	40.5	40.2	39.3	38.5	37.7	37.1	37.0
Slovakia	45.8	44.5	43.3	42.2	41.0	39.8	37.9	36.1	34.9	33.7	33.1
Slovenia	40.7	39.9	39.0	38.2	38.1	38.2	38.4	38.5	38.6	38.6	38.6
Estonia	33.7	31.8	29.2	26.9	24.8	23.2	21.9	20.4	18.5	16.9	15.8
Latvia	25.7	25.3	25.2	24.3	23.4	22.7	21.3	18.9	16.1	13.9	12.6
Lithuania	33.5	33.2	32.7	32.2	31.6	31.0	30.3	29.6	29.0	28.2	27.7
Cyprus	57.6	59.1	60.0	58.2	57.4	57.6	59.2	58.9	58.4	57.5	56.5
Malta	42.5	42.3	39.8	37.0	37.4	38.1	39.9	41.0	41.0	40.6	40.0
EU-12	**46.5**	**44.3**	**43.2**	**41.9**	**40.2**	**38.8**	**37.3**	**35.7**	**34.2**	**32.9**	**32.1**
Austria	54.2	53.0	51.8	50.6	49.4	48.0	46.3	44.5	42.7	40.7	38.5
Belgium	46.5	47.5	48.2	48.3	47.9	47.2	46.3	45.4	44.6	43.9	43.2
Denmark	39.4	38.9	38.3	38.0	38.3	38.0	37.7	37.4	37.5	37.6	37.8
Finland	51.2	52.0	52.1	52.0	51.7	51.1	50.2	49.2	48.3	47.5	46.9
France	63.3	60.6	57.7	55.0	52.9	51.6	50.3	49.1	48.3	47.8	47.5
Germany	50.4	49.7	49.7	47.8	45.9	43.8	42.9	42.7	42.5	42.4	42.5
Greece	72.2	74.7	77.9	81.4	85.6	87.5	86.9	85.4	83.7	82.0	80.5
Ireland	28.5	29.1	29.7	30.0	30.4	30.7	31.0	31.3	31.5	31.6	31.6
Italy	71.3	71.9	70.5	67.5	64.1	60.5	57.3	54.6	51.7	49.1	47.3
Luxembourg	41.4	38.0	37.0	39.1	39.3	40.8	41.1	42.8	42.9	44.3	44.1
Netherlands	41.8	41.6	41.1	40.6	40.4	40.3	40.4	40.6	40.7	40.7	40.5
Portugal	49.0	48.2	47.2	45.3	42.3	38.7	36.7	35.3	34.5	32.7	32.7
Spain	62.6	65.9	65.2	63.3	61.0	59.0	57.2	55.9	54.5	53.3	52.2
Sweden	48.1	44.7	41.0	38.6	36.6	34.9	33.5	32.4	31.4	30.6	30.1
United Kingdom	34.6	34.5	34.9	35.0	34.5	34.2	34.2	34.9	35.8	36.6	37.1
EU-15	**52.1**	**51.7**	**51.0**	**49.5**	**47.8**	**46.3**	**45.0**	**44.1**	**43.3**	**42.7**	**42.3**
EU-27	**50.9**	**50.5**	**49.7**	**48.4**	**46.8**	**45.3**	**43.8**	**42.5**	**41.4**	**40.6**	**40.1**

Note: The system replacement rate is defined as the ratio of the average pension to the average gross contributory earnings. In the 2009 Ageing Report, the system replacement rate is referred to as the benefit ratio.

Source: European Commission, 2009 Ageing Report; Economic and budgetary projections for EU-27 Member States (2008–2060), Statistical Annex; and ILO calculations.

Figure 1.C.21
Projected system replacement rates in select EU-12 countries, 2010–2060 (%)

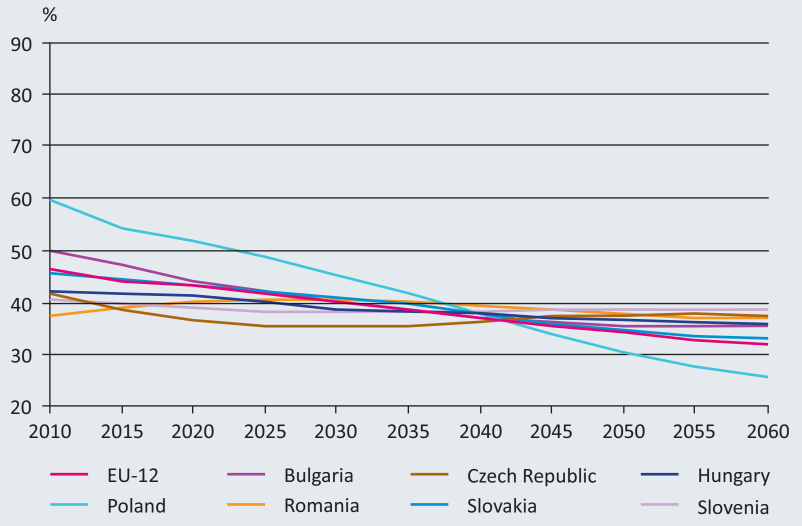


Figure 1.C.22
Projected system replacement rates in select EU-15 countries, 2010–2060 (%)

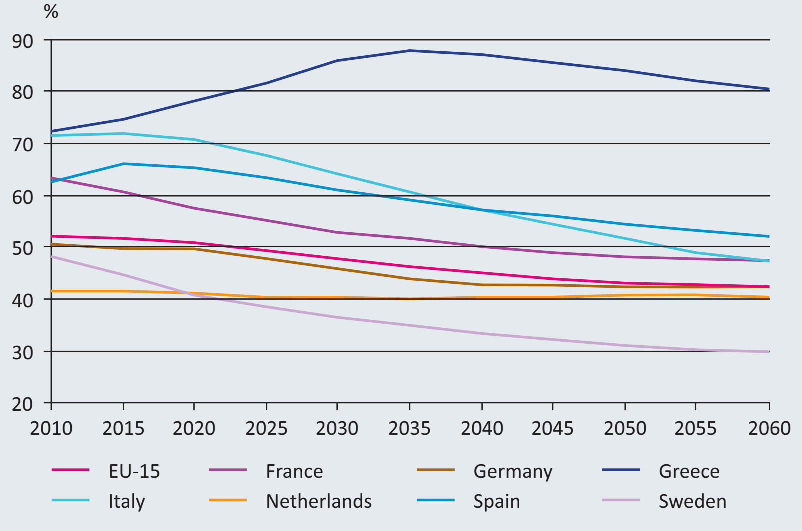


Table 1.C.16
Projected taxable income capture rates in EU-27 countries, 2010–2060 (%)

Country	2010	2015	2020	2025	2030	2035	2040	2045	2050	2055	2060
Bulgaria	24.6	24.8	25.3	25.5	25.8	25.9	25.8	26.8	26.7	26.7	26.1
Czech Rep.	31.2	31.0	30.9	31.4	31.1	31.0	31.1	31.3	31.4	31.2	31.4
Hungary	36.4	35.8	35.9	36.2	36.3	36.3	36.2	36.3	36.0	36.0	36.2
Poland	32.4	32.8	32.4	32.2	31.8	31.6	31.7	31.7	31.1	31.4	31.9
Romania	25.7	27.1	27.6	28.9	29.8	30.4	31.1	32.3	33.4	34.2	35.0
Slovakia	30.4	30.1	30.2	30.4	30.2	30.3	30.1	30.3	30.4	30.4	30.1
Slovenia	40.8	41.0	40.9	40.7	40.7	40.8	41.0	40.8	40.7	40.9	41.1
Estonia	35.4	34.7	35.2	35.1	34.7	34.8	35.3	34.7	35.2	35.4	35.5
Latvia	43.9	44.4	43.5	43.2	43.4	43.4	43.4	43.9	44.1	44.8	44.5
Lithuania	32.1	32.2	32.4	32.5	32.7	32.9	33.0	32.9	33.3	33.2	33.2
Cyprus	37.6	37.4	37.4	37.2	36.9	37.0	36.9	36.7	36.6	36.5	36.5
Malta	38.9	39.6	40.2	40.5	41.0	41.5	41.8	41.9	42.1	42.3	41.9
EU-12	**30.9**	**31.6**	**32.2**	**32.0**	**32.3**	**32.4**	**32.8**	**32.9**	**33.0**	**33.5**	**33.5**
Austria	39.2	39.0	39.1	39.2	39.1	39.2	39.3	39.2	39.3	39.3	39.4
Belgium	37.8	37.9	37.9	37.8	37.9	37.9	37.8	37.8	37.9	37.8	37.9
Denmark	48.4	48.5	48.4	48.3	48.4	48.4	48.3	48.5	48.3	48.3	48.4
Finland	36.7	36.6	36.6	36.5	36.5	36.4	36.5	36.6	36.5	36.5	36.4
France	36.9	36.9	36.9	37.0	36.9	37.1	37.0	37.0	37.1	37.1	37.0
Germany	32.5	32.7	32.7	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9
Greece	28.7	28.6	28.6	28.6	28.7	28.7	28.8	28.9	29.0	29.1	29.3
Ireland	51.7	51.6	51.3	51.4	51.0	51.1	51.0	50.6	50.6	50.6	51.0
Italy	30.2	30.2	30.3	30.3	30.3	30.2	30.3	30.3	30.4	30.3	30.3
Luxembourg	48.2	51.8	52.8	52.7	52.7	52.7	52.8	52.8	52.8	52.7	52.8
Netherlands	51.1	52.7	54.1	56.2	58.6	60.6	61.6	61.2	61.1	61.3	62.0
Portugal	31.7	31.0	30.1	29.4	28.7	28.2	27.8	27.2	27.3	27.2	27.0
Spain	38.8	38.2	37.7	37.7	37.8	37.9	37.9	37.7	37.7	37.7	37.8
Sweden	49.8	48.3	48.0	48.1	48.0	47.9	47.7	47.9	48.0	47.8	47.9
United Kingdom	—	—	—	—	—	—	—	—	—	—	—
EU-15*	**36.7**	**36.7**	**36.7**	**36.8**	**37.0**	**37.2**	**37.4**	**37.6**	**37.7**	**37.8**	**38.0**
EU-27*	**36.0**	**36.0**	**36.0**	**36.1**	**36.3**	**36.6**	**36.9**	**37.3**	**37.6**	**38.0**	**38.3**

Note: The taxable income capture rate is defined as the estimated contributory base as a percentage of GDP.

* Not including UK data.

Source: European Commission, 2009 Ageing Report; Economic and budgetary projections for EU-27 Member States (2008–2060), Statistical Annex; and ILO calculations.

Figure 1.C.23
Projected taxable income capture rates in select EU-12 countries, 2010–2060 (%)

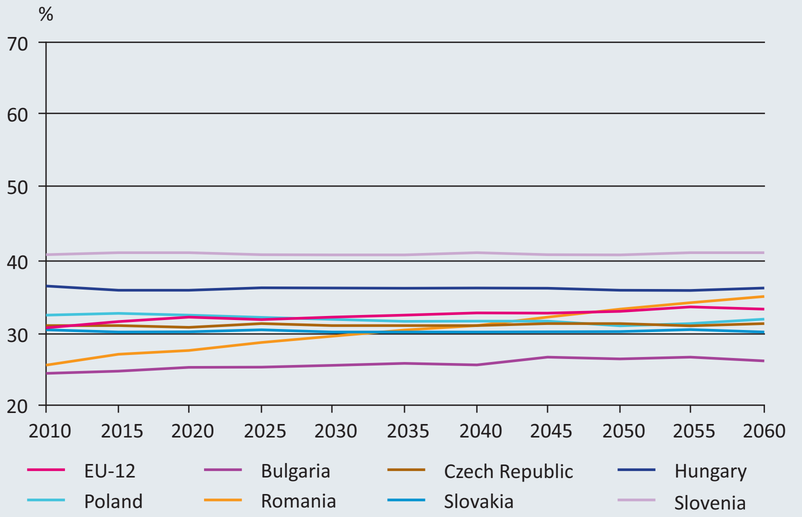


Figure 1.C.24
Projected taxable income capture rates in select EU-15 countries, 2010–2060 (%)

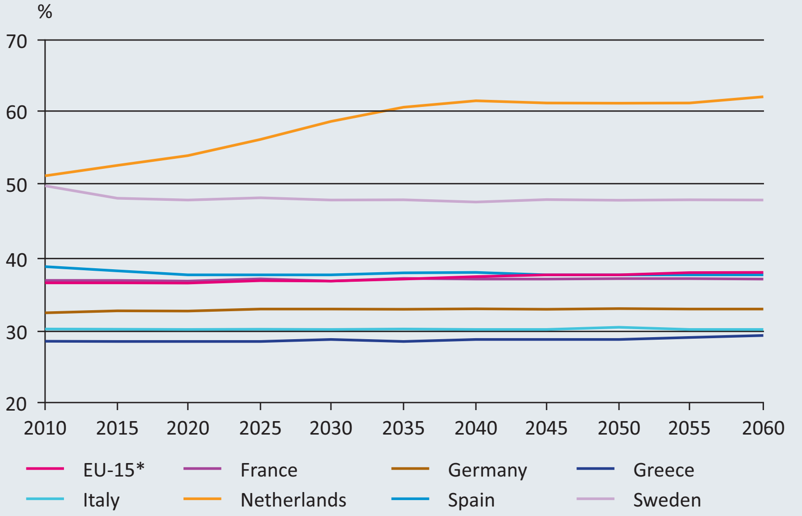


Table 1.C.17
Analysis of changes in the pension-to-GDP ratio in select EU-12 countries, 1990–2009 (%)

Country	1990 level	2009 level	Change in pension-to-GDP rate in 1990–2009	Contribution by				
				Old-age dependency rate	Pensioners coverage rate	Contributors coverage rate	System replacement rate	Residual
Bulgaria	8.8	9.4	0.6	2.3	–1.5	2.3	1.2	–3.7
Czech Rep.	13.0	9.3	–3.7	0.8	–0.6	2.1	0.5	–6.5
Hungary	9.1	10.9	1.8	1.4	–0.8	1.4	4.4	–4.7
Poland	6.6	9.9	3.3	1.4	–0.1	0.2	–0.2	2.1
Romania	6.3	8.2	1.9	1.9	1.6	2.1	1.5	–5.1
Slovakia	11.7	8.2	–3.5	0.1	–0.3	3.2	0.7	–7.2
Slovenia	9.7	10.9	1.2	4.6	–1.5	–0.3	–0.1	–1.6

Source: ILO calculations.

Table 1.C.18
Analysis of changes in the pension-to-GDP ratio in select EU-12 countries, 1990–2000 (%)

Country	1990 level	2000 level	Change in pension-to-GDP rate in 1990–2000	Contribution by				
				Old-age dependency rate	Pensioners coverage rate	Contributors coverage rate	System replacement rate	Residual
Bulgaria	8.8	9.0	0.2	1.9	–0.9	3.7	0.2	–4.7
Czech Rep.	13.0	8.9	–4.2	0.3	–0.4	2.1	–0.3	–5.8
Hungary	9.1	8.5	–0.6	0.8	–0.1	1.6	1.0	–3.9
Poland	6.6	9.8	3.2	1.1	0.4	0.8	–1.5	2.4
Romania	6.3	6.6	0.3	1.4	2.8	2.4	–1.9	–4.4
Slovakia	11.7	8.2	–3.5	0.4	–0.3	2.5	–0.9	–5.2
Slovenia	9.7	11.2	1.5	2.6	–1.1	0.3	0.8	–1.2

Source: ILO calculations.

Figure 1.C.25
Factors contributing to changes in the pension-to-GDP ratio in select EU-12 countries, 1990–2009 (%)

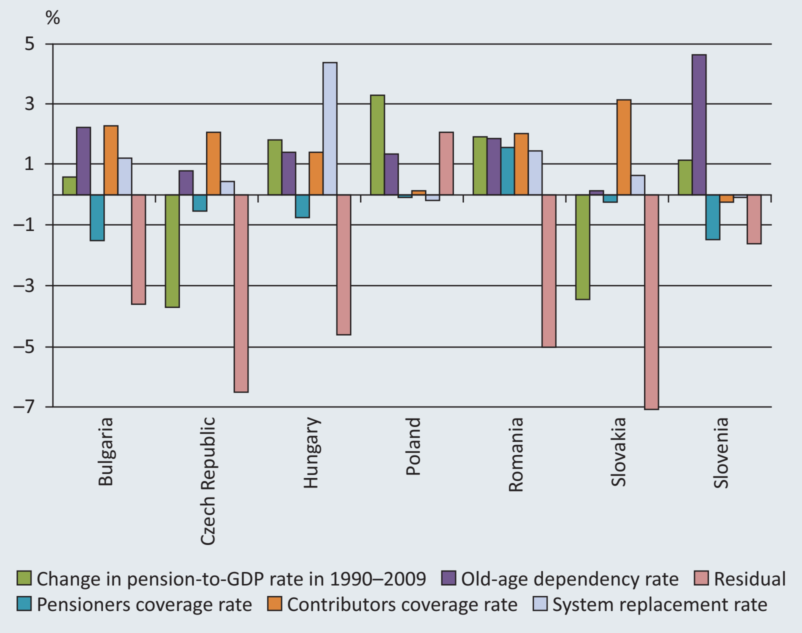


Figure 1.C.26
Factors contributing to changes in the pension-to-GDP ratio in select EU-12 countries, 1990–2000 (%)

Table 1.C.19
Analysis of changes in the pension-to-GDP ratio in select EU-12 countries, 2000–2009 (%)

Country	2000 level	2009 level	Change in pension-to-GDP rate in 2000–2009	Contribution by				
				Old-age dependency rate	Pensioners coverage rate	Contributors coverage rate	System replacement rate	Residual
Bulgaria	9.0	9.4	0.4	0.3	–0.7	–2.5	1.0	2.3
Czech Rep.	8.9	9.3	0.4	0.4	–0.1	0.0	0.5	–0.4
Hungary	8.5	10.9	2.4	0.6	–0.7	–0.2	2.9	–0.2
Poland	9.8	9.9	0.1	0.4	–0.6	–1.1	2.5	–1.0
Romania	6.6	8.2	1.6	0.5	–0.9	–0.6	5.1	–2.4
Slovakia	8.2	8.2	0.0	–0.2	0.0	0.6	1.2	–1.7
Slovenia	11.2	10.9	–0.3	1.8	–0.5	–0.7	–1.0	0.0

Source: ILO calculations.

Figure 1.C.27
Factors contributing to changes in the pension-to-GDP ratio in select EU-12 countries, 2000–2009 (%)

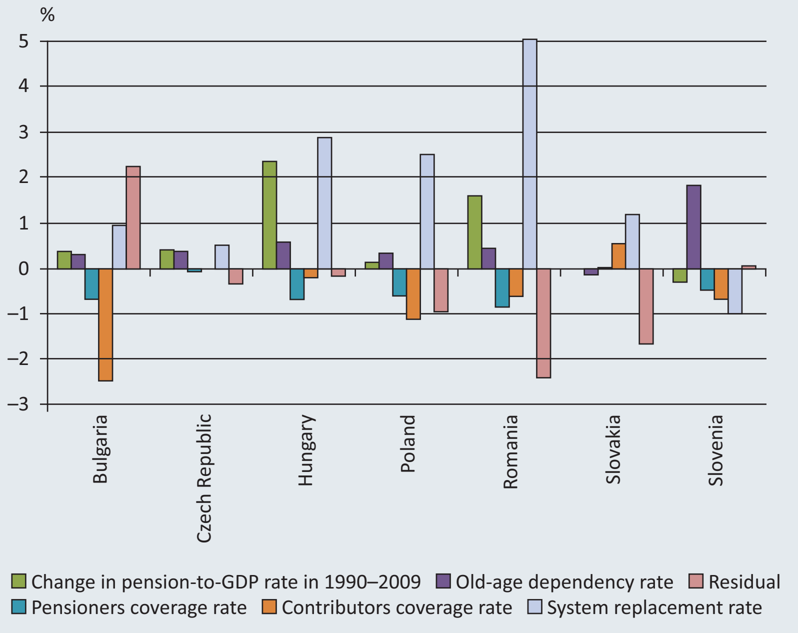


Table 1.C.20
Analysis of changes in the pension-to-GDP ratio in select EU countries, 2010–2050 (%)

Country	2010 level	2050 level	Change in pension-to-GDP rate in 2010–2050	Contribution by				
				Old-age dependency rate	Pensioners coverage rate	Contributors coverage rate	System replacement rate	Residual
Bulgaria	9.1	10.8	1.7	10.8	–2.0	–1.0	–2.6	–3.4
Czech Rep.	7.1	10.2	3.1	10.5	–2.2	–0.5	–0.7	–4.0
Hungary	11.3	13.2	1.9	12.1	–3.5	–0.6	–2	–4.6
Poland	10.8	9.1	–1.7	20.0	–4.3	–0.1	–5.3	–11.9
Romania	8.4	14.8	6.4	12.6	–2.5	–2.3	0.0	–1.4
Slovakia	6.6	9.4	2.8	14.4	–2.4	–0.6	–1.6	–7.0
Slovenia	10.1	18.2	8.1	15.1	–1.9	–0.3	–0.5	–4.3
EU-12	**9.2**	**11.1**	**1.9**	**13.9**	**–3.0**	**–0.7**	**–2.4**	**–5.9**
France	13.5	14.2	0.7	10.1	–2.2	–0.8	–3.2	–3.1
Germany	10.2	12.3	2.1	8.2	–1.4	–1.0	–1.6	–2.0
Greece	11.6	24.0	12.4	11.9	–0.8	–0.8	1.8	0.3
Italy	14.0	14.7	0.7	12.9	–2.5	–1.4	–3.8	–4.5
Netherlands	6.5	10.3	3.8	6.5	–1.0	–1.5	–0.2	0.0
Spain	8.9	15.5	6.6	12.7	–0.7	–0.8	–1.2	–3.4
Sweden	9.6	9.0	–0.6	4.6	0.0	0.1	–3.3	–1.9
EU-15*	**10.3**	**12.4**	**2.1**	**8.5**	**–1.6**	**–0.9**	**–1.7**	**–2.2**
EU-27*	**10.2**	**12.3**	**2.1**	**9.6**	**–1.9**	**–0.5**	**–1.9**	**–3.2**

* Calculations for contributors coverage rates of EU-15 and EU-27 countries do not include the UK data.

Source: European Commission, 2009 Ageing Report; Economic and budgetary projections for EU-27 Member States (2008–2060), Statistical Annex; and ILO calculations.

Figure 1.C.28
Factors contributing to changes in the pension-to-GDP ratio in select EU countries, 2010–2050 (%)

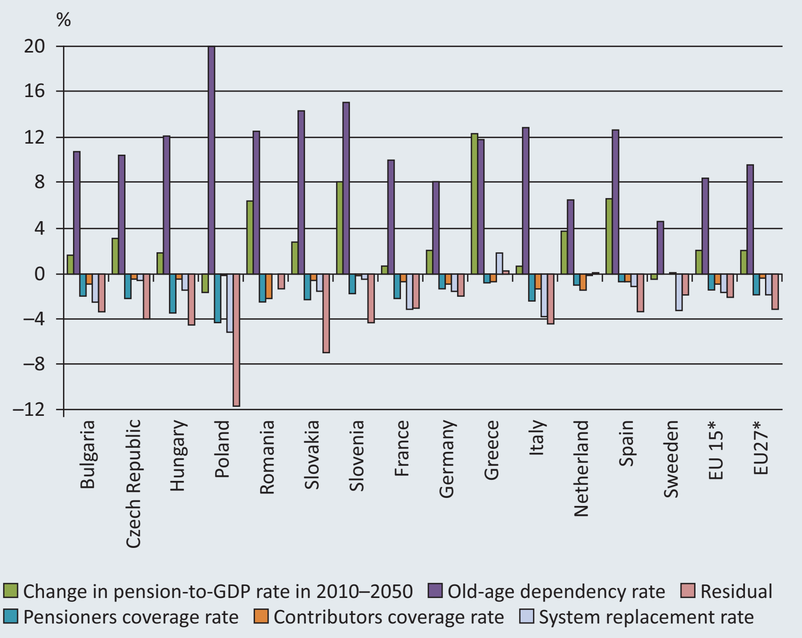


Table 1.C.21
Analysis of change in the pension-to-GDP ratio in select EU countries, 2010–2030 (%)

Country	2010 level	2030 level	Change in pension-to-GDP rate in 2010–2030	Contribution by				
				Old-age dependency rate	Pensioners coverage rate	Contributors coverage rate	System replacement rate	Residual
Bulgaria	9.1	8.6	–0.5	4.0	–1.5	–0.6	–1.8	–0.7
Czech Rep.	7.1	7.1	0.0	4.4	–1.7	–0.3	–1.1	–1.4
Hungary	11.3	11.0	–0.3	4.5	–2.2	–0.7	–0.9	–1.0
Poland	10.8	9.4	–1.4	9.4	–3.8	–0.5	–2.6	–3.9
Romania	8.4	10.4	2.0	3.5	–1.6	–1.1	0.6	0.5
Slovakia	6.6	7.3	0.7	5.8	–1.8	–0.7	–0.7	–1.8
Slovenia	10.1	13.3	3.2	7.3	–1.6	0.3	–0.6	–2.2
EU-12	**9.2**	**9.2**	**0.0**	**5.7**	**–2.4**	**–0.5**	**–1.2**	**–1.6**
France	13.5	14.2	0.7	7.1	–1.9	–0.7	–2.2	–1.7
Germany	10.2	11.5	1.3	4.8	–1.0	–0.8	–0.9	–0.7
Greece	11.6	17.1	5.5	4.3	–0.7	–0.4	2.2	0.2
Italy	14.0	14.8	0.8	5.3	–1.1	–1.1	–1.4	–0.8
Netherlands	6.5	9.3	2.8	4.8	–0.9	–1.1	–0.2	0.1
Spain	8.9	10.8	1.9	3.7	–0.4	–0.6	–0.2	–0.6
Sweden	9.6	9.5	–0.1	3.1	0.0	0.1	–2.3	–1.1
EU-15*	**10.3**	**11.6**	**1.3**	**4.4**	**–1.0**	**–0.7**	**–0.9**	**–0.6**
EU-27*	**10.2**	**11.4**	**1.2**	**4.8**	**–1.4**	**–0.5**	**–0.8**	**–0.9**

* Calculations for contributors coverage rates of EU-15 and EU-27 countries do not include the UK data.

Source: European Commission, 2009 Ageing Report; Economic and budgetary projections for EU-27 Member States (2008–2060), Statistical Annex; and ILO calculations.

Figure 1.C.29
Factors contributing to changes in the pension-to-GDP ratio in select EU countries, 2010–2030 (%)

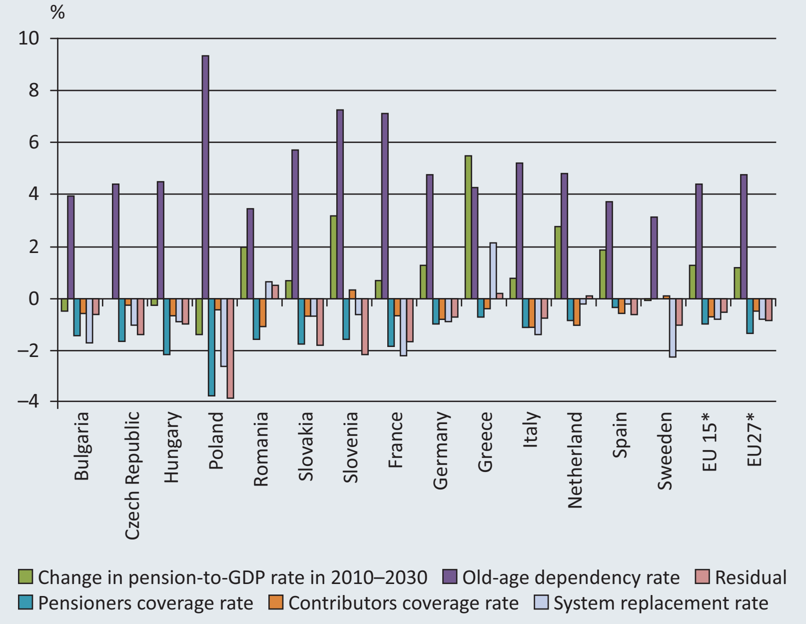


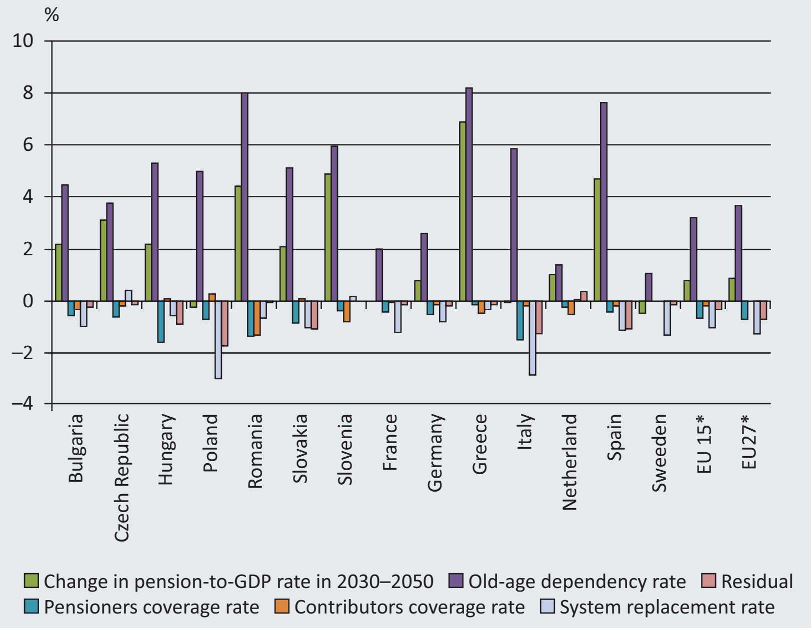
Table 1.C.22
Analysis of change in the pension-to-GDP ratio in select EU countries, 2030–2050 (%)

Country	2030 level	2050 level	Change in pension-to-GDP rate in 2030–2050	Contribution by				
				Old-age dependency rate	Pensioners coverage rate	Contributors coverage rate	System replacement rate	Residual
Bulgaria	8.6	10.8	2.2	4.5	–0.6	–0.4	–1.0	–0.3
Czech Rep.	7.1	10.2	3.1	3.7	–0.7	–0.2	0.4	–0.2
Hungary	11.0	13.2	2.2	5.3	–1.6	0.1	–0.6	–0.9
Poland	9.4	9.1	–0.3	5.0	–0.7	0.3	–3.0	–1.8
Romania	10.4	14.8	4.4	8.0	–1.4	–1.3	–0.7	–0.1
Slovakia	7.3	9.4	2.1	5.1	–0.9	0.1	–1.1	–1.1
Slovenia	13.3	18.2	4.9	6.0	–0.4	–0.8	0.2	0.0
EU-12	**9.2**	**11.1**	**1.9**	**5.0**	**–0.8**	**–0.2**	**–1.4**	**–0.8**
France	14.2	14.2	0.0	2.0	–0.5	–0.1	–1.2	–0.2
Germany	11.5	12.3	0.8	2.6	–0.6	–0.2	–0.9	–0.2
Greece	17.1	24.0	6.9	8.2	–0.2	–0.5	–0.4	–0.2
Italy	14.8	14.7	–0.1	5.9	–1.5	–0.2	–2.9	–1.3
Netherlands	9.3	10.3	1.0	1.4	–0.3	–0.5	0.1	0.4
Spain	10.8	15.5	4.7	7.6	–0.4	–0.2	–1.2	–1.1
Sweden	9.5	9.0	–0.5	1.1	0.0	0.0	–1.3	–0.2
EU-15*	**11.6**	**12.4**	**0.8**	**3.2**	**–0.7**	**–0.2**	**–1.1**	**–0.4**
EU-27*	**11.4**	**12.3**	**0.9**	**3.7**	**–0.7**	**0.0**	**–1.3**	**–0.7**

* Calculations for contributors coverage rates of EU-15 and EU-27 countries do not include the UK data.

Source: European Commission, 2009 Ageing Report; Economic and budgetary projections for EU-27 Member States (2008–2060), Statistical Annex; and ILO calculations.

Figure 1.C.30
Factors contributing to changes in the pension-to-GDP ratio in select EU countries, 2030–2050 (%)



Part II

National Reports

2. Bulgaria

Antoaneta Gancheva[1]

2.1. Overview

2.1.1. Historical overview

The pension system in Bulgaria has undergone substantial structural reform since the late 1990s. The traditional pay-as-you-go system was transformed into a three-pillar system through the introduction of compulsory and voluntary fully funded pensions. Other aspects of the pension reform include the separation of the State social insurance budget from the State budget, the establishment of specialized funds, and the introduction of the tripartite management of the State social insurance system.

The problems underlying the former pension system that motivated the radical pension reforms of 1998–1999 are summarized as follows:

- The system was providing low and nearly flat-rate pensions. The average replacement rate in 1997 was 27 percent, and the maximum pension amount was three times larger than the minimum pension.
- Compliance with the social insurance system was deteriorating due to a growing informal labour market.
- There was generous recognition of non-contributory periods in the pension formula and a wide practice of early retirement, both of which resulted in increased social insurance expenditure.

The current Bulgarian pension system came into force with the Mandatory Social Insurance Code on 1 January 2000 (renamed the Social Insurance Code in 2003). The main objectives of the reform were to stabilize the existing public insurance system (first pillar), and to allow the Bulgarian population to receive higher incomes after retirement through participation in second- and third-pillar pension systems.

2.1.2. The current system's structure

The first pillar is a pay-as-you-go public pension insurance system. It is financed through contributions from employers and employees, as well as through transfers from the State budget covering benefits based on non-contributory periods. Since 2009 the State has become a "third insurer" and pays contributions equal to 12 percent of the total contributory base. The State also covers the deficit due to insufficient revenues.

The first pillar is administrated by the National Social Security Institute (NSSI), which is responsible for the entitlement and payment of pensions and other social insurance benefits in the event of one's temporary

1 This chapter was prepared by Antoaneta Gancheva in collaboration with Penka Taneva, Svetozar Zlatanov and Gergana Peeva from the Analysis, Planning and Forecasting General Directorate of the National Social Security Institute.

incapacity to work, maternity and unemployment. The pension policy is formulated and implemented by the Ministry of Labour and Social Policy.

The second pillar is a supplementary mandatory pension insurance system. It is based on individual retirement savings accounts managed by licensed private pension insurance companies. The mandatory second pillar is comprised of two types of pension funds: the Universal Pension Fund and the Professional Pension Fund.

The Universal Pension Fund covers all persons insured by the public pension insurance born on 1 January 1960 and after. The Fund provides life annuities in old age, as well as payments to family members in the case of death. The contribution rate of the Universal Fund is currently 5 percent.

The Professional Pension Fund covers all persons working within the first and second labour categories (including persons working in hazardous or physically strenuous jobs, such as miners, steel workers, pilots, etc., representing about 4 percent of employees), irrespective of their age. This Fund provides fixed-term early retirement pensions for persons below the statutory retirement age as well as payments to family members in the case of death. The contribution rate is 12 percent for the first category and 7 percent for the second category, and contributions are wholly paid by employers.

The third pillar is a supplementary voluntary pension insurance system. It is a pension savings scheme based on voluntary contributions deposited in private pension funds that are maintained by licensed pension insurance companies. Currently, two types exist: the Voluntary Pension Fund and the Occupational Pension Fund. The latter is provided under occupational schemes and is based on collective agreements.

Contributions to the third pillar are paid by the members themselves or by their employers. Contributions to the Funds are tax-exempt up to a certain limit. Benefits can be paid in the form of life annuities or fixed-term annuities for old age or disability, or in the form of lump sums or programmed withdrawals for survivors' benefits.

2.2. Coverage, compliance and collection

2.2.1. Coverage

Table 2.1 presents the number of insured persons registered with the National Social Security Institute. In 2009, the total number of contributors was 2,829,819, consisting of 2,566,440 employees and 263,379 self-insured persons. The number of self-insured persons includes 50,168 farmers. It should be noted that members of the army and police and other State employees are recorded in a special register.

Table 2.1
The number of insured persons by sex and labour category, 2009

Indicators	Men	Women	Total
Total	1,479,570	1,350,249	2,829,819
Employees	1,318,363	1,248,077	2,566,440
Labour category III	1,103,446	1,156,800	2,260,246
Labour category II	92,553	13,499	106,052
Labour category I	6,848	911	7,759
Other (including army personnel and police officers)	115,516	76,867	192,383
Self-insured persons	161,207	102,172	263,379
Non-farmers for pensions only	66,547	26,031	92,578
Non-farmers for all social risks	68,371	52,262	120,633
Farmers for pensions only	17,020	11,437	28,457
Farmers for all social risks	9,269	12,442	21,711

Source: NSSI.

The Social Insurance Code stipulates that the entire working population is compulsorily insured. Employees are mandatorily insured through the public social insurance for all social risks, including old age, disability, death, sickness, work accidents and occupational diseases, and unemployment. The coverage for self-employed persons depends on the activity that they pursue.

2.2.2. Compliance and contribution collection

Table 2.2
Comparison of employed persons and insured persons, 2002–2009

Year	2002	2003	2004	2005	2006	2007	2008	2009
Employed persons (in thousands) (1)	3,222	3,317	3,403	3,495	3,612	3,714	3,836	3,723
Insured persons (in thousands) (2)	2,170	2,394	2,492	2,597	2,747	2,864	2,851	2,830
Ratio of insured to employed (2) / (1)	67.3%	72.2%	73.2%	74.3%	76.0%	77.1%	74.3%	76.0%
Employed but not insured (in thousands) (3) = (1) – (2)	1,052	923	912	898	865	851	984	893
Ratio (3) / (1)	32.7%	27.8%	26.8%	25.7%	24.0%	22.9%	25.7%	24.0%

Source: National Statistical Institute, NSSI.

Table 2.2 compares the number of employed persons according to the National Statistical Institute data to the number of employees insured by the NSSI. This shows that the coverage rate increased from 67.3 percent in 2002 to 77.1 percent in 2007. In 2009, 2.8 million persons, or 76 percent of the employed population, were insured by the NSSI, while 893,000 persons, or 24 percent of the employed population, were not.

Alternatively, the NSSI – using GDP data – has estimated the number of employed workers not insured by the NSSI. Assuming the same labour productivity for all employed persons, they estimate that about 950,000 employed persons are not accounted for. This estimate is close to the above-mentioned estimate of non-insured employed persons. Such informal situations that lack employment contracts violate the labour rights of these non-insured persons, leaving them unprotected from various social risks.

In Bulgaria, there is a widespread practice of underreporting actual wages. Data provided by the National Statistical Institute show that 28 percent of employed persons in the private sector pay social insurance contributions based on the minimum wage. The non-payment or underpayment of contributions leads not only to a shortage in the financial balance, but to an increased number of elderly persons with little or no pensions.

In efforts to expand the contributory base, the Government has implemented several measures, including a reduction in the contribution rate and establishing a closer link between contributions and pension benefits in the pension formula. As can be seen from Table 2.3, the contribution base as compared to GDP has been steadily increasing since 2006, although room for improvement continues to exist.

Table 2.3
Contributory base as a percentage of GDP, 2006–2009

Year	2006	2007	2008	2009
Contributory base (in million BGN)	10,088	12,311	15,540	16,676
GDP (in million BGN)	51,783	60,185	69,295	68,537
Contributory base as a percentage of GDP (in %)	19	20	22	24

Source: National Statistical Institute, NSSI.

All taxes and insurance contributions have been collected by the National Revenue Agency since 2006. The NSSI administers only the expenditure side of the pension system and the short-term benefits (sickness and maternity, work accidents and occupational diseases, and unemployment).

2.3. Benefits

2.3.1. State pension

All State pensions are tax-exempt, and some pensioners receive more than one pension or supplements to their State pension.

2.3.1.1. Qualifying conditions and the retirement age

Under current legislation, insured persons must meet two conditions to be eligible for an old-age pension. First, they must attain the retirement age. Second, the sum of their current age and the number of their insurance years must exceed a defined minimum number (the so-called "point rule").

In 2010, an insured male could receive an old-age pension if he had reached 63 years of age and the sum of his current age and number of insurance years was at least 100. Likewise, an insured female could receive an old-age pension if she had reached 60 years of age and the sum of her current age and number of insurance years was at least 94[2].

Under the legislation in force before 2000, an old-age pension was payable to men who had attained 60 years of age and completed at least 25 years of service, and women who had attained 55 years of age and completed at least 20 years of service. Table 2.4 presents the current qualifying conditions for old-age pensions, accounting for the transitional period from 2000 to 2010.

Table 2.4
Qualifying conditions for old-age pensions, 2000–2010

Year	Men			Women		
	Age	Sum of age + insurance period	Insurance period (at min. age)	Age	Sum of age + insurance period	Insurance period (at min. age)
2000	60.5	98	37.5	55.5	88	32.5
2001	61	99	38	56	89	33
2002	61.5	100	38.5	56.5	90	33.5
2003	62	100	38	57	90	33
2004	62.5	100	37.5	57.5	90	32.5
2005	63	100	37	58	91	33
2006	63	100	37	58.5	92	33.5
2007	63	100	37	59	93	34
2008	63	100	37	59.5	94	34.5
2009	63	100	37	60	94	34
2010	63	100	37	60	94	34

Source: NSSI.

2 For example, a 63-year-old insured male can receive an old-age pension if he has a 37-year insurance period. If a 63-year-old insured male has a 35-year insurance period and has stopped working, he can receive an old-age pension at 65 years of age, when his age and insurance periods add up to 100 points. If he has a 35-year insurance period and continues working, he can receive an old-age pension at 64 years of age, when he completes a 36-year insurance period.

As a result of the amendments made to the Social Insurance Code in 2010, the above-mentioned point rules have been abolished and the qualifying conditions are now stated in terms of the attainment of the retirement age and the number of insurance periods. The qualifying conditions have likewise become stricter under the amendments. In 2011, old-age pensions are payable to men who have attained 63 years of age and completed at least 37 years of service, and women who have attained 60 years of age and completed at least 34 years of service. In 2012 and beyond, the required length of service will be increased by four months every year until reaching 40 years for men and 37 years for women in 2020. Subsequently, in 2021 the retirement age for both sexes will be increased by six months every year until reaching 65 years for men in 2024 and 63 years for women in 2026.

Insured persons who do not meet the aforementioned qualifying conditions may still be eligible for old-age pensions at age 65 (both men and women) with the completion of a 15-year insurance period.

Periods in which persons receive social insurance benefits for temporary incapacity, maternity and unemployment are credited as fully-insured periods. Other non-contributory periods, such as military service and child-rearing for children under two years of age, are regarded as insurance periods. Upon retirement, the contributions due for these periods are transferred from the State budget to the Public Social Security Budget. The amount is calculated based on the duration of the non-contributory periods credited as insurance periods, assuming the minimum wage as a contribution base.

In 2009, the average life expectancy at retirement was 14.72 years for men and 20.75 years for women. In 2060 it is expected to be 22.2 years for men and 28.1 years for women.

2.3.1.2. Pension formula

Since 2000 the old-age pension is calculated according to the following formula:

Old-Age Pension = AR x IP x IC x AMII,

where
AR: Accrual rate,
IP: Insurance period,
IC: Individual coefficient, and
AMII: National average monthly insurable income in the last 12 months.

The factors in the aforementioned pension formula are explained as follows:

- The accrual rate is currently 1.1 percent per insurance year. Prior to April 2009 it was 1 percent. For periods of postponed retirement the accrual rate is 3 percent.
- The insurance period consists of the contributory and non-contributory periods during which contributions have been paid by the State.
- The individual coefficient is the ratio of an individual's average insurable income to the national average insurable income. When calculating the individual coefficient, the individual's average is calculated from (i) their best three consecutive years out of the last 15 years of service before 1 January 1997 and (ii) the whole period after 1 January 1997. The reference period for the calculation of one's average insurable income is gradually extended to one's whole working life for persons entering the labour market after 1994.

- The national average monthly insurable income for the 12 months preceding one's retirement is calculated and reported by the National Social Security Institute on a monthly basis.

Minimum income support for the elderly is provided through the minimum old-age pension and the social pension for old age. The minimum old-age pension amount is set every year by the Public Social Security Budget Law. At the end of 2009 the minimum old-age pension was equal to BGN 136.08. Before 2006 the minimum old-age pension was set at 115 percent of the social pension for old age, but it was set at BGN 85 in July 2006. Thereafter it has been indexed in line with the other pensions. Recently, the trade unions suggested that the minimum old-age pension should be set at 55 percent of the minimum wage and the social pension for old age should be set at 50 percent of the poverty line.

Members of elderly households with an income lower than the minimum income guarantee are entitled to the social pension for old age. This pension is means-tested and is financed by the State budget. The amount of the social pension for old age is determined by the Council of Ministers. At the end of 2009 it was BGN 100.86.

The maximum pension is fixed at 35 percent of the maximum insurable income. In 2009, the maximum pension was BGN 700. The maximum pension will be abolished for all pensions granted after 1 January 2014.

The invalidity pension is calculated in a similar way, but with the following special rules:

- In cases of non work-related invalidity, the insurance period is equal to the actual years of service plus the granted period. The granted period is equal to the difference between the retirement age and the current age of the insured person. Special coefficients are also taken into account, which are determined by the percentage of the loss in one's capacity to work.
- In cases of work-related invalidity, the insurance period is equal to 30, 35 or 40 years depending on the percentage of one's loss of work capacity. The average amount of a work-related invalidity pension is approximately 5 percent higher than the average non work-related invalidity pension.

The survivors' pension is calculated as a percentage of the deceased person's pension. It is 50 percent of the deceased person's pension in the case of one survivor, 75 percent in the case of two survivors, and 100 percent in the case of three or more survivors. The survivors' pension is shared by all eligible beneficiaries. The minimum survivors' pension is 75 percent of the minimum old-age pension.

Table 2.5
Minimum and maximum pensions and their indexation, 2000–2010

Year	Social pension for old age (BGN)	Minimum old-age pension (BGN)	Maximum old-age pension (BGN)	Indexation		Christmas supplements (BGN)
				Date	Rate (%)	
2000	40.00	46.00	160.00	1 January	New pension formula	36.2
2001	44.00	50.60	176.00	1 June	10	20.0
2002	46.64	53.64	186.56	1 June	6	41.5
2003	50.00	57.50	200.00	1 June	6.2	48.2
2004	53.00	60.95	420.00	1 June	6.0	44.2
2005	60.00	69.00	420.00	1 June	7.0	21.9
2006	63.00	85.00	455.00	1 January	5.0	50.0
				1 July	3.5	
2007	76.23	102.85	490.00	1 July	10.0	100.0
				1 October	10.0	
2008	84.12	113.49	490.00	1 July	10.35	150.0
				1 October	Recalculation	
2009	100.86	136.08	700.00	1 April	Increase in accrual rate	25.0 (Paid in January 2010)
				1 July	9	
2010	100.86	136.08	700.00	—	—	

Source: NSSI.

2.3.1.3. Early retirement pensions

In Bulgaria, early retirement is not an option for general employees. It is only possible for the following groups of insured persons:

- persons working in the first and second labour categories (i.e. in hazardous or physically strenuous jobs),
- military and police officers, and
- teachers.

Workers in the first and second labour categories have been mandatorily covered by the Professional Pension Fund since 2000. During the transitional period from 2000 to 2014, workers in these categories can either receive an early retirement pension from the first pillar by transferring the balance in their individual accounts to the public pension system or retire at the statutory pension age and receive their accumulated balance as a lump sum.

In the former case, insured persons with at least ten years of service under the first labour category can retire at 52 or 47 years of age for men and women, respectively, if the sum of their age and insurance years is at least 100 for men and 94 for women. For first category insured persons, three years of service are credited as five (a 67 percent increase). Similarly, insured persons with at least ten years of service under the second labour category can retire at 57 or 52 years of age for men and women, respectively, if the sum of their age and insurance years is at least 100 for men and 94 for women. For second category insured persons, four years of service are credited as five (a 25 percent increase).

From 2015 onwards, early retirement pensions will be paid directly from the Professional Pension Fund.

Table 2.6 shows the number of pensioners who have completed insurance periods in the first and second labour categories.

Table 2.6
Number of pensioners with extended periods of insurance, 2009

Labour category	Number of pensioners	Average insurance period (in years)			Average pension (BGN)
		Total	Effective work period	Additional period	
First category	38,864	43.2	25.9	17.3	503.67
Second category	95,277	40.0	32.0	8.0	286.82
Mixed periods	588,375	41.6	32.7	8.9	348.20
Total	722,516	41.5	32.2	9.2	348.47

Source: NSSI.

Military personnel and police officers are entitled to pensions regardless of their age after completing a 25-year insurance period, two thirds of which was spent in military or police service. Starting in 2012 the required insurance period for these persons will be increased by four months per year until reaching 28 years. For the purpose of pension calculation, three years of service are credited as five (a 67 percent increase). Table 2.7 presents statistics on military and police pensions as well as special merit pensions from 2009. The State budget pays contributions for military and police officers. The State contributions are, however, insufficient to meet the pension expenditure for these categories of insured persons. Special merit pensions are granted by the National Assembly, following a proposal by the Council of Ministers, to persons who have made special contributions to the nation. The amount of the special merit pension is fixed at the maximum pension amount (currently BGN 700). The average pension in the table below is lower because it also includes survivors' pensions (which are 50 percent of the pension of the deceased beneficiary).

Table 2.7
Pensioners with privileged rights, 2009

Category	Number of pensioners	Average pension (BGN)	Pensions as a % of net average insurable income
Military and police officers	92,313	410.61	94.5
Special merit pensions (financed by the State budget)	18	599.84	138.1

Source: NSSI.

The Teachers' Pension Fund, established in 1997, provides early retirement pensions for teachers in public and private schools. The Fund is financed by contributions that equal 4.3 percent of the wages paid by employers. Since 2000, teachers have been entitled to an early pension three years before the normal retirement age if they fulfil the required insurance period as a teacher. The required insurance period is 30 years for men and 25 years for women. However, teachers' pensions are reduced by 0.2 percent for every month of early retirement. From 2012 onwards, the required insurance period is to be increased by four months every year until reaching 33 years for men and 28 years for women.

2.3.1.4. Disability pensions

Disability pensions are payable to insured persons who have lost more than 50 percent of their ability to work and have completed a minimum five-year insurance period. For insured persons under 30 years of age, the required insurance period is shortened in the following manner:

- For persons under 20 years of age, persons born blind or persons who became blind before starting to work, disability pensions are available regardless of the duration of their insurance period.
- For persons between 20 and 24 years of age, one year of insurance is required.
- For persons between 25 and 29 years of age, three years of insurance is required.

Persons with more than a 50 percent loss in their ability to work due to a work accident or occupational disease qualify for a disability pension regardless of the duration of their insurance period.

Disability pensions for non work-related diseases are not granted to persons receiving old-age pensions.

In the 2000s, the disability pension was generally considered an alternative to retirement when a person failed to meet the requirements for an old-age pension. While the number of disability pensioners below the statutory retirement age was about 150,000 in 1999, it grew rapidly after 2000 and peaked at 274,000 pensioners in 2006. In that year the NSSI carried out a thorough investigation and monitoring of new pension applications and reviewed the expert decisions of the Regional Expert Medical Commission (REMC) regarding invalidity. Thereafter the number of disability pensioners with non work-related diseases registered in 2008 decreased by 0.3 percent as compared to 2007. With the financial crisis, however, new increases in the number of disability pensioners were noted in 2010. For this reason, additional measures are expected in the coming years. The IMF mission in 2010 recommended a more stringent monitoring of disability pensions through random medical reassessment of disability pensioners by NSSI medical commissions.

2.3.1.5. Indexation of pensions

The pension indexation from 2000 to 2010 is summarized in Table 2.5 above. Until 2006 all pensions were indexed in June of every year based on the sum of 25 percent of the rate of increase of the average insurable income and 75 percent of the increase of the Consumer Price Index for the preceding calendar year. Since 2007, the base of indexation has been changed to the sum of 50 percent of the rate of increase of the average insurable income and 50 percent of the Consumer Price Index for the previous year.

Two extra indexations were undertaken in 2006 and 2007 and additional ad hoc measures were implemented in 2008 and 2009 to increase the level of pension benefits. In October 2008 all pensions were recalculated on the basis of the average insurable income for 2007 (which resulted in a 5 percent increase in the average pension), and in April 2009 the pension formula accrual rate was increased from 1 percent to 1.1 percent for all pensioners (which in theory implies a 10 percent increase in pension levels).

From 2001 to 2009, the rate of increase of the average insurable income was 11.1 percent per year and the rate of increase of the Consumer Price Index was 6.4 percent per year. The average rate of pension indexation (including both regular and additional indexations) for the same period was 9.2 percent per year. If the two additional measures – the recalculation of pensions in October 2008 and the increase of the accrual rate in April 2009 – are taken into account, the average rate of pension increase would be 9.9 percent per year, which equals about 89 percent of the wage increase.

It has been announced that pensions will not be indexed from 2010 until the end of 2012.

2.3.2. Mandatory funded pension

2.3.2.1. Basic structure

Table 2.8 shows the membership of the Universal Pension Fund (UPF) and Professional Pension Fund (PPF) by sex and age at the end of 2009.

The Universal Pension Fund covers all persons insured through public pension insurance born on or after 1 January 1960. The Fund provides life annuities in old age as well as payments in the case of death. The contribution rate of the Fund was initially 2 percent in 2002. It is currently 5 percent (2.8 percent contributed by employers and 2.2 percent by employees), and it will be further raised to 7 percent by 2017.

Workers in the first and second labour categories must, regardless of their age, become members of the Professional Pension Fund in addition to the Universal Pension Fund. The Professional Pension Fund provides fixed-term early retirement pensions (eight years before the statutory retirement age for workers in the first category and three years before the statutory retirement age for workers in the second category), as well as payments in the case of death. Since 2000, the contribution rate has been fixed at 12 percent for the first category and 7 percent for the second category, and contributions are paid entirely at the employer's expense.

The National Revenue Agency collects all social security contributions, including contributions made to the mandatory private pension schemes, and transfers the contributions to their respective pension funds.

Table 2.8
Membership of the supplementary mandatory pension funds by sex and age, 31 December 2009

Age group	Universal Pension Fund (UPF)*			Professional Pension Fund (PPF)		
	Men	Women	Total	Men	Women	Total
15–19	16,833	17,110	33,943	87	17	104
20–24	188,121	166,985	355,106	5,041	920	5,961
25–29	249,864	229,097	478,961	14,623	2,098	16,721
30–34	280,187	265,356	545,543	24,424	3,108	27,532
35–39	269,859	261,162	531,021	29,780	4,498	34,278
40–44	247,844	242,586	490,430	33,599	6,191	39,790
45–49	249,906	250,014	499,920	32,888	6,722	39,610
50–54	—	—	—	28,847	5,718	34,565
55–59	—	—	—	17,422	2,909	20,331
60–64	—	—	—	5,427	1,051	6,478
65 and above	—	—	—	1,358	201	1,559
Total	1,502,614	1,432,310	2,934,924	193,496	33,433	226,929
Average age	34.4	34.7	34.5	42.5	43.3	42.6

* Persons born on or after 1 January 1960 are compulsorily insured by the UPF.
Source: FSC.

Both the Universal and Professional Pension Funds are independent legal entities managed by pension insurance companies (PICs). The pension insurance companies must obtain a license from the Financial Supervision Commission (FSC) and have a minimum amount of required capital. Currently there are ten pension insurance companies operating in the market. Each company can establish and manage one Universal and one Professional Pension Fund. Table 2.9 lists the pension insurance companies and their market share in 2009.

The Financial Supervision Commission (FSC) was established on 1 March 2003 under the Financial Supervision Commission Act. The Commission is a specialized governmental body that regulates and supervises the financial sector. It is independent from the Executive and reports to the National Assembly.

The regulatory and supervisory activities of the Financial Supervision Commission are carried out mainly by the Investment, Insurance, and Social Insurance Supervision Divisions. These Divisions are organized as follows:

- In the Investment Supervision Division, there are directorates covering four fields: Preliminary Supervision, Inspection and Off-site Supervision, Enforcement and Market Abuse Investigation, and Regulatory Policy and Market Analysis.
- In the Insurance Supervision Division, there are directorates covering three fields: Regulatory Regimes and Consumer Protection, Inspection and Financial Supervision, and Regulatory Policy and Analysis.

- In the Social Insurance Supervision Division, there are directorates covering two fields: (i) Regulatory Regimes and Risk Evaluation, and (ii) Control Activities.

Table 2.9
Pension insurance companies and their market share, 2009 (%)

	UPF		PPF	
	Membership	Net assets	Membership	Net assets
PF Doverie	34.80	36.70	33.42	36.65
PF Allianz Bulgaria	19.41	21.41	16.05	19.60
PF Saglasie	13.05	11.73	15.73	17.19
PF DSK–Rodina	10.53	8.94	8.48	5.77
ING PF	8.84	9.98	7.25	5.71
PF CCB–SILA	5.36	4.42	5.77	3.22
Lujoil Garant–Bulgaria–PF	4.08	4.28	6.30	7.00
PF Future	2.60	1.74	2.43	1.03
PF Toplina	1.10	0.69	4.39	3.79
PF Pensionnoosiguritelen Institut	0.23	0.11	0.18	0.04
Total	100.00	100.00	100.00	100.00

Source: FSC.

2.3.2.2. Investment performance

The pension insurance companies invest the assets of the supplementary pension insurance funds with the aim of increasing revenues to provide adequate income for the elderly. Each pension fund manages one investment portfolio.

The resources of a Universal or Professional Pension Fund are invested based on the principles of reliability, liquidity, profitability and diversification. A pension insurance company may invest the assets of a supplementary mandatory pension fund in securities issued or guaranteed by the Government, shares, bank deposits, mortgage bonds and corporate bonds, debt securities, and investment property in Bulgaria, in Member States of the European Union, or in Member States of the European Economic Area Agreement.

At the end of 2009, the total assets of the second-pillar system amounted to BGN 2.6 billion, comprising BGN 2.2 billion from the Universal Pension Fund and BGN 453 million from the Professional Pension Fund. Table 2.10 provides the asset structure of the Universal and Professional Pension Funds in 2009.

Until 2008, there was a trend towards investing in riskier assets for higher returns. As a result the percentage of investments in shares reached 32.6 percent in 2007. When the financial crisis hit the Bulgarian capital market in 2008, investments were transferred to less risky instruments. Then, in the second half of 2009 as the first indications of market recovery became apparent, a gradual change was observed in the structure of the second-pillar pension fund assets. In 2009, the percentage of investments in government securities fell to 21.1 percent, shares grew to 22.0 percent, bank deposits increased to 23.8 percent because of high interest rates, and bonds retained their percentage.

Table 2.10
The asset structure of the supplementary mandatory pension funds, 2009

	UPF		PPF	
	Assets (in thousand BGN)	Share (%)	Assets (in thousand BGN)	Share (%)
Total assets	2,189,428	100.00	452,959	100.00
I. Investments	2,040,765	93.21	427,516	94.38
Investments in foreign markets	794,002	36.27	134,002	29.58
1. Debt securities issued or guaranteed by EU Member States or by their central banks	503,624	23.00	94,991	20.97
2. Corporate bonds	451,872	20.64	91,610	20.22
3. Mortgage bonds	24,716	1.13	7,090	1.57
4. Municipal bonds	42,516	1.94	10,139	2.24
5. Shares, rights and units	459,536	20.99	108,383	23.93
5.1. Shares and rights to the shares of a special investment purpose company	50,607	2.31	16,434	3.63
5.2. Shares and units, issued by collective investment schemes	234,396	10.71	45,984.26	10.15
5.3. Other shares, rights and units	174,534	7.97	45,965	10.15
6. Bank deposits	523,989	23.93	105,102	23.20
7. Property	34,512	1.58	10,200	2.25
II. Cash	111,148	5.08	18,392	4.06
III. Short-term receivables	37,515	1.71	7,051	1.56

Source: FSC.

It should be noted that investments abroad have increased significantly, from 1.2 percent of the total assets in 2005 to 21.8 percent in 2007 and 34.4 percent in 2009. This increase is due to the liberalization of foreign investment following Bulgaria's accession to the EU in 2007, along with a lack of liquidity and suitable instruments in the domestic market to absorb the growing assets.

Table 2.11 summarizes the statutory limitations placed on different types of financial instruments stipulated in the Social Insurance Code (Art. 178)[3].

3 In addition, the value of financial instruments issued by one agent should not exceed 10 percent of the total investment.

Table 2.11
Statutory limits on different investment instruments in the supplementary mandatory pension funds

Item	Instruments	Maximum percentage
1	Stocks (except those under item 2)	20
2	Stocks of special investment companies	5
3	Municipal securities issued by Bulgarian and foreign municipalities, and qualified debt securities issued by foreign municipalities	15
4	Bank deposits, provided that the investment in one bank's deposits may not exceed 5 percent of the assets of the fund	25
5	Mortgage bonds issued by local banks, approved by the Law of Mortgage Bonds	30
6	Corporate bonds issued or guaranteed by banks with more than 50 percent of State participation	10
7	Corporate bonds, debt securities of EU Member States and qualified debt securities of countries listed in the ordinance of the European Commission	25
8	Secured corporate bonds	5
9	Stocks or shares of collective investment schemes, managed by one management company	15
10	Assets in currency other than BGN or euro	20
11	Investment properties in Bulgaria or other EU Member States	5

Source: FSC.

Table 2.12 presents the rates of return on investments made from the second-pillar pension funds between 2005 and 2009. As a result of the global economic crisis, the pension funds lost more than 20 percent of their assets in 2008. However, the pension funds recorded positive rates of return in 2009: the weighted average rate of return of investments made from the Universal Pension Fund was 7.91 percent (ranging from 5.47 to 13.69 percent), and the weighted average rate of return for investments made from the Professional Fund was 7.85 percent (ranging from 5.17 to 10.74 percent).

Table 2.12
Rates of return for the supplementary mandatory pension funds, 2005–2009 (%)

Year	2005	2006	2007	2008	2009
Universal Pension Fund (UPF)					
– Weighted	7.59	7.35	15.38	–20.15	7.91
– Average	8.16	8.78	17.19	–21.14	8.11
Professional Pension Fund (PPF)					
– Weighted	8.33	8.45	15.57	–23.13	7.85
– Average	7.96	9.33	17.04	–22.77	7.39

Source: FSC.

2.3.2.3. Efficiency (management fees)

The Social Insurance Code provides for the following types of fees that the pension insurance companies are allowed to collect:

- up to 5 percent of contributions transferred to the pension fund, and
- an investment fee at a rate not exceeding 1 per cent annually of the net asset value.

A retirement insurance company may also charge an additional fee not exceeding BGN 20 if an insured person transfers the resources in their individual account from one fund to another. The fee shall be paid by the insured person.

All pension insurance companies now charge the legally allowed maximum fee rates.

2.3.2.4. Payment phase

Benefits from the universal pension funds are payable when an insured person is eligible for an old-age pension from the first pillar. Benefits from the universal pension funds may be paid up to five years before the statutory retirement age, provided that the accumulated balance in the individual's account is sufficient to provide the amount of the minimum old-age pension.

The Professional Pension Fund provides fixed-term early retirement pensions up to the statutory retirement age as well as payments in the case of death. Early retirement benefits from the Professional Pension Fund are payable to:

- persons with at least ten insured years in the first labour category who are not more than eight years from the statutory retirement age, or
- persons with at least 15 insured years in the second labour category who are not more than three years from the statutory retirement age.

The pension insurance companies provide these benefit payments. The Universal Pension Fund provides life annuities for old age, as well as lump-sum payments in the case of death. The payment of pensions from the Universal Pension Fund is expected to begin in 2021. The Professional Pension Fund will provide fixed-term annuities for early retirement. The first early retirement pensions provided by the Professional Pension Fund are expected in 2015.

2.3.3. Voluntary pension funds

Any person above 16 years of age can join the Voluntary Pension Funds (VPFs) of the third pillar. The Funds are fully funded, defined-contribution pension schemes based on individual accounts.

In 2007, the Occupational Pension Fund was introduced. The Occupational Pension Fund is based on a collective bargaining agreement or a collective contract between a sponsor and the fund's members. Contributions paid by employers (up to BGN 60 per month) and employees (up to 10 percent of their taxable income) are tax-exempt. The benefits can be paid in the form of life annuities, fixed-tem annuities or lump-sum payments.

The main impetus driving the adoption of this type of insurance was the necessity to transpose EC Directive 2003/41 (IORP Directive) into national legislation. Consequently, the Law on the Amendment and Supplementation of the Social Insurance Code[4] was adopted in 2006 and entered into force on 1 January 2007.

Tables 2.13 and 2.14 summarize the basic aspects of the Voluntary Pension Funds at the end of 2009. It should be noted that this table does not cover the Occupational Pension Fund.

Table 2.13
Membership of the supplementary Voluntary Pension Funds by sex and age, 31 December 2009

Age	Men	Women	Total
15–19	215	152	367
20–24	5,077	3,180	8,257
25–29	14,617	10,896	25,513
30–34	28,192	19,263	47,455
35–39	43,240	28,409	71,649
40–44	52,177	35,820	87,997
45–49	52,648	40,838	93,486
50–54	53,229	42,346	95,575
55–59	45,811	37,229	83,040
60–64	32,196	21,946	54,142
65 and older	21,874	8,981	30,855
Total	349,276	249,060	598,336

Source: FSC.

4 State Gazette 56, 11 July 2006.

Table 2.14
The asset structure of the Voluntary Pension Funds, 2009

	Assets (in thousand BGN)	Share (%)
Total assets	529,146	100.00
I. Investments	496,932	93.91
Investments in foreign markets	162,103	30.63
1. Debt securities issued or guaranteed by EU Member States or by their central banks	70,336	13.29
2. Corporate bonds	122,495	23.15
3. Mortgage bonds	2,449	0.46
4. Municipal bonds	11,168	2.11
5. Shares, rights and units	129,658	24.5
5.1. Shares and rights to the shares of a special investment purpose companies	23,319	4.41
5.2. Shares and units, issued by collective investment schemes	57,130	10.8
5.3. Other shares, rights and units	49,209	9.3
6. Bank deposits	125,274	23.67
7. Property	35,553	6.72
II. Cash	12,735	2.41
III. Short-term receivables	19,478	3.68

Source: FSC.

2.3.4. Adequacy of benefits

Table 2.15 illustrates the number of pensioners and their average pension amount by pension type in 2009.

Table 2.15
Number of pensioners and their average pension amount by type of pension, 2009

	Number of pensioners	%	Average pension (in BGN)	%
Total	2,192,524	100.0	244.46	100.0
Contributory pensions	2,134,458	97.4	252.73	103.4
Old-Age	1,660,485	75.7	263.26	104.2
Invalidity	351,101	16.0	202.92	77.1
Survivors'	122,872	5.6	161.89	79.8
Non-contributory pensions	58,066	2.6	132.62	81.9

Source: NSSI.

Table 2.16 compares the average pension amount with the average gross insurable income for the period from 2000 to 2009. Since 2004 the average pension has increased more rapidly than the average insurable income. As a consequence, the average gross replacement rate (defined as the ratio of the average pension to the average gross insurable income) has increased from 39.8 percent in 2000 to 44.1 percent in 2009. In comparison to the net insurable income, the average pension increased from 51.1 percent in 2000 to 56.3 percent in 2009.

Table 2.16
Average insurable income and average pension amounts, 2000–2009

Year	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Average gross insurable income (BGN) (1)	217.11	242.96	259.75	280.76	308.8	331.62	354.5	398.17	500.56	554.78
Index 2000=100	100	112	120	129	142	153	163	183	231	256
Average pension (BGN) (2)	83.42	90.72	98.86	106.68	121.17	132.77	147.93	171.62	208.97	244.46
Index 2000=100	100	109	119	128	145	159	177	206	251	293
Average gross replacement rate (2) / (1)	39.8%	38.0%	39.4%	39.4%	40.4%	40.6%	42.9%	43.1%	41.7%	44.1%
Average net replacement rate	51.1%	48.2%	49.9%	49.6%	51.0%	51.6%	53.3%	53.5%	53.3%	56.3%

Source: NSSI.

Despite the significant increases in pension levels in recent years, around 1 million pensioners (47 percent of all pensioners) were receiving pensions below the poverty line (BGN 211 per month) at the end of 2009. According to Eurostat, the poverty incidence rate in 2008 was 34 percent amongst the Bulgarian population aged 65 years or more and 40 percent amongst the population aged 75 years or more.

2.4. Expenditure and financing

2.4.1. Contribution rates

Table 2.17 summarizes the social insurance contribution rates by category of insured persons and by types of benefits in 2010. The contribution rates from 2000 until 2010 are found in Table 2.A.1 in the Annex.

Table 2.17
Social insurance contribution rates, 2010 (%)

	Pension				Sickness and maternity	Work accidents and occupational diseases	Unemployment	Total*
	First pillar		Second pillar					
	Born before 1 January 1960	Born on or after 1 January 1960	Universal Fund (born on or after 1 January 1960)	Professional Fund (categories II and III)				
Employees								
Labour category III	16.0	11.0	5.0		3.5	0.4–1.1	1.0	21.2
Employers	8.9	6.1	2.8		2.1	0.4–1.1	0.6	12.3
Employees	7.1	4.9	2.2		1.4		0.4	8.9
Labour category II	19.0	14.0	5.0	7.0	3.5	0.4–1.1	1.0	31.2
Employers	11.9	9.1	2.8	7.0	2.1	0.4–1.1	0.6	22.3
Employees	7.1	4.9	2.2		1.4		0.4	8.9
Labour category I	19.0	14.0	5.0	12.0	3.5	0.4–1.1	1.0	36.2
Employers	11.9	9.1	2.8	12.0	2.1	0.4–1.1	0.6	27.3
Employees	7.1	4.9	2.2		1.4		0.4	8.9
Civil servants	16.0	11.0	5.0		3.5	0.4–1.1	1.0	21.2
Military personnel	19.0	14.0	5.0		3.5		1.0	23.5
Self-insured persons								
with pensions only	16.0	11.0	5.0					16.0
for all social risks	16.0	11.0	5.0		3.5			19.5

* The contribution rate for work accidents and occupational diseases is assumed to be 0.7 percent.

Source: NSSI.

Since 2009 the State has acted as a "third insurer" and pays contributions equal to 12 percent of the total insurance income. The Government also pays the total contributions (i.e. both employer and employee shares) for the army, police, civil servants and magistrates.

The governmental policy is to increase the contribution base and decrease the contribution rate. As a result, insurable income as a percentage of GDP has increased considerably since 2006 (see Table 2.3 above). As shown in Table 2.18, the maximum insurable income is BGN 2,000. In 2010, the minimum insurable income for the self-employed was increased substantially to BGN 420.

Table 2.18
Average income, minimum income and maximum insurable income, 2002–2010

Year	2002	2003	2004	2005	2006	2007	2008	2009	2010
Average insurable income (BGN)	259.75	280.76	308.80	331.62	354.50	398.17	500.6	554.78	570.33
Minimum insurable income of the self-employed (BGN)	170	200	200	220	220	220	240	260	420
Maximum insurable income (BGN)	850	1,000	1,200	1,300	1,400	1,400	2,000	2,000	2,000

Source: NSSI.

The Law on the Establishment of the Silver Demographic Reserve Fund was adopted by the National Assembly in 2008. The objective of the Silver Demographic Reserve Fund is to accumulate public resources to be used towards the growing deficit in the public pension fund. As of July 2010, around BGN 1.6 billion (0.8 billion euro) has been set aside from the consolidated governmental budget for this purpose in a separate account with the National Bank. The resources of this Fund have not yet been disbursed, partly due to the lack of legal framework that would define the conditions under which this Fund should be utilized.

2.4.2. The operations of the State Pension Fund

Table 2.19 presents the revenue and expenditure of the NSSI for the period from 2000 to 2009. The total pension expenditure in 2009 was 9.8 percent of GDP, the highest it has been since 2000.

In 2009, the decreased employment rate and the irregular and delayed payment of salaries resulting from the global crisis aggravated the precarious financial situation of the NSSI. From Table 2.19 the following observations are made:

- On the revenue side, the social security contribution rate has been gradually reduced. In October 2007, the total contribution rate for mandatory pensions decreased from 23 percent to 22 percent (for workers in the third labour category) and the contribution rate for unemployment insurance was reduced from 3 percent to 1 percent. Furthermore, the total mandatory pension contribution rate was reduced to 18 percent in 2009 and to 16 percent in 2010. To compensate for the gap in pension financing, a State contribution of 12 percent was introduced in 2009.
- On the expenditure side, the level of benefits has been increased in various ways. In 2007, the pensions were indexed by 10 percent in both July and October. In July 2008, the pensions were indexed by 10.35 percent as compared to 9.5 percent as originally planned. In October 2008, all contributory pensions that had been awarded under the former pension system were recalculated on the basis of the average insurance wage in 2007, which resulted in the overall average pension amount being increased by 5.8 percent. In 2009, after minimum pensions had been increased by 10 percent in January, the pension formula accrual rate was increased from 1 percent to 1.1 percent for each year of insurance period in April, and all pensions were indexed by 9 percent in July. Additional lump sums were paid out at the end of 2007 (100 BGN) and at the end of 2008 (150 BGN).

Table 2.19
Revenue and expenditure of the NSSI, 2000–2009 (in million BGN)

Year	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2009	
											as % of GDP	as % of cont. base
TOTAL REVENUE	2,996	2,935	3,611	3,872	4,204	4,517	5,021	5,570	6,463	7,644	11.5%	45.8%
I. Own revenue	2,446	2,329	2,581	2,964	3,279	3,501	3,260	3,681	4,247	3,746	5.7%	22.5%
1. Balance from the previous year	109	11	13	11	9	9	11	12	13	12	0.0%	0.1%
2. Contributions	2,198	2,183	2,443	2,907	3,212	3,423	3,222	3,638	4,198	3,708	5.6%	22.2%
2.1. Employers	1,594	1,531	1,687	1,943	2,149	2,351	2,075	2,379	2,557	2,184	3.3%	13.1%
2.2. Employees	318	339	497	565	624	804	899	1,040	1,415	1,310	2.0%	7.9%
2.3. Self-insured persons	116	144	127	143	156	171	159	159	174	165	0.2%	1.0%
3. Other own revenue	139	135	126	47	58	69	27	31	37	26	0.0%	0.2%
II. Transfers	550	606	1,029	908	925	1,016	1,761	1,889	2,216	3,898	5.9%	23.4%
1. Transfers from the State budget covering the deficit	90	392	516	383	470	584	1,199	1,178	1,974	1,523	2.3%	9.1%
2. Transfers from the State budget for State contributions	—	—	—	—	—	—	—	—	—	2,070	3.1%	12.4%
3. Other transfers (*)	460	214	513	525	455	432	562	711	242	305	0.4%	1.8%
TOTAL EXPENDITURE	2,985	2,922	3,600	3,862	4,196	4,506	5,008	5,557	6,451	7,644	11.5%	45.8%
I. Pensions	2,535	2,700	2,943	3,159	3,542	3,799	4,234	4,708	5,634	6,521	9.8%	39.1%
II. Other social insurance benefits	152	169	510	525	595	640	719	781	736	1,049	1.6%	6.3%
III. Programmes and social security services for employment	37	52	41	47	59	65	54	65	80	73	0.1%	0.4%
IV. Other expenditures	262	0	106	130	0	2	1	4	1	1	0.0%	0.0%
Contributions/Total expenditure	73.6%	74.7%	67.9%	75.3%	76.5%	76.0%	64.3%	65.5%	65.1%	48.5%	—	—
Transfer from the State/Total expenditure	3.0%	13.4%	14.3%	9.9%	11.2%	13.0%	23.9%	21.2%	30.6%	47.0%	—	—

Source: NSSI.
Note: Other transfers include transfers for non-contributory pensions. For the period 2002–2007, health insurance contributions for pensioners, the unemployed and children are also included.

As a consequence, the NSSI's deficit has widened to a considerable magnitude. With regards to the structure of the revenue and expenditure of the Bulgarian State Pension Fund in 2009, the following observations can be made:

- The total amount of pension contributions collected from employers and workers covers only 49 percent of the NSSI expenditure (and 85 percent of the NSSI's expenditure is spent on pension benefits). Hence, the remaining 51 percent is transferred to the NSSI from other sources.
- The State contribution, which was introduced in 2009, amounts to 27 percent of the NSSI's expenditure. However, the pension expenditure still exceeds the amount of total contributions by 24 percent.

The Bulgarian State Pension Fund, in consequence, is not self-financing and relies heavily on transfers from the State budget in the form of State contributions and other sources to cover the NSSI's deficit. Currently the total amount of the State budget transfer to the State Pension Fund is estimated to be 5.4 percent of GDP. The State spending on pensions has put an additional burden on the financial authority of Bulgaria, which must also comply with EU criteria.

Concerns are also raised as to the long-term sustainability of the Bulgarian pension system in lieu of the severe ageing of the population that is expected to accelerate after 2020. Unless steps are taken now to improve and stabilize the pension system's financing, it is expected that the fiscal gap will continue to grow in the future.

2.4.3. Future projections

2.4.3.1. Scope of the projections

To examine the long-term sustainability of the Bulgarian pension system, the NSSI has carried out a study projecting the future of the pension funds in the face of the expected demographic and economic changes for the period from 2008 to 2060.

The long-term actuarial pension model developed by the NSSI is used for producing these projections. The model is based on the provisions that were in effect in August 2008. The economic assumptions are based on the Government's Medium-Term Fiscal Framework for 2009-2011. These parameters include a 4 percentage-point decrease in the pension contributions made by employers and employees, a 12 percent contribution from the State in 2009, and the recalculation of all pensions in October 2008.

The scope of the actuarial pension model covers the public pension system (i.e. the first pillar) and the Universal Pension Fund in the second pillar. It does not include the (i) Professional Pension Fund in the second pillar, the (ii) Voluntary Pension Funds and Occupational Pension Fund in the third pillar, or the (iii) Teachers' Pension Fund.

2.4.3.2. Projection results

Table 2.20 presents the projected pension expenditure as a percentage of GDP (the pension-to-GDP ratio) by pension type for the period from 2000 to 2060.

Over the projection period, the total pension-to-GDP ratio is expected to grow from 8.3 percent in 2007 to 13 percent in 2060. The acceleration of the growth of expenditures after 2035 reflects the adverse effects of the expected changes in the age structure of the Bulgarian population. The expenditure of disability, survivors' and social pensions is expected to decline due to the introduction of more stringent qualification requirements for these pensions. The expenditure of the mandatory private pensions from the Universal Pension Fund is expected to grow steadily throughout the projection period.

Table 2.20
Projected pension expenditure as a percentage of GDP, 2000–2060

Year	2000	2007	2020	2030	2040	2050	2060
Public pensions	9.4	8.3	8.4	8.6	9.5	10.8	11.3
Old-age and early retirement	8.3	6.8	6.9	7.1	8.1	9.4	10.0
Disability, survivors' and social pensions	1.1	1.4	1.5	1.5	1.4	1.4	1.3
Private pensions	0.0	0.0	0.0	0.3	0.8	1.4	1.7
Mandatory	0.0	0.0	0.0	0.3	0.8	1.4	1.7
Voluntary	—	—	—	—	—	—	—
Total pension expenditure	9.4	8.3	8.4	8.9	10.3	12.2	13.0

Source: NSSI.

The pension-to-GDP ratio can be expressed as a product of five factors[5]. Table 2.21 summarizes the contributions of these five factors on the changes in the pension-to-GDP ratio for different periods.

Table 2.21
Factors contributing to changes in the pension-to-GDP ratio, 2007–2060 (percentage of GDP)

Period	2007–2020	2020–2030	2030–2040	2040–2050	2050–2060	2007–2060
Pension-to-GDP ratio (public pensions)	0.1	0.2	0.9	1.3	0.5	3.0
Dependency ratio	2.1	1.3	1.7	2.5	1.6	9.2
Coverage ratio	–1.2	–0.4	–0.1	–0.6	–0.8	–3.1
1/Employment rate	–0.6	0.2	0.1	0.0	–0.2	–0.5
Replacement ratio	0.0	–0.8	–0.7	–0.5	0.0	–2.0

Source: DG ECFIN, NSSI.

5 This analysis is based on the following analytical framework:
Pensions-to-GDP ratio = (Dependency ratio) x (Coverage ratio) / (Employment rate) x (Replacement ratio).
For more details, see "The 2009 Ageing Report" (European Union).

The following observations can be made in lieu of the projection results shown above:

- Demographic ageing, as measured by the dependency ratio, is the main cause of the increase in pension costs, contributing 9.2 percent. In particular, the ratio's rapid increase from 2030 to 2040 reflects the expected retirement of the baby boom generation born in the 1970s.
- The decrease in the population receiving pensions, reflected in the coverage ratio, will contribute to decreasing pension costs due to the gradual transfer of benefits (i.e. early retirement pensions) to the second pillar and the increase in the statutory retirement age. The employment rate is also expected to slightly decrease pension costs.
- It is expected that the replacement rates of newly awarded pensions will also gradually decline, as the new pension formula accounts for entire insurance periods for purposes of individual coefficient calculation.
- The decline in replacement rates after 2020 is ascribed to the fact that generations born after 1960 (who pay part of their contributions to the second pillar) will receive proportionally-reduced pensions from the first pillar.

Although not included in Table 2.20, the projection also shows that pensioners receiving pensions from the second pillar will start to emerge in 2020. As these insured persons with longer investment periods retire, they will receive higher pensions.

Table 2.22
Projected pensioners and contributors, 2000–2060

Year	2000	2007	2020	2030	2040	2050	2060
Number of pensioners (1)	2,375	2,234	2,160	2,205	2,346	2,412	2,271
Population aged 65 or more (2)	1,331	1,325	1,462	1,572	1,690	1,852	1,876
Ratio (1) / (2)	178%	169%	148%	140%	139%	130%	121%
Number of contributors (3)	2,304	2,864	2,837	2,622	2,389	2,121	1,857
Employed population (4)	3,272	3,307	3,148	2,848	2,513	2,160	1,949
Ratio (3) / (4)	70%	87%	90%	92%	95%	98%	95%
Ratio (3) / (1) (Dependency rate)	97%	128%	131%	119%	102%	88%	82%

Source: DG ECFIN, NSSI.

Table 2.22 summarizes the results of the demographic projection.

In the short- to medium-term, the number of persons receiving pensions from the first pillar will decline to 2,160,000 in 2021, mainly due to the stricter rules governing the entitlement of pension rights under current legislation. As the sizeable generations born after 1962 attain the retirement age, the number of pensioners is expected to increase again and subsequently reach 2,412,000 by 2050.

The number of contributors to the pension system is expected to increase slightly to 2,977,000 in 2011 and decrease thereafter. This is due to emigration and the decreasing working-age population, despite the fact that the ratio of insured persons to the employed population continues to increase throughout the projection period.

As a result, the system dependency rate, defined as the ratio of the number of pensioners to the number of insured persons, is expected to increase to 131 percent by 2020 and then gradually decrease to 82 percent by 2060.

As shown in Table 2.23, the assets of the second-pillar Universal Pension Fund are projected to grow steadily from 2.2 percent of GDP in 2007 to 14.2 percent of GDP in 2020. They are then projected to reach almost 70 percent of GDP by 2060. It should be noted that the Silver Demographic Reserve Fund is not included in these projections.

Table 2.23
Projected assets of pension funds, 2000-2060 (percentage of GDP)

Year	2000	2007	2020	2030	2040	2050	2060
Public pensions	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Private pensions (Universal Pension Fund)	0.0	2.2	14.2	26.0	37.2	51.4	69.9
Total	0.0	2.2	14.2	26.0	37.2	51.4	69.9

Source: NSSI.

2.5. Social dialogue in the pension reform

In the 1999 pension reform, the Bulgarian government made efforts to reach a consensus with the social partners. Through negotiations, concessions were made on issues such as the share of contributions by workers and employers, the schedule for increasing the retirement age, and the continuance of early retirement for workers in hazardous or physically strenuous jobs. Moreover, trade unions and employers' organizations were allowed to establish their own Occupational Pension Funds.

The National Council for Tripartite Cooperation (NCTC), established in 1992, serves as a forum for the discussion of proposed legislation related to social security. The Council is a tripartite institution composed of 14 members representing the Government, trade unions and employers' organizations.

In 2009 the pension reform strategy was widely discussed in the National Council for Tripartite Cooperation. The most debated issues were early retirement, the number of insurance years required for a full pension, and the schedule for further increases in the retirement age for different categories of employees. Only the increase in the contribution rate by 1.8 percent was agreed upon. After continuous debate, the Government finally obtained the support of the social partners and an agreement was signed in November 2010 (see section 2.6.2).

According to a survey concerning the proposed amendments to the Social Insurance Code conducted by the National Public Opinion Centre (NPOC) in July 2009, 26 percent of respondents said they could not complete the required insurance years for an old-age pension, and 41 percent responded they were not sure if they would do so. Only 33 percent of respondents responded positively. Those who responded positively were mostly men with high educational backgrounds and high incomes between 40 and 60 years of age.

As regards retirement, only 6 percent of the respondents answered that they would not retire even if they had met all of the requirements. Two-thirds of respondents answered that they would like to retire as soon as they meet the qualifying conditions for an old-age pension. However, in order to have a higher pension amount, many respondents (mostly people with high educational backgrounds and high incomes living in urban areas) would prolong their working lives beyond the retirement age.

2.6. Conclusion

2.6.1. The impact of the global economic crisis on the pension system

The global economic crisis has resulted in a dramatic decline in Bulgaria's GDP. There was a 5 percent contraction of GDP in 2009 compared to a 6 percent growth in 2008, and only a 0.2 percent growth in 2010. The slowdown in economic growth and the increasing public deficit negatively affect the sustainability of the public pension system. Social security revenue declined sharply during the crisis, reflecting the drop in income, the decreasing number of insured persons, and rising unemployment. At the same time, significant cuts in social contribution rates and ad hoc benefit increases contributed to a large imbalance in the pension system that is being temporarily alleviated through State budget transfers and subsidies.

With their secure incomes from public pensions, current pensioners have been among the well-protected segment of the population. Despite the financial problems facing the public pension system in recent years, pensions have maintained their 2009-levels and have not been cut as in other EU Member States. However, future pensioners may be affected by unemployment, lower contributions and the poorer returns in financial markets. The crisis has impacted the currently active population, notably the younger generations, and thus the accumulation of their pension rights.

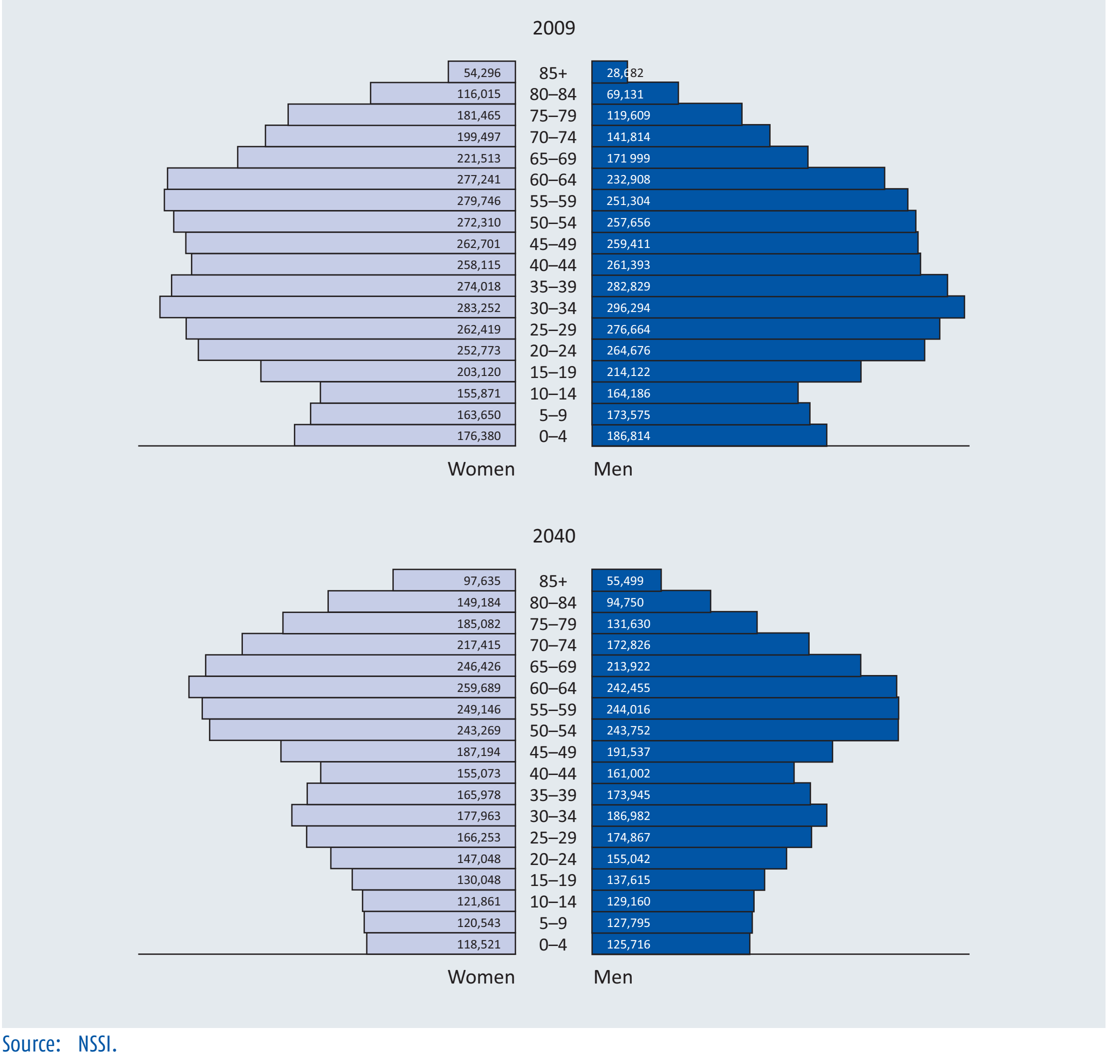
The financial crisis also decreased the value of the supplementary pension funds and exposed their sensitivity to volatile market conditions. According to the Financial Supervision Commission, the average rate of return in 2008 was –20.15 percent for the Universal Pension Fund, –23.13 percent for the Professional Pension Fund, and –24.71 percent for the Voluntary Pension Funds. In 2009, the situation improved and the average rate of return compared to the net assets of all pension types was positive. The average rate of return for 2005-2009 was slightly greater than 3 percent per annum.

Finally, public confidence and interest in funded schemes has decreased as a result of the crisis. In 2009 the number of persons with voluntarily-funded accounts decreased by 1 percent from 2008 according to the Financial Supervision Commission.

2.6.2 Current challenges facing the pension system

The challenges currently facing the pension system reflect in part the impact of the cumulative cuts in the social contribution rate, from 32 percent to 16 percent since 2000, and the increase in contributions to the mandatory private pension funds. Recent policy measures have also raised pension expenditure.

Figure 2.1
Structure of the Bulgarian population in 2009 and 2040



Source: NSSI.

The key challenges facing the pension system can be summarized as follows:

- The current deficit of the public pension system is high and unsustainable. Financial instability was caused in part by the above-mentioned measures to increase the benefits and reduce the contribution rate in recent years. The contribution revenues are not enough to cover half of pension expenditure, and the enormous deficit is being covered by the State budget.
- The pension system is heavily dependent on the State budget. In addition to covering the deficit, the State acts as a "third insurer" by paying contributions equal to 12 percent of personal insurance income since 2009. In 2010 the total amount of State budget transfer was BGN 4.8 billion, including: (1) transfers for non-contributory pensions and supplements (BGN 0.3 billion); (2) transfers equal to 12 percent of the personal insurance income (BGN 2.3 billion), and (3) transfers for covering the deficit (BGN 2.2 billion). On the other hand, the total expenditure in 2010 was BGN 8.2 billion, of which the pension expenditure was BGN 7 billion. Thus, the overall amount of transfers from the State budget amounts to 69 percent of the pension expenditure.

- The global economic crisis has resulted in a reduction in the insurance base (number of insured persons and insurance income), and therefore in contribution revenue as well.
- Bulgaria is one of the fastest-ageing economies in the EU, due to falling fertility rates and growing life expectancies. The old-age dependency ratio will increase rapidly in the coming decades, reflective of the expected growth in the share of elderly persons in the population (a proportion that is expected to double) and a drastic decline in the share of the working-age population. These trends can adversely affect the financial sustainability of the pension system.

Under these circumstances, the Government has established a Consultative Council on Pension Reform made up of a small number of experts to discuss the pension reform to be implemented in 2012 or later. The Consultative Council has presented four options for restoring the financial balance of the State Pension Fund.

- Under Option 1, the insurance period necessary for persons to be eligible for old-age pensions would be extended by 3 years, and no changes would be made to the normal retirement age. The new required length of service would be 40 years for men (rather than 37) and 37 years for women (rather than 34).
- Under Option 2, the normal retirement age for women (currently 60 years) would be increased by four months per year starting in 2012 until reaching the retirement age for men (63 years). The normal retirement age of both sexes would then be raised to 65 years by 2018.
- Under Option 3, both men and women would be entitled to pension rights at 65 years of age with the completion of a 15-year contributory period. Transitional provisions for early retirement pensions are also set out.
- Under Option 4, the normal retirement age for women (currently 60 years) would be increased to equal that of men (63 years). This option includes various cost containment measures to modify existing provisions.

Following discussions at the National Council for Tripartite Cooperation, the key tripartite stakeholders have agreed upon the following reform measures to be implemented by 2035:

1. On 1 January 2011 the contribution rate was increased by 1.8 percent. Hence, the total pension contribution rate has been increased from 16 percent to 17.8 percent. (The 12 percent State contribution continues to be paid.)
2. From 1 January 2011, higher penalties are applied to non-compliant employers and workers to improve the collection of contributions.
3. Early retirement pensions for workers in the first and second labour categories will continue to be paid from the State Pension Fund until the end of 2014. The individual account balances of these early retired workers will be transferred from the Professional Fund to the State Pension Fund. Starting on 1 January 2015, early retirement pensions for these workers will be paid from the Professional Fund.
4. Starting on 1 January 2012, the insurance period required for a pension (currently 37 years for men and 34 years for women) shall be extended by four months every year until reaching 40 years for men and 37 years for women by 2020. Persons who do not have sufficient insurance periods may purchase periods up to five years.

5. Starting on 1 January 2021[5], the pensionable age (currently 63 years for men and 60 years for women) will be increased by six months per year until reaching 65 years for men and 63 years for women. The difference in the pensionable age between men and women will thus be narrowed to two years.
6. Employer contributions for guaranteed receivables of workers and employers (the contribution rate of which is now 0.1 percent) shall be suspended from 2011 to 2013.
7. Starting on 1 January 2017, the accrual rate applied in the pension formula will be increased from 1.1 percent to 1.2 percent per insurance year.
8. Starting on 1 January 2017, the contribution rate for the Universal Pension Fund will be increased from 5 percent to 7 percent.
9. Starting on 1 January 2014, there shall be no maximum amount for newly granted State pensions. Through the end of 2013 the current maximum pension of 700 BGN will be indexed in line with the increase in the maximum insurable wage.
10. Starting on 1 January 2012, employers will only pay the first day of sickness benefits. The benefits shall be 100 percent of the employee's salary[6].
11. The indexation of pensions will be frozen until 2012.
12. As of 1 September 2011, the amount of supplements paid to pensions of surviving spouses was increased from 20 percent to 26.5 percent of the deceased spouse's pension.

All measures aim to eliminate the pension system deficit, ensure the medium-term financial stability of the Bulgarian pension system, and improve the adequacy of benefits in light of the demographic ageing. The NSSI estimates that if the aforementioned measures are implemented and the State continues to contribute 12 percent, the State Pension Fund will improve its financial balance by 2035.

5 In December 2011, the Government decided to start the increase in the pensionable age in 2012.

6 As a temporary measure during the period of crisis, employers were made responsible for the first three days of sickness benefits at the rate of 70% of the employee's salary.

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7 Available at http://www.nssi.bg/en/content/legislation/SICode.pdf.

Annex

Figure 2.A.1
Social insurance contribution rates by benefit type and category of insured persons, 2000–2010 (%)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
State contributions:										12.0	12.0
TOTAL (Contribution rate for work accidents and occupational diseases is assumed to be 0.7%)											
Employees											
Labour category I	50.7	47.7	51.7	51.7	51.7	51.2	45.2	43.7	42.2	38.2	36.2
Labour category II	45.7	42.7	46.7	46.7	46.7	46.2	40.2	38.7	37.2	33.2	31.2
Labour category III	35.7	32.7	36.7	36.7	36.7	36.2	30.2	28.7	27.2	23.2	21.2
Self-insured persons											
With pensions only	32.0	29.0	29.0	29.0	29.0	29.0	23.0	22.0	22.0	18.0	16.0
For all social risks	35.0	32.0	32.0	32.0	32.0	32.0	26.5	25.5	25.5	21.5	19.5
I. Pension (I pillar)											
Employees											
Labour category I											
– born before 1960	35.0	32.0	32.0	32.0	32.0	32.0	26.0	25.0	25.0	21.0	19.0
– born after 1960	35.0	32.0	30.0	30.0	29.0	29.0	22.0	20.0	20.0	16.0	14.0
Labour category II											
– born before 1960	35.0	32.0	32.0	32.0	32.0	32.0	26.0	25.0	25.0	21.0	19.0
– born after 1960	35.0	32.0	30.0	30.0	29.0	29.0	22.0	20.0	20.0	16.0	14.0

Labour category III											
– born before 1960	32.0	29.0	29.0	29.0	29.0	29.0	23.0	22.0	22.0	18.0	16.0
– born after 1960	32.0	29.0	27.0	27.0	26.0	26.0	19.0	17.0	17.0	13.0	11.0
Others											
– born before 1960	33.5	30.5	30.5	30.5	30.5	29.0	23.0	22.8	22.8	30.5	16.0
– born after 1960	33.5	30.5	28.5	28.5	27.5	26.0	19.0	17.8	17.8	25.5	11.0
Self-insured persons											
– born before 1960	32.0	29.0	29.0	29.0	29.0	29.0	23.0	22.0	22.0	18.0	16.0
– born after 1960	32.0	29.0	27.0	27.0	26.0	26.0	19.0	17.0	17.0	13.0	11.0
II. Universal Pension Fund											
– born after 1960			2.0	2.0	3.0	3.0	4.0	5.0	5.0	5.0	5.0
III. Professional Pension Fund											
Labour category I	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
Labour category II	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
IV. Sickness and maternity											
	3.0	3.0	3.0	3.0	3.0	3.0	3.5	3.5	3.5	3.5	3.5
V. Work accidents and occupational diseases (paid by employers)											
	0.4–1.1	0.4–1.1	0.4–1.1	0.4–1.1	0.4–1.1	0.4–1.1	0.4–1.1	0.4–1.1	0.4–1.1	0.4–1.1	0.4–1.1
VI. Unemployment											
	—	—	4.0	4.0	4.0	3.5	3.0	2.5	1.0	1.0	1.0

Source: NSSI.

3. Croatia

Snježana Baloković

3.1. Overview

3.1.1. Historical overview

The Pension and Disability Insurance Act[1] of the Republic of Croatia, which came into force in 1983, is based on the General Law on Pension and Disability Insurance of the former Yugoslavia. The Act provides generous conditions for entitlements and a wide range of rights in the area of pension and disability insurance, including some benefits beyond pension and disability insurance (e.g. vocational training for children with disabilities, compensation allowance for physical damage in case of injury and disease, and allowances for the care and assistance of others). The pension insurance system was originally a public one-pillar defined-benefit scheme managed by three funds that covered employees, self-employed persons and farmers. Mandatory pension insurance for farmers was introduced in 1980 with an amendment to the former Pension and Disability Insurance Act of 1972[2].

The former public pension system was based on the Bismarckian tradition of broad benefit coverage characterized by a low retirement age, generous replacement rates due to the calculation of pensions based on the average salary of one's best ten years, a broad definition of invalidity and other related pension rights. During the 1990s a rapid maturation of the pension system was observed as the pension system was used as a refuge for the unemployed. The war from 1991 to 1995 likewise had negative effects on the pension system.

The Pension and Disability Insurance Act regulates old-age pensions, early retirement pensions, disability pensions, survivors' pensions (including the minimum pension and the protection supplement to pensions), and benefits for those with residual ability to work. The benefits for those with residual ability to work consist of occupational rehabilitation and salary compensation while employed in another adequate job or during an unemployment period, compensation allowances for physical injury, and attendance benefits and salary compensation for part-time work based on the degree of one's disability.

The acquisition of pension rights depends on the fulfilment of the age conditions and the completion of qualifying periods, except for those benefits related to occupational injury or disease.

Under the Pension and Disability Insurance Act, insured males who have reached 60 years of age and insured females who have reached 55 years of age and have completed 20-year insurance periods are

1 Official Gazette Nos 26/83, 5/86, 42/87, 34/8, 57/89, 40/90, 9/91, 26/93, 96/93, 44/94 and 59/96.

2 Official Gazette No 29/79.

entitled to old-age pensions[3]. If these conditions are not met, it is possible for insured males to acquire rights to old-age pensions if they have reached 65 years of age and insured females if they have reached 60 years of age and have completed 15-year qualifying periods. Furthermore, old-age pensions can be awarded to insured males after the completion of a 40-year insurance period and to insured females after 35-year insurance period, regardless of age.

Early retirement pensions are payable to insured males who have reached 55 years of age and have completed 35-year insurance periods, or to insured females who have reached 50 years of age and have completed 30-year insurance periods. Early retirement pensions are subject to a 1.33 percent reduction per year of early retirement. This reduction is lifted once the pensioner fulfils the age conditions for an old-age pension.

Survivors' pensions are payable to family members of the deceased insured person (including widows and widowers; divorced spouses entitled to maintenance; marital, extramarital and adopted children; dependent stepchildren and grandchildren; children without parental support; children receiving an education; and parents dependent on the insured person) if the deceased insured person has completed a five-year qualifying period or a ten-year insurance period, or if they were an old-age pensioner.

Certain categories of insured persons, such as war veterans, police officers, and former representatives of Parliament, are entitled to special privileges. These benefits are financed by the State.

Pension indexation is undertaken once or twice a year according to the increase of the national average salary in the Republic of Croatia, based on regulations and in accordance with a social agreement. If salaries increase above their expected value, a special indexation procedure is carried out.

The growing financial burden on the pension system, due to unfavourable demographic trends and the continual ageing of the population, made it evident that a comprehensive pension reform was needed to make the system financially sustainable in the long-term. Therefore a reform was carried out in two steps: first through parametric reform, and later through systemic reform.

The first reform made changes to the State pension system. The main objectives of this reform were to achieve adequate pension levels, introduce different financing modalities, reduce the overall public expenditure, re-establish a long-term sustainable pension system harmonized with economic and demographic trends, promote greater individual responsibility for one's own income security, and induce economic growth.

The Pension Insurance Act[4] was passed and entered into force in 1999. The Act regulates the pay-as-you-go (PAYG) defined-benefit scheme that was implemented over a ten-year transitional period. The Act also introduces the concept of funded pension schemes.

3 The Pension and Disability Insurance Act defined these terms as follows:

- *Insurance periods* include the periods completed by an insured person under compulsory pension insurance, extended insurance schemes and special schemes (with respect to the period after reaching 15 years of age and after 1 January 1973);
- *Qualifying periods* include periods covered by insurance after reaching 15 years of age, meaning periods in employment or in carrying out independent activity that is equivalent to employment.

4 Official Gazette Nos 102/98, 127/2000, 59/2001, 109/2001, 147/2002, 117/2003, 30/2004, 177/2004, 92/2005, 43/2007 (Constitutional Court decision), 79/2007, 35/2008, 40/2010 (Constitutional Court decision), and 121/2010.

The second systemic reform was concerned with the design of the second and third pillars. Although the Pension Insurance Act introduced funded pension schemes, the implementation of the new laws regulating these schemes were promulgated only in 2002.

3.1.2. Basic legislation

Table 3.1 lists the key legislation regulating the Croatian pension system.

Table 3.1
Key legislation regulating the Croatian pension system

Act	Date of entry into force
Pension and Disability Insurance Act	1 July 1983
Pension Insurance Act	1 January 1999
Act on Maximum Pensions	1 January 1999
Act on Compulsory and Voluntary Pension Funds	1 January 2002
Act on Pension Insurance Companies and Payment of Pensions Based Upon the Individual Fully Funded Retirement Savings	1 January 2002
Act on Compulsory Insurance Contributions	1 January 2003
Act on Supplements to the Pensions Acquired According to the Pension Insurance Act	30 July 2007
Act on Contributions	1 January 2009

The Pension Insurance Act regulates the new first pillar, which is a reformed version of the former pension system. The main changes include: tightening the conditions for the acquisition of rights by gradually increasing the retirement age and more restrictively defining "disability"; changing the pension formula (extending the reference period for individual average salaries to one's whole career); abolishing some benefits or their transfer to other social branches (for example, attendance benefits); and indexing pensions according to the average rate of the increase in wages and prices (the so-called Swiss formula).

In addition to the Pension Insurance Act, other laws regulate the pension schemes for special categories of insured persons. These laws are:

- the Act on the Rights and Duties of Members of Parliament[5], which regulates, among other things, the pensions for members of Parliament, members of the Government and members of the Constitutional Court. These groups of persons can receive old-age pensions at 60 years of age for men and 55 years of age for women with the completion of one full mandate period and a 25-year qualifying period. When three mandate periods are completed in the Parliament, with the Government or in the Constitutional Court, pensions are payable with the completion of a 15-year qualifying period, regardless of age. The pension amounts to between 65 and 85 percent of the person's final salary;
- the Act on Entitlements to Pension Insurance for Active Military Officers, Police Officers and Authorized Officials[6], which regulates entitlements for these groups of workers. According to this Act, old-age pensions can be granted upon the decision of the responsible minister or competent leader with the

5 Official Gazette Nos 55/2000, 107/2001 and 86/2009.

6 Official Gazette Nos 128/99, 16/2001, 22/2002 and 41/2008.

completion of a 30-year qualifying period, 15 years of which must be completed with the military or police service. In addition, the Act regulates disability pensions for persons unable to continue their professional career in these services. Disability pensions are based on the average salary earned in one's best period of ten consecutive years of service. From the date of Croatia's accession to the EU, the same conditions for acquiring old-age and early retirement pensions will be applied to males and females (i.e. 65 years of age with a 15-year qualifying period for old-age, and 60 years of age with a 35-year qualifying period for early retirement);

- the Act on Qualifying Periods Counted with Extended Duration[7], which regulates jobs and occupations in which workers cannot make an entire career because of dangerous or hazardous working conditions. This Act provides for additional years of service and a lower retirement age;
- the Act on Entitlements to Pension Insurance of War Veterans from the Homeland War and Members of their Families[8], which provides, among other things, their right to disability pensions and old-age pensions under more favourable conditions than the general rules. This Act, together with the Regulation on Special Insurance Periods during the Homeland War, stipulates that the insurance period completed during the war is regarded as double the actual period. A disability pension is payable in cases of disability resulting from the war or resulting from a combination of causes related to the war. War veterans can receive special supplements to their old-age pensions if their service was for less than 40 years. Their maximum pension is set at twice the amount calculated by the general rules. Entitlement to the so-called State pension is also set forth in this Act.

The second and the third pillars are regulated by two laws. The first law concerns the phase of collecting contributions (accumulation phase), and the second law deals with the payment of pensions (payout phase). These two laws are:

- the Act on Compulsory and Voluntary Pension Funds[9], which regulates the compulsory and voluntary pension funds based on individual savings accounts that are managed by pension companies, the Central Registry of Affiliates, and the Croatian Financial Services Supervisory Agency; and
- the Act on Pension Insurance Companies and Pension Payments Based Upon the Individual Fully Funded Retirement Savings[10], which regulates the pension insurance companies that manage compulsory and voluntary pension funds.

For the implementation of compulsory pension schemes, a new State institution was established through the Regulation on the Establishment of the Central Registry of Affiliates[11] in October 1999, two years before the compulsory pension schemes started their operation. The Central Registry of Affiliates keeps records of the personal accounts of the members of compulsory pension funds. It is also responsible for transferring the contributions and individual account assets of compulsory pension fund members if they change pension funds, collecting monthly information on wages and contributions from employers and other contributors, providing members with account balance statements, informing the pension funds of the details of (and changes in) membership, and other related issues.

7 Official Gazette Nos 71/99, 46/2007 and 41/2008.

8 Official Gazette Nos 174/2004, 92/2005, 2/2007, 107/2007, 65/2009 and 137/2009.

9 Official Gazette Nos 44/99, 63/2000,103/2003 and 177/2004.

10 Official Gazette Nos 106/99 and 63/2000.

11 Official Gazette No 101/99.

Since July 2001, the Tax Authority – an entity of the Ministry of Finance – has been responsible for the collection of mandatory social security contributions (health insurance contributions, unemployment insurance contributions, and first and second-pillar pension contributions). Since January 2003 the Tax Authority has also been responsible for on-site control of second-pillar contributions, although the Central Registry of Affiliates is directly responsible for the disclosure of information on individual accounts and the transfer of fund members' assets to pension insurance companies in the pay out phase.

The collection of contributions is regulated by the Act on Contributions[12] (previously by the Act on Compulsory Insurance Contributions[13]). This Act establishes the obligation to pay contributions for compulsory insurance, and determines the contribution rates by type, the contribution basis, the payment obligations and deadlines for payments, what constitutes a contributor and who is liable to pay contributions, along with other related issues.

3.1.3. The current system's structure

The current pension system is a mixed private-public system based on three pillars, as summarized in Table 3.2 The first pillar is a mandatory pay-as-you-go (PAYG) defined-benefit scheme. The second pillar is a mandatory fully funded defined-contribution scheme based on individual savings accounts. The third pillar is a voluntary fully funded defined-contribution scheme based on individual savings accounts.

Table 3.2
The three-pillar pension system in Croatia

	Public / Private	Defined-benefit (DB) / Defined-contribution (DC)	Implementing institution	Supervisory authority
I. Pillar	Public scheme	Defined-benefit	Croatian Pension Insurance Institute	Ministry of the Economy, Labour and Entrepreneurship; Ministry of Finance
II. Pillar	Private scheme	Defined-contribution	Central Registry of Affiliates; Pension companies; Pension insurance companies	Croatian Financial Services Supervisory Agency; General supervision: Ministry of the Economy, Labour and Entrepreneurship; Ministry of Finance
III. Pillar	Private scheme	Defined-contribution	Pension companies; Pension insurance companies	Croatian Financial Services Supervisory Agency; General supervision: Ministry of the Economy, Labour and Entrepreneurship; Ministry of Finance

12 Official Gazette Nos 84/2008, 152/2008 and 94/2009.

13 Official Gazette Nos 147/02 and 177/04.

The organizational structure of each pillar is outlined as follows:

- The Croatian Pension Insurance Institute is the implementing agency of the first-pillar system. It is a public institution and has legal personality and public authority over pension insurance decisions. The Ministry of Economy, Labour and Entrepreneurship supervises the implementation of laws and the administration of the Croatian Pension Insurance Institute. The Ministry of Finance is responsible for drafting the State budget in line with the fiscal policy based on analyses and forecasts of macroeconomic trends. The Ministry of Finance monitors the pension insurance system from a macroeconomic point of view.
- In the accumulation phase of the second-pillar pension system, pension companies establish and manage the pension funds. Contributions are paid to pension funds through the Central Registry of Affiliates that manages the individual accounts of the insured persons in the second pillar. In the pay out phase of the second-pillar pension system, insured persons conclude individual contracts with pension insurance companies for the payment of their pension benefits.
- The organization of the third-pillar pension system is similar to that of the second-pillar system, except that in the third-pillar system there is no central agency that manages the individual accounts of insured persons.
- The second-pillar and third-pillar systems are supervised by the Ministry of Economy, Labour and Entrepreneurship and the Ministry of Finance. The Ministry of Economy, Labour and Entrepreneurship is also responsible for drafting the legislation relevant to these systems. Legal supervision is provided by the Croatian Financial Services Supervisory Agency, which is an independent legal person with public authority over the financial sector. The Agency is authorized to supervise the operation of pension funds, pension companies and pension insurance companies. It is obliged to submit an annual report to the Croatian Parliament. The Ministry of Finance and the Ministry of Economy, Labour and Entrepreneurship provide their opinions on the Agency's activities.

The Croatian Pension Insurance Institute is responsible for issuing decisions on the right to pension insurance and resolving those issues arising from the pension insurance in the first and second instance (with respect to first pillar pensions). The local units are responsible for the first instance decisions, and when an appeal is lodged against a first instance decision the central unit is responsible for the second instance decision. Appeals from second instance decisions and in those rare cases when an appeal is not allowed, the Croatian Pension Insurance Institute can be brought before the Administrative Court of the Republic of Croatia. Further appeals may be made to the Supreme Court or to the Constitutional Court, depending on the nature of the legal matter put forward.

3.2. Coverage, compliance and collection

3.2.1. Coverage

As shown in Table 3.3, the number of insured persons in the Croatian pension system stood at 1.5 million in 2009.

The following persons are compulsorily insured under the first pillar:

- employees and other workers, including salaried civil servants, full time volunteers and apprentices (regardless of remuneration), unemployed persons, sportsmen, priests, monks and other clerics, members of the management boards of trading companies, parents with children under one year of age, Croatian citizens employed in foreign diplomatic or consular offices in the territory of Croatia, persons insured under specific circumstances (students, trainees, and unemployed persons in vocational training who are covered only against employment injury), foreign citizens and stateless persons employed in Croatia, Croatian citizens employed abroad, and Croatian citizens on board a foreign vessel who are not compulsorily insured under a social security agreement applied between Croatia and the host country;

- self-employed persons such as craftsmen, caterers, carriers and merchants, as well as self-employed professionals such as lawyers, doctors, dentists, artists, journalists, educators, lecturers, translators and athletes;
- farmers mainly engaged in agriculture or forestry, and the members of family farms; and
- persons who are on temporary service contracts, regardless of their employment status.

Table 3.3
Number of insured persons by category, 1995–2009

Year	Employees	Self-employed	Farmers	Total
1995	1,340,951	77,549	149,481	1,567,981
1996	1,267,650	81,095	130,230	1,478,975
1997	1,270,226	79,962	118,750	1,468,938
1998	1,282,576	80,021	108,912	1,471,509
1999	1,239,200	76,629	90,262	1,406,091
2000	1,224,178	77,331	79,001	1,380,510
2001	1,249,709	78,783	73,610	1,402,102
2002	1,274,293	80,471	67,217	1,421,981
2003	1,301,994	82,775	59,226	1,443,995
2004	1,324,474	83,840	51,791	1,460,105
2005	1,368,402	83,749	46,726	1,498,877
2006	1,412,215	82,736	43,219	1,538,170
2007	1,457,676	81,963	39,824	1,579,463
2008	1,488,922	79,149	36,777	1,604,848
2009	1,421,376	75,051	33,806	1,530,233

Persons insured under the first pillar are also insured under the second pillar. Regarding the membership of the second-pillar pension system, the following rules apply:

- Persons newly insured after 2002 and insured persons under age 40 in 2002 are compulsorily insured under the second pillar.
- Insured persons aged between 40 and 49 years in 2002 could choose at that time whether or not to join the second pillar.
- Insured persons older than 50 years in 2002 are to remain in the first-pillar system.

As mentioned previously, members of the army, war veterans, members of the defence forces in the Homeland War, police officers, authorized judiciary officials, members of the intelligence agency, members of Parliament, members of the Government and members of the Constitutional Court are insured under special pension schemes regulated by separate legislation.

3.2.2. Compliance – the informal economy

The current pension system covers a wide range of the population. Among the population not covered by the current system are economically inactive persons. Many of these persons are housewives who are not employed.

However, workers in the informal economy represent a growing gap in the pension system coverage. Although accurate data on the informal economy are not available, crude estimates conducted by the Institute of Public Finance in 1996 indicate that the share of the informal economy of Croatia in 1996 was at least 25 percent of GDP. The situation today has not changed significantly. Some informal estimates suggest that the share of the informal economy is still between 20 and 25 percent of GDP. In Croatia the main components of the informal economy are work in the grey market and unreported employment. In addition, there are widespread practices of tax evasion and the evasion of social security contributions through the underreporting of income. These problems are a matter of concern for the tax and pension authorities since contributions cover about 60 percent of the pension expenditure, with the remainder coming from the State budget.

To combat the grey economy, the Act on Contributions prescribes cash penalties for employers who fail to establish the basis for paying their contributions, fail to pay contributions on time, or fail to notify the Tax Authority on their obligation to contribute. These provisions also apply to self-employed insured persons. Pursuant to the provisions of the General Tax Code, the Tax Authority implements procedures to identify and calculate contribution obligations. It also implements procedures to inspect accounting, to identify refunds given for paid contributions without a legal basis, and to enact enforcement proceedings. Based on the Act on Contributions, a register of taxpayers has been established that keeps records of contribution payments. This register is expected to improve the State's control over contribution collection and to reduce the size of the informal economy.

Under the current system based on the insurance principle, persons who do not complete the 15-year minimum qualifying period cannot acquire rights from the pension system. According to an estimate made in 2008, the number of elderly persons not receiving a pension was approximately 70,000. Elderly persons without pensions and without other sufficient living means are entitled to social assistance benefits, such as permanent assistance, supplements for home care and assistance, and personal disability allowances.

Recently the Government has been considering the introduction of so-called social pensions (or State subsidies), which would be payable to all permanent residents of Croatia subject to a means or income test. A draft bill of the Social Assistance Act which contains a provision for social pensions is currently in the legislative process. The income threshold for an entitlement to the social pension would be 15 to 30 percent higher than the current amount required for a permanent social assistance benefit. The introduction of social pensions will require securing sufficient resources from the State budget.

3.2.3. Collection of contributions

Before mid-2001, separate institutions were responsible for collecting social security contributions and personal income taxes. Pension insurance contributions were collected by the Croatian Pension Insurance Institute, health insurance contributions were collected by the Croatian Institute for Health Insurance, and taxes were collected by the Tax Authority.

One of the goals of the pension reform was to establish a unified mechanism for collecting taxes and social security contributions. Therefore, since 1 July 2001 the Tax Authority has been responsible for collecting both taxes and compulsory social security contributions (pension and health insurance), as well as unemployment insurance contributions. The unified collection procedure contributed to the reduction of administrative costs and improved efficiency in contribution collection due to its reliance on tax collection expertise and a network of local and central tax offices.

3.3. Benefits

3.3.1. State pension

3.3.1.1. Qualifying conditions and the retirement age

As under the previous law, the acquisition of pension rights in the first-pillar system depends on the fulfilment of age conditions and the completion of qualifying periods. However, for benefits related to occupational injury or disease, it is sufficient to have insurance status at the time of injury or disease.

Currently, old-age pensions are payable to men at 65 years of age and women at 60 years of age who have fulfilled 15-year qualifying periods[14].

Under the former rules, old-age pensions were payable to men at 60 years of age and women at 55 years of age who had completed 20-year qualifying periods. Hence, during the transitional period (from 1999 to 2007), the retirement age increased by six months per year while the minimum qualifying period was shortened by six months per year.

At the same time, an age condition was introduced for the pensions of insured persons who had completed the maximum qualifying period (40 years for men and 35 years for women). The age condition in 1999 was 55 years for men and 50 years for women, and was subsequently increased by six months each year until reaching 60 years for men and 55 years women in 2007, after which time entitlements based on the completion of a maximum qualifying period were abolished.

14 The Pension Insurance Act sets forth the following definitions:

- *Insurance periods* are periods in which contributions are made after attaining the age of 15. They consist of periods of full time employment or self-employment activity, periods of extended insurance, periods regarded as extended durations, periods of sick-leave and occupational rehabilitation, and periods of occasional earnings based on temporary service contracts.
- *Qualifying periods* consist of insurance periods, periods of miltary insurance, purchased periods under special conditions, periods of service in the Homeland War and periods completed under the former legislation and recognized as qualifying periods (all periods of insurance and some special periods, including periods completed in anti-fascist combat in World War II).

According to the most recent amendments to the Pension Insurance Act that entered into force on 1 November 2010, the retirement age of women has been made equal to the retirement age of men. This follows the Constitutional Court decision of 18 April 2010, stating that entitlements from the first-pillar pension system should be equal for both sexes. As a transitional measure, the retirement age for women will be increased by three months per year from 2011 until 2030. Table 3.4 summarizes the qualifying conditions for old-age pensions.

Table 3.4
Qualifying conditions for old-age pensions

Period	Men		Women	
	Age	Qualifying period	Age	Qualifying period
1990–1998	60 years	20 years	55 years	20 years
1999–2007	Increase of 6 months per year	Decrease of 6 months per year	Increase of 6 months per year	Decrease of 6 months per year
2008–2010	65 years	15 years	60 years	15 years
2011–2030	65 years	15 years	Increase of 3 months per year	15 years
2031 and after	65 years	15 years	65 years	15 years

3.3.1.2. Pension formula

The amount of a first-pillar pension depends on the level of wages earned during one's employment and the length of one's qualifying periods. Croatia has adopted the point system for the calculation of pensions. For persons who are insured exclusively by the first-pillar system, the old-age pension is calculated using the following formula:

Old-age pension = (personal points) x (pension factor) x (actual pension value).

The three factors in the above formula are calculated in the following way:

First, personal points are calculated as a product of (i) the average value point, (ii) the qualifying periods and (iii) the initial factor.

- For each insurance year, the value point is calculated by dividing the individual annual earnings by the average annual salary of all employed persons in the same year[15]. Hence, the value point equals 1 if the insured person earned the wage equal to the average wage. The average value point is then calculated. Initially, in 1999, the average was taken from the individual's ten most favourable years. However, the reference period was extended by three years per year until it reached 40 years in 2009. After that the average is now taken over the whole insurance period completed.
- For the purpose of calculating pensions, the qualifying period is converted into units of years.

15 Value points are calculated for periods of insurance completed after 1 January 1970, while average value points will be used for periods completed before 31 December 1969.

- The initial factor is used for the calculation of early retirement pensions. It reflects the reduction of 0.15 percent per month for early retirement (equivalently, 1.8 percent per year or 9 percent for five years).

Second, the pension factor is determined for different types of pensions. For old-age pensions and early retirement pensions the pension factor is 1.0.

Third, the actual value of the pension is the unit pension amount for one personal point. This is determined by the Management Board of the Pension Insurance Institute. Pensions are indexed by adjusting their actual value twice a year (on 1 January and 1 July of every year). The actual pension value has been 58.37 HRK since 1 July 2009[16]. In terms of the accrual rate, the current actual pension value is equivalent to 1.1 percent of the average salary of 2009. It should be noted that the indexation of pensions is suspended from 1 January 2010 until 31 December 2011.

For insured persons who are also members of the second-pillar system, their old-age pensions from the first pillar amount to:

i) 0.25 percent of the national average gross salary of all employed persons of the preceding year for each year of a qualifying period completed under the second-pillar system (alternatively, the actual pension value is replaced by 0.25 percent of the national average gross salary), plus

ii) 25 percent of the actual value of the pension with personal points that were obtained under second-pillar insurance (alternatively, the pension factor is equal to 0.25), plus

iii) The old-age pension, calculated using the formula above, for the period completed before joining the second-pillar system, if any.

In addition, the pensioner will receive annuities from the second-pillar system.

The minimum pension is applicable for all pensions, except for the invalidity pension acquired on the grounds of occupational incapacity for work. The minimum pension is defined in terms of the value of the pension per qualifying period. Initially the minimum pension was determined as 0.825 percent of the average wage in 1998, which was indexed up to the date of the entitlement. Between 2002 and 2008, while pensions with qualifying periods up to 30 years maintained this same rate, pensions with qualifying periods in excess of 30 years had a value of 0.4125 percent. Since 1 January 2008, minimum pensions have been determined again according to the original provision. Currently the value of the minimum pension is 56.59 HRK per year of qualifying period.

The maximum pension is regulated by the Act on Maximum Pensions[17]. The Act stipulates that the average value point should not exceed 3.8. For special categories of beneficiaries (Parliamentary deputies, members of the Government, members of the Constitutional Court and war veterans), the maximum pension is twice the standard rate based on a 40-year qualifying period. The maximum and minimum pensions have a redistributive element.

Table 3.5 compares the pension based on the average wage (i.e. with the personal pension points equal to one) with the minimum and maximum pensions.

16 The actual value of a pension was 57.59 HRK from 1 January 2009, 56.30 HRK from 1 July 2008, and 54.11 HRK from 1 January 2008.

17 Official Gazette Nos 162/98 and 82/2001.

Table 3.5
Comparison of pensions by different qualifying periods, 2011

Qualifying period (in years)	Amount (monthly, HRK)			As a percentage of the average wage		
	Minimum Pension	Pension based on the average wage	Maximum pension	Minimum Pension	Pension based on the average wage	Maximum pension
15	849	1,112	3,327	16.2	21.2	63.5
16	905	1,186	3,549	17.3	22.6	67.7
17	962	1,260	3,771	18.4	24.0	71.9
18	1,019	1,334	3,993	19.4	25.5	76.2
19	1,075	1,408	4,214	20.5	26.9	80.4
20	1,132	1,483	4,436	21.6	28.3	84.6
21	1,188	1,557	4,658	22.7	29.7	88.9
22	1,245	1,631	4,880	23.8	31.1	93.1
23	1,302	1,705	5,102	24.8	32.5	97.3
24	1,358	1,779	5,323	25.9	33.9	101.5
25	1,415	1,853	5,545	27.0	35.4	105.8
26	1,471	1,927	5,767	28.1	36.8	110.0
27	1,528	2,002	5,989	29.1	38.2	114.3
28	1,585	2,076	6,211	30.2	39.6	118.5
29	1,641	2,150	6,432	31.3	41.0	122.7
30	1,698	2,224	6,654	32.4	42.4	126.9
31	1,745	2,298	6,876	33.5	43.8	131.2
32	1,811	2,372	7,098	34.5	45.3	135.4
33	1,867	2,446	7,320	35.6	46.7	139.6
34	1,924	2,520	7,541	36.7	48.1	143.9
35	1,981	2,595	7,763	37.8	49.5	148.1
36	2,037	2,669	7,985	38.9	50.9	152.3
37	2,094	2,743	8,207	39.9	52.3	156.6
38	2,150	2,817	8,429	41.0	53.7	160.8
39	2,207	2,891	8,650	42.1	55.2	165.0
40	2,264	2,965	8,872	43.2	56.6	169.2
41	2,320	3,039	9,094	44.3	58.0	173.5
42	2,377	3,113	9,316	45.3	59.4	177.7
43	2,433	3,118	9,538	46.4	60.8	182.0
44	2,490	3,262	9,759	47.5	62.2	186.2
45	2,547	3,336	9,981	48.6	63.6	190.4

Note: In the above calculation, the following data have been used:
- The actual pension value: 58.37 HRK;
- The value of the minimum pension: 56.59 HRK;
- The average salary in February 2011: 5,242 HRK;
- The supplement to the pensions has been assumed at 27 percent.

3.3.1.3. Early retirement options and disability pensions

Currently, early retirement pensions are payable to men at 60 years of age with a 35-year qualifying period and women at 55 years of age with a 30-year qualifying period.

During the transitional period from 1999 to 2007, the age limit for early retirement pensions was increased by six months per year, from 55 years to 60 years for men and from 50 years to 55 years for women.

Over time, the reduction rate has been modified in the following ways:

- From 1999 to 2002, the reduction rate was 0.3 percent per month of anticipation (equivalently, 3.6 percent for one year or 18 percent for the maximum five years of anticipation).
- From 2003 to 2007, the reduction rate was 0.34 percent per month of anticipation (4.08 percent for one year or 20.4 percent for the maximum five years of anticipation).
- From 2008 until present, the reduction rate is 0.15 percent per month of anticipation (1.8 percent for one year or 9 percent for the maximum five years of anticipation).

As with old-age pensions, the latest amendments to the Pension Insurance Act (effective from 1 November 2010) equalize the entitlements of early retirement pensions for men and women.

As a consequence, from 2011 to 2030, the age limit for women's early retirement will be raised three months per year, from 55 years to 60 years, and the qualifying period will be extended three months per year, from 30 years to 35 years.

Table 3.6 summarizes the qualifying conditions for early retirement pensions.

Table 3.6
Qualifying conditions for early retirement pensions

Period	Men		Women	
	Age	Qualifying period	Age	Qualifying period
1990–1998	55 years	35 years	50 years	30 years
1999–2007	Increase of 6 months per year	Decrease of 6 months per year	Increase of 6 months per year	Decrease of 6 months per year
2008–2010	60 years	35 years	55 years	30 years
2011–2030	60 years	35 years	Increase of 3 months per year	Increase of 3 months per year
2031 and after	60 years	35 years	60 years	35 years

3.3.1.4. Disability pensions

Disability pensions are payable in cases of total disability as well as occupational disability. Total disability is the total and permanent loss of one's ability to work. Occupational disability is the permanent reduction of one's ability to work by more than 50 percent as compared to a fully healthy person. Disabilities may be caused by occupational or non work-related accidents or diseases. One's disability must be assessed and identified by an authorized medical expert. Control medical check-ups of the state of the disability are to be undertaken at least every four years.

Invalidity pensions are granted on the grounds of one's total or occupational disability if the accident or contraction of the disease occurred prior to the age of 65. The qualifying condition for non work-related disabilities requires that at least one third of the person's working life period[18] was covered by qualifying periods (for insured persons under 35 years of age, a two-year qualifying period is sufficient, and for insured persons under 30 years of age, a one-year qualifying period is sufficient). For disabilities due to occupational accidents or diseases, the entitlement of an invalidity pension is not conditional upon the length of qualifying periods. For occupational disabilities, the benefits payable to persons with a residual ability to work are paid if the person is under 50 years of age. Occupational invalidity pensions are payable to persons older than 50 years of age, or persons younger than 50 years of age whose residual abilities to work are unlikely to be improved by occupational rehabilitation.

The pension amount is calculated in the same way as the old-age pension except for the following:

- Invalidity pensions acquired on the grounds of total disability have a pension factor of 1.0.
- Invalidity pensions acquired on the grounds of occupational disability have a pension factor of 0.6667 for the rights acquired prior to 18 December 2002 and 0.8 for the rights acquired thereafter if the beneficiary is unemployed. If the beneficiary is employed, the pension factor is 0.3333. If the invalidity was caused by an occupational accident or disease, the pension factor is 0.5.
- If one's disability was caused by an occupational accident or disease, completed periods of insurance less than 40 years are regarded as 40 years for the purpose of calculating one's invalidity pension.

Benefits given to occupationally-disabled persons under 50 years of age who have a residual ability to work consist of occupational rehabilitation and salary compensation. Salary compensation is payable to disabled workers during their employment in another adequate job, or during an unemployment period of 12 months after the completion of occupational rehabilitation (24 months if the disability was caused by an occupational accident or disease). The salary compensation amount is assessed based on the amount of one's invalidity pension.

3.3.1.5. Survivors' pensions

The entitlement conditions for survivors' pensions concern the deceased person and their survivors.

The deceased must have been a pensioner, a beneficiary of occupational rehabilitation, an insured person who had completed a five-year insurance period or ten-year qualifying period, or an insured person who had met the disability pension requirements in respect of the length of their qualifying periods. If their death was the consequence of a work injury or occupational disease, no minimum qualifying period is required.

Survivors include the spouse (widow or widower) if they are aged 50 or more, if they are caring for children entitled to the survivors' pension, or if they are disabled (a widow aged at least 45 years of age

18 The working life period covers the period from age 20 (age 23 for persons with post-secondary qualifications and age 26 for persons with university qualifications) until the date of disability.

at the time of death of her husband acquires the entitlement upon reaching 50 years of age). Survivors also include divorced spouses who receive alimony, children under the age of 15, children under 18 if unemployed, children under 26 if enrolled in higher education full-time, or disabled children of any age. Children can be marital, extramarital and adopted, but stepchildren, grandchildren and other children are eligible only if they are supported by the deceased, and their parents only if they were also supported by the deceased.

In the case of the death of an insured person, the base pension is calculated on the basis of the old-age pension formula, subject to the following differences:

- If the actual qualifying period is less than 21 years it is regarded as 21 years. If the death is a consequence of an occupational accident or disease, the minimum period is 40 years.
- The pension factor for a survivors' pension is 0.7 for one family member, 0.8 for two, 0.9 for three and 1.0 for four or more family members. For orphans the pension factor is applied to the pensions of both the deceased parents.

In the case of the death of a pensioner, the base pension is the pension that the pensioner was entitled to on the date of their death.

If a survivors' pension is granted only to the insurer's widow(er) and children, or only to their parents, or only to other children without parental support, the total sum of the survivors' pension is divided into equal parts and each survivor receives the appropriate share of the pension. If a survivors' pension is granted to the insurer's widow(er) and children and parents, the total sum of the survivors' pension is first divided into parts for the insurer's widow(er), children and parents. Each of these parts is then divided equally by each survivor.

3.3.1.6. Indexation of pensions

The Pension Insurance Act of 1999 introduced the Swiss formula for the indexation of pensions. Under the old legislation, pensions were indexed according to the salary increases of all employed persons.

Under the current legislation, pensions are indexed twice a year, on 1 January and 1 July, by adjusting the actual value of pensions. (The actual value of pensions is the pension amount equal to one personal point.) The rate of indexation is the (arithmetic) average of (i) the rate of increase in the cost-of-living index in the preceding semester, and (ii) the rate of increase in the average gross salary of all employees in the preceding semester.

The indexation of pensions has been suspended by a decision of Parliament, which later became special law, from 1 January 2010 until 31 December 2011.

3.3.2. Mandatory funded pension

3.3.2.1. Basic structure

Persons insured under the first pillar are also insured under the second pillar. Members of the second-pillar system are insured persons who were newly insured and under the age of 40 in 2002 (born in 1964 or later), and those who were between 40 and 49 years of age in 2002 (born between 1953 and 1962) and chose to join the second pillar.

As shown in Table 3.7, four mandatory pension funds are currently operating in the Republic of Croatia. According to the Croatian Financial Services Supervisory Agency, the total membership of the mandatory pension funds was 1,552,459 as of September 2010.

Table 3.7
Number of pension funds and members, 2002–2009

Year	Mandatory pension funds		Open-ended voluntary pension funds		Closed-ended voluntary pension funds	
	Number of funds	Number of members	Number of funds	Number of members	Number of funds	Number of members
2002	7	983,310	1	1,345	—	—
2003	4	1,070,932	4	8,773	—	—
2004	4	1,170,092	4	30,022	4	1,112
2005	4	1,248,931	6	51,121	8	5,336
2006	4	1,322,010	6	75,161	10	10,633
2007	4	1,395,693	6	103,923	12	11,943
2008	4	1,475,729	6	127,738	15	17,285
2009	4	1,502,047	6	138,627	15	17,585

Each member chooses one mandatory pension fund. Contributions to the second pillar equal 5 percent of one's wage. The State guarantees the interest rate credited to personal accounts and the payment of pensions.

3.3.2.2. Investment performance

A pension fund is a special type of fund established for the purpose of providing, together with the first-pillar pension, an adequate income in old age through the long-term investment of contributions. According to the amendments made to the Act on Compulsory and Voluntary Pension Funds in 2007, the assets of a pension fund should be invested with a view to maximizing the overall returns of investments, exclusively for the benefit of pension fund members. Investment should be based on the principles of security, prudence, loyalty and care, and should involve the practices of risk reduction through investment diversification, lawfulness, the maintenance of adequate liquidity, and the avoidance of conflicts of interest.

The total assets of the four compulsory pension funds reached 34.6 billion HRK in 2010. The figure is about 4 billion HRK more than the gross amount paid by the members of the compulsory funds. According to data provided by the Croatian Financial Services Supervisory Agency, the average annual growth rate of the assets of the compulsory pension fund (called the "Mirex"[19]) in late September 2010 was 5.11 percent, reflecting a real growth of about 3 percent.

19 Mirex represents the value of the unit account of an average Compulsory Pension Fund, and is calculated as a weighted average based on the share of net assets of Compulsory Pension Funds.

Table 3.8 presents the investment structure of the compulsory pension funds in the last quarter of 2010 according to the Croatian Financial Services Supervisory Agency. In the last quarter of 2010, 88.5 percent of the total assets were invested domestically and 11.5 percent were invested in foreign assets. The voluntary pension funds have similar investment portfolios.

Table 3.8
Investment structure of compulsory pension funds, 4th quarter of 2010

Instruments	Amount in million HRK	Share (%)
Domestic investments	32,256	88.50
– Government bonds	23,700	65.02
– domestic shares	5,700	15.64
– deposits	617	1.69
– investments in open-ended mutual funds	550	1.51
– short-term securities	349	0.96
– investments in closed-ended funds	67	0.18
– investments in corporate bonds	1,200	3.29
– investments in municipal bonds	73	0.20
Foreign investments	4,193	11.50
– foreign shares	1,800	4.94
– Government bonds	444	1.22
– corporate bonds	49	0.13
– open-ended mutual funds	1,900	5.21
Total	36,449	100.00

The Act on Compulsory and Voluntary Pension Funds regulates the maximum limits of different types of investment instruments. According to the Amendments to this Act made in 2007, these maximum limits are prescribed as follows:

- Investments in securities should not exceed 30 percent of the assets.
- Investments in stocks should not exceed 30 percent of the assets.
- Investments in shares in open-ended investment funds and in stocks of closed-ended investment funds should not exceed 5 percent for a single issuer, whereas, in the aggregate, they should not exceed 30 percent of the assets.
- Investments in deposits, certificates of deposits or repurchase arrangements should not exceed 2.5 percent for a single borrower, whereas, in the aggregate, they should not exceed 20 percent of the assets.
- Investments in the assets of the business account of a pension fund should not exceed 5 percent of the assets.

Until the date of accession of the Republic of Croatia to the European Union, at least 50 percent of the assets of a compulsory fund should be invested in securities issued by the Republic of Croatia and the Croatian National Bank; up to 20 percent of the assets of a compulsory fund and up to 25 percent of the assets of a voluntary fund may be invested in the assets of Member States and OECD member states. The Act on Compulsory and Voluntary Pension Funds stipulates that from the date of EU accession, the Croatian Financial Services Supervisory Agency can impose restrictions on investments in particular types of assets issued by the Member States.

The recent economic crisis has affected both the public and private funded pension systems. In particular, private pension funds recorded a significant loss in asset value from 2008 to 2009. As a large portion of the assets of the compulsory pension funds was invested in Government bonds that yielded positive returns during the crisis, the loss was relatively minimal as compared to that experienced in neighbouring countries with similar pension systems. The yield of the pension funds in 2008 was –12.5 percent (as compared to 5.1 percent in 2003, 7.4 percent in 2004, 7.1 percent in 2005, 5.7 percent in 2006, and 6.8 percent in 2007).

The experience of the recent economic crisis has led the Government to consider introducing multiple portfolios with different investment risks in one pension fund, as well as a default investment option that would allow insured persons to automatically move to less risky investment portfolios as they approach retirement age.

As Croatia has been working on the transposition and implementation of EU *acquis communautaire* in the field of investment[20], the country's investment policy will be liberalized from the day of its accession to the EU. In particular, it will be possible to invest the closed-ended voluntary pension funds in more risky capital markets.

3.3.2.3. Administrative efficiency

The Act on Compulsory and Voluntary Pension Funds stipulates the types of fees and their upper limits to be charged by the pension companies administering the compulsory pension funds.

- Entry fees (collected at one's entry into the fund) should not exceed 0.8 percent of the contributions paid.
- Management fees (net asset value fees) should not exceed 1.2 percent of the total assets per year according to the Act. However, the by-laws of the Croatian Financial Services Supervisory Agency have set a lower rate, reducing this maximum from 0.9 percent to 0.75 percent. The maximum rate is 0.65 percent for 2011.
- Exit fees should be paid if a member switches from the fund within the first three years of membership. The exit fees are 0.8 percent of the total amount of the member's personal account in the first year, 0.4 percent in the second year and 0.2 percent in the third year. After three years, no fees are charged when a member switches funds.
- Fees are also owed to the custodian bank.

20 IORP Council Directive 2003/41/EC on the activities and supervision of institutions for occupational retirement provision, Council Regulation 3604/93/EC specifying definitions for the application of the prohibition of privileged access referred to in Article 104a of the Treaty, and the introduction of a prudent person rule which is one of the main principles of EU investment policy.

The amount of fees collected by the compulsory pension fund management companies in 2009 totalled 237 million HRK, 205 million HRK of which were management fees. The average fee collected per member was 155 HRK in 2009. Within the framework of the Economic Recovery Program, the Government plans to propose further reductions in the administrative costs of the second-pillar system in 2011.

3.3.2.4. Payment phase

Persons insured in both the first and the second pillars will be entitled to their second-pillar pension when they satisfy the requirements of the first-pillar pension.

As the second-pillar pension is intended for old-age insurance, invalidity pensions and survivors' pensions would typically only be granted from the first pillar. Exceptions are made in rare cases where the sum of one's invalidity pension or survivors' pension from the first pillar (based on the formula for members of the second-pillar pension) and one's pension from the second pillar is more favourable than the invalidity pensions or survivors' pensions from the first pillar only.

In the pay out phase of the second-pillar pension system, insured persons conclude individual contracts with the pension insurance company of their choice and transfer their savings account balance in the pension fund to the pension insurance company.

According to the Law on Pension Insurance Companies and the Payment of Pensions Based Upon the Individual Fully Funded Retirement Savings, pension insurance companies are required to offer the following types of annuities:

i) Single life annuities, i.e. monthly pensions that are payable so long as the pensioner is alive.
ii) Joint life annuities, i.e. monthly pensions that are payable so long as the pensioner or the spouse is alive.
iii) Single life annuities with a guarantee period, i.e. single life annuities with the provision that in the case of death of the pensioner before the guarantee period, annuity payments continue to be paid to a nominated beneficiary until the end of the guarantee period. In the event that the nominated beneficiary dies before the end of the guarantee period, all remaining payments are added to the legacy of the deceased pensioner.
iv) Joint life annuities with a guarantee period, i.e. joint life annuities with the provision that in case both the pensioner and their spouse die within the guarantee period, annuity payments are paid to the designated beneficiary.

The amount of annuities (i.e. pensions) depends on the balance of the individual savings account and the actuarial factors corresponding to the annuity type selected by the beneficiary (using unisex life tables). The amount of annuities for compulsory pensions is adjusted according to the increase in the cost of living at least twice a year.

Once a person enters into an annuity contract with a pension insurance company, the annuity contract cannot be modified or terminated at a later stage.

3.3.3. Voluntary pension funds and occupational pension schemes

Any person residing in the Republic of Croatia can join the third-pillar voluntary pension funds. A voluntary pension fund can be open-ended or closed-ended. Open-ended pension funds accommodate any individual, while closed-ended pension funds accommodate workers employed by a sponsor employer, members of trade unions or members of self-employed persons' associations. In the latter, sponsors (employers, trade unions or associations of self-employed persons) are responsible for paying contributions into the members' individual saving accounts. Closed-ended pension funds are therefore similar to the occupational pension schemes in the EU Member States. Members of the closed-ended funds are also insured persons under the compulsorily funded pension system. The contribution amount is determined by the collective agreement or the statute provisions relevant to the sponsor association for closed-ended funds, while for open-ended funds the members choose their contribution levels in agreement with the pension company[21].

One of the main differences between voluntary and compulsory pension funds is that in voluntary pension funds the members' records are kept by the respective pension companies, while in the compulsory pension funds, the Central Registry of Affiliates is responsible for contribution allocation and record keeping.

The membership of the voluntary pension funds has been growing steadily. At the end of October 2010 the number of members in the voluntary pension funds was 180,000 (163,000 persons in the open-ended funds and 17,600 persons in the closed-ended funds), representing 1.2 percent of all employees. The total assets of the voluntary pension funds at the end of September 2010 reached 1.62 billion HRK (the open-ended funds remained at 1.4 billion HRK and the closed-ended funds reached 270 million HRK). The annual rates of return for open-ended pension funds range between 2.46 and 8.99 percent, or between 1 and 7 percent in real terms. The annual rates of return for closed-ended pension funds range between 0.69 and 13.96 percent, or between –1.5 and 12 percent in real terms.

Voluntary pension fund members can experience preferential treatment in the form of tax relief and State subsidies. Contributions paid into the voluntary pension funds (and premiums paid for private health insurance and life insurance) up to 12,000 HRK per year can be exempt from income tax. Additionally, in order to promote voluntary pension savings, the State subsidizes 25 percent of the contributions paid into a voluntary pension fund up to 1,250 HRK per year.

These provisions were recently amended. The State subsidy has been lowered to 15 percent of the voluntary fund contributions pursuant to the Amendment to the Act on Compulsory and Voluntary Pension Funds[22]. Also, as an incentive for employers, trade unions, and associations of the self-employed to sponsor closed-ended pension funds, their voluntary contributions of up to 6,000 HRK per year are exempt from corporate tax as well (Amendment to the Law on Profit Tax[23]). Conversely, voluntary contributions made by members of the open-ended funds are no longer exempt from income tax (Amendment to the Law on Income Tax[24]). The first amendment came into force on 1 November 2010, and the last two amendments came into force on 1 July 2010.

21 Contribution payments to an open-ended fund from another EU member State will be possible from the date of Croatia's accession to the EU, taking into account the right of the free movement of persons within the EU.

22 Official Gazette No 124/2010.

23 Official Gazette No 80/2010.

24 Official Gazette No 80/2010.

Pensions in the third pillar are paid out according to the terms of individual contracts signed between insured persons and their pension insurance companies. Unlike under the second-pillar system, entitlements to benefits from the third pillar are not linked to the first-pillar system.

A pension insurance company can offer life annuities, fixed-term annuities, variable annuities, partial lump-sum payments (up to 30 percent of the member's balance), and other pension benefits. Life annuities and fixed-term annuities may not be purchased before 50 years of age. Once a person enters into an annuity contract with a pension insurance company, the annuity contract cannot be modified or terminated at a later stage.

Pensions and guaranteed benefits are paid to beneficiaries on a monthly basis. If the amount of a monthly benefit is lower than 10 percent of the national average net salary in the previous year, payments may be made on a quarterly basis.

3.3.4. Adequacy of benefits

In September 2010, the average pension of all types from the first pillar amounted to 2,162.63 HRK, which is 40.12 percent of the national average gross salary. The average old-age pension in the same month was 2,408.43 HRK, which is 44.68 percent of the national average gross salary. For old-age pensioners with 40-year qualifying periods, their average pension was 60.29 percent of the national average gross salary. On average, pensions were above the poverty line of 1,845.42 HRK[25].

As a result of the pension reform in 1999 that tightened eligibility conditions and adopted a new pension formula, the newly acquired pensions from the first pillar were lower than the pensions acquired under the old regulation. Although reduced pension levels were expected, this result greatly dissatisfied the public. In October 2007, the Government promulgated the Act on Supplements to the Pensions Acquired According to the Pensions Insurance Act[26], which provides that all pensioners of the first-pillar system can receive a certain percentage of the amount of their pension as a supplement. The supplement for pensions acquired in 1999 is 4 percent, and for those acquired in and after 2010 is 27 percent[27]. The Act does not apply to pensioners who are insured under the second pillar or belong to special categories of insured persons.

However, this legislation resulted in another irregularity: pensions granted from both pillars now amounted to less than pensions granted from the first pillar only. In October 2010, a total of 527 beneficiaries (women receiving early retirement pensions at 50 years of age) received pensions from both the first and second pillars. Their average pension is 1,660 HRK, which is below the poverty line. If they were granted pensions only from the first pillar, their average pension, including the above-mentioned supplement, would be 2,050 HRK, which is 25 percent higher. Even without supplements the first-pillar pension would be higher.

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25 According to World Bank data.

26 Official Gazette No 79/2007.

27 The percentages of supplements according to the year of one's acquisition of a pension are: 4% for 1999, 8.4% for 2000, 12.6% for 2001, 16.3% for 2002, 19.0% for 2003, 20.9% for 2004, 22.6% for 2005, 23.8% for 2006, 24.9% for 2007, 25.9% for 2008, 26.4% for 2009 and 27% for 2010 and after.

This is concerning for insured persons born between 1953 and 1962 who opted to join the second-pillar scheme in 2002. Due to a short period of investment coupled with the negative impact of the crisis, their resulting pensions are smaller than those they would have received had they remained exclusively in the first pillar. This discrepancy has further widened with the introduction of the supplement in 2007. It is reported that the Government is considering extending the supplement provision to pensioners insured in both pillars.

The taxation of pensions is regulated by the Law on Income Tax[28]. The amount of pensions in excess of the deductible of 3,000 HRK per month is subject to taxation. Pension taxes are deducted by the payment institution that transfers the taxes to the Tax Authority. Survivors' pensions for orphans, survivors' pensions for deceased war veterans and pensions paid from abroad are tax-exempt.

3.4. Expenditure and financing

3.4.1. Pension expenditure

Table 3.9 compares the number of contributors with the number of pensioners for the period from 1970 to 2010. During the 1990s there was a drastic increase in the system dependency ratio, defined as the ratio of the number of pensioners to the number of contributors. The system dependency ratio increased from 33.5 percent in 1990 (almost three contributors supporting one pensioner) to 55.2 percent in 1995 (1.8 contributors to one pensioner), and further to 73.5 percent in 2000 (less than 1.4 contributors to one pensioner). As shown in Figure A1 in the Annex, the demographic ageing of the Republic of Croatia is expected to continue into the future.

Table 3.9
System dependency ratio, 1970–2010

Year	Number of contributors (1)	Number of pensioners (2)	System Dependency Ratio (%) (2) / (1)
1970	1,166,088	340,134	29.2
1975	1,287,396	377,565	29.4
1980	1,518,049	438,133	28.9
1985	1,658,960	507,551	30.6
1990	1,682,971	594,339	33.5
1995	1,340,951	773,836	55.2
2000	1,235,482	870,810	73.5
2005	1,498,877	1,080,571	72.9
2010	1,475,363	1,200,386	77.5

28 Official Gazette Nos 177/2004, 73/2008 and 80/2010.

Table 3.10 presents pension expenditure as a percentage of GDP from 1995 to 2009. In the late 1990s and early 2000s the pension-to-GDP ratio increased steadily, peaking at 12.04 percent in 2001. As a consequence of the pension reforms in 1999 and 2002, the pension-to-GDP ratio has declined, standing at 9.71 percent in 2007. The ratio increased in 2008 and 2009 due to the stagnation of GDP and the continuous increase in pension expenditure.

Table 3.10
Pension expenditure as a percentage of GDP, 1995–2009

Year	GDP (in million HRK) (1)	Pension expenditure (in million HRK) (2)	Ratio (%) (2) / (1)
1995	115,699	10,667	9.22
1996	127,052	12,343	9.71
1997	145,394	15,448	10.62
1998	160,603	16,536	10.30
1999	164,054	19,047	11.61
2000	176,690	20,225	11.45
2001	190,769	22,967	12.04
2002	208,223	23,723	11.39
2003	227,012	24,691	10.88
2004	245,550	26,011	10.59
2005	264,367	27,298	10.33
2006	286,341	28,919	10.10
2007	314,223	30,519	9.71
2008	342,159	33,515	9.80
2009	333,063	35,072	10.53

Source: National Statistical Bureau and the Croatian Pension Insurance Institute.

3.4.2. Contribution rates

According to the Act on Contributions, the total contribution rate for pension insurance is 20 percent of the contribution base. Persons insured by the first pillar only pay all contributions to the first-pillar pension fund[29]. Persons insured under both pillars pay 15 percent to the first pillar and 5 percent to the second pillar. At the beginning of the pension reform a gradual increase in the second-pillar contribution rate was planned, but the rate has so far remained the same.

29 Technically, first-pillar pension contributions are paid into the Croatian Pension Insurance Institute's account with the State Treasury.

One of the notable characteristics of the Croatian pension system is that employees are liable for their whole pension contribution rate of 20 percent, although employers transfer the contributions on their behalf. However, employers are liable for all of the contribution rates for health insurance, unemployment insurance and the insurance for work accidents and occupational diseases (with a total rate of 17.2 percent).

Employers do pay contributions for persons employed in hazardous and physically strenuous jobs. For these workers, a 12-month contribution period counts as 14 to 18 months depending on their working conditions. Table 3.11 presents the additional contribution rates for different extended periods by types of insured persons. It should be noted that the additional contribution rates are disproportionately lower for persons insured by both pillars because the employer is also liable to pay the contributions to the second pillar.

Table 3.11
Additional employers' contribution rates for hazardous and physically strenuous jobs (%)

Extended period	14 months	15 months	16 months	18 months
I pillar only	4.86	7.84	11.28	17.58
Both I and II pillars	1.25	2.01	2.89	4.51

The minimum and maximum contribution bases are determined for each calendar year based on the national average salary for the first eight months of the previous year. The minimum contribution base is fixed at 0.35 times the national average salary, and the maximum contribution base is fixed at six times the national average salary.

Every year the Ministry of Finance issues a Decree on the Amounts of Contribution Bases for Paying Pension Insurance Contributions. According to data from the State Statistical Institute, the national average salary for the period from January to August of 2009 was 7,716 HRK. Therefore in 2010 the minimum contribution base was 2,700 HRK and the maximum contribution base was 46,296 HRK[30].

Self-employed persons pay the full contribution rate of 20 percent. Their minimum insurance base is 1.1 times the average wage of employed persons. If self-employed persons are insured in the second pillar, 5 percent of their contributions will be diverted into the second pillar.

Farmers pay a 20 percent contribution rate only if they are liable to pay income tax. In this case their minimum insurance base is 1.1 times the average wage of employed persons. If they are not liable to pay income tax, they should pay a 10 percent contribution rate. If they are insured in the second pillar, 5 percent of their contributions will be diverted into the second pillar.

The State budget covers the costs of the first-pillar pension benefits granted under favourable conditions (i.e. for military officers, policemen, judiciary officials, Parliamentary deputies, members of the Government and disabled war veterans). In addition, the State covers any deficits that may arise under

30 Official Gazette No 141/2009.

the first-pillar system, and guarantees the interest rate of the second-pillar system and of pension payments. The State also subsidizes the third-pillar voluntary contributions up to a certain limit.

3.4.3. Fund operations

Table 3.12 presents the revenue and expenditure of the Croatian Pension Insurance Institute from 2000 to 2009. As can be seen, the contributions are insufficient for financing the pension expenditure. While contributions covered 64 percent of the pension expenditure in 2000, contributions have covered a smaller portion of the expenditure after the introduction of the second-pillar system in 2002 due to the diversion of contributions to the second pillar. In 2009, contributions covered only 57 percent of the pension expenditure. The deficit is financed through the State budget.

In addition, the State is legally responsible for paying pensions to special categories of insured persons (i.e. military officers, policemen, judiciary officials and Parliamentary deputies). It is also responsible for the difference between one's pension and the minimum pension amount, and for part of farmers' pensions whose contributions are paid from the State budget. This increasing reliance on the State budget in financing pension expenditure puts the public finances under heavy strain.

Table 3.12
Revenue and expenditure of the Croatian Pension Insurance Institute, 2000–2010 (in million HRK)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
TOTAL REVENUE	20,195	22,967	23,658	24,675	26,074	27,274	28,965	30,516	33,575	35,090	35,499
Contributions	12,854	13,261	12,530	13,844	14,872	15,714	16,919	18,543	20,155	19,839	19,154
Employees	12,416	12,854	12,138	13,285							
Self-employed	322	315	313	506							
Farmers	116	92	79	53							
Transfers from the State budget	7,155	9,559	11,008	10,723	11,051	11,475	11,664	11,961	13,162	15,212	16,260
Other revenue (from property)	186	147	120	108	151	85	382	12	258	39	85
TOTAL EXPENDITURE	20,225	22,967	23,723	24,691	26,011	27,298	28,919	30,519	33,515	35,072	35,477
Current expenditure	20,223	22,957	23,708	24,664	25,990	27,275	28,873	30,475	33,458	35,031	35,445
Wages and other personnel expenditure	303	260	225	242	279	274	301	336	389	356	344
Expenditure on goods and services	62	76	111	104	99	98	104	110	124	118	107
Benefit expenditure	19,470	22,281	23,090	24,111	25,412	26,703	28,270	29,865	32,783	34,399	34,877
Other expenditure	388	340	282	207	200	200	198	164	162	158	117
Expenditure on non-financial assets	2	10	15	27	21	23	46	44	57	41	32
Contributions / Total expenditure	63.6%	57.7%	52.8%	56.1%	57.2%	57.6%	58.5%	60.8%	60.1%	56.6%	54.0%
Transfers from the State budget / Total revenue	35.4%	41.6%	46.5%	43.5%	42.4%	42.1%	40.3%	39.2%	39.2%	43.4%	45.8%

3.5. Social dialogue in the pension reform

3.5.1. Pension system governance

Pursuant to the regulations on governmental organizations, the Office for Social Partnership has been established. All laws and regulations should first be considered in the Office for Social Partnership. This ensures that the social partners are involved in the decision-making process.

The Management Board of the Croatian Pension Insurance Institute is comprised of 13 members appointed by the Government for four-year terms. Four of its members are nominated by the Ministry of Economy, Labour and Entrepreneurship, three members by the insured persons' associations, three members by the employers' associations, and three members by the pensioners' associations.

As described in the Statute of the Croatian Pension Insurance Institute as approved by the Croatian Parliament, the Management Board issues by-laws to the Pension Insurance Act and supervises their implementation. The Management Board discusses the financial report and the annual activity report of the Institute, and decides on the use, acquisition and disposal of the Institute's assets. It also provides guidance and recommendations on particular issues to the director and Board of Advisors of the Institute.

3.5.2. The process of pension reform

In the early stages of pension reform in 1999 and 2002, a process of public consultation was organized to inform the public and the social partners of the reform. A Working Group on Pension Reform was established in the Ministry of Labour and Social Affairs. The social partners, who were not involved in this group, were against the pension reform. At that time, cooperation between the social partners was rather weak in general, but the social partners nonetheless remained involved in the pension reform process.

Information on the pension reform was made available through newsletters, informational brochures, newspaper announcements and a public media campaign. The pension fund management companies were obliged to publish informational leaflets. The new Central Registry of Affiliates also joined the informational campaign, in particular by providing insured persons with information on the compulsory registration with compulsory pension funds.

Trade unions expressed their own opinion about the pension reform and the consequences of the introduction of the compulsory pension funds. Employers are generally not keen to establish closed-ended pensions funds, and this reluctance keeps these funds underdeveloped in Croatia. With the aim of involving the social partners in the process of pension reform, an agreement between the trade unions and the Government has been prepared with regards to the improvement of the pension insurance system.

3.5.3. The views of different generations

The younger generation in the Republic of Croatia tends to think that it is their responsibility to care for themselves in old age. They see the defined-benefit pension scheme as an outdated remnant of the past and prefer the system based on personal accounts, in which they can see the notional amount they will be eligible to receive in old age.

On the other hand, the older generation continues to prefer the old system. They tend to distrust the privately managed system and hope that intergenerational solidarity will ensure adequate and sustainable pensions in the future.

3.6. Conclusion

The Republic of Croatia has implemented a series of pension reforms since the 1990s. The 1999 pension reform redesigned the former state pension system by gradually increasing the retirement age, introducing a new pension formula based on one's full working period, and introducing the Swiss formula for pension indexation.

The reform in 2002 introduced the compulsorily funded pension system to diversify old-age income provisions. In order for the new pension system to be implemented effectively it also required governmental reorganization. The Tax Administration became responsible for the collection of social security contributions, and the Central Registry of Affiliates (REGOS) was established to disburse contributions and manage the individual saving accounts of the second-pillar pension system.

In October 2007, the Government decided to provide supplements (equivalent to between 4 and 27 percent of one's pension) for all pensioners exclusively in the first-pillar system. This created another imbalance between the pensions granted from both pillars and the pensions granted from the first pillar only.

The economic crisis of 2008-2009 affected both the public and private pension systems. Due to conservative investment policies, the losses to the compulsorily funded pensions were relatively limited. Nonetheless, the crisis has led to the recognition of the need for multiple funds and default investment options for different age groups.

In 2010, under the framework of the Economic Recovery Programme, the qualifying conditions for men and women became equalized. The retirement age of women for old-age and early retirement pensions will therefore be increased by five years over the next 20 years.

In view of the uncertainty and volatility of the financial markets and future demographic trends, many Croatians are aware that additional changes will be required to make the pension system financially and socially sustainable in the long run.

In December 2010 the Agreement on Social Partnership regarding the pension system was signed. Based on this agreement, an Inter-Organizational Working Group has been established that will discuss future amendments to the pension system with the participation of the social partners. The pension reform measures will be formulated in line with the Government's Economic Recovery Programme. Possible measures to be implemented include:

- reorganizing the pension system;
- revising the special benefits available for some categories of persons;
- reviewing the minimum pension;

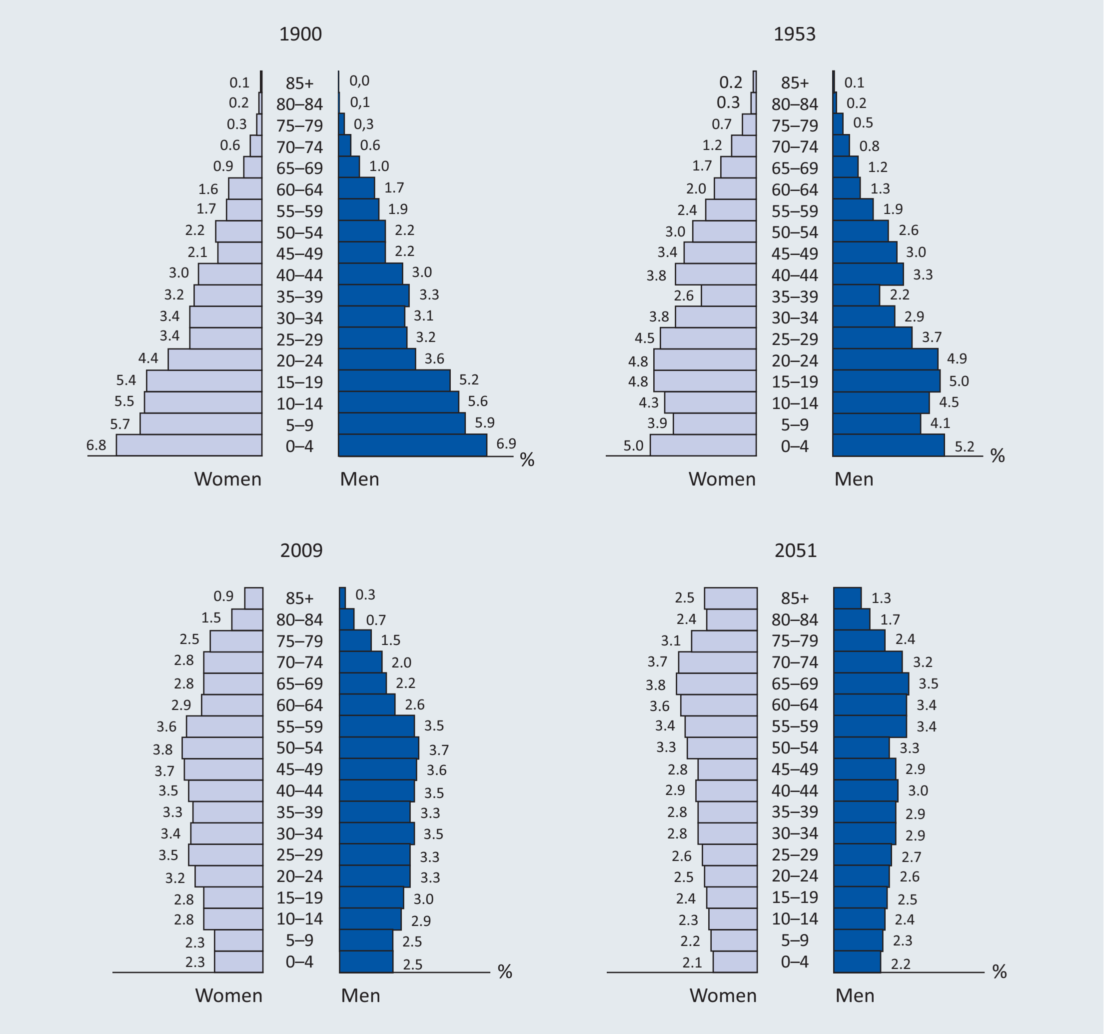
- increasing the contribution rate for the second pillar; and
- decreasing the management fees in the second pillar[31].

The pension reform in the Republic of Croatia is an unfinished process. In the future, agreement between the Government and the social partners will be especially important so that an informed decision can be reached on the reform package based on nationwide consensus.

31 In September 2011, the Croatian Government amended the legislations to allow those insured persons who voluntarily opted for the second-pillar system (i.e. those who were between 40 and 49 years of age at the date of implementation and chose to join this system) to return to the State pension system.

Annex

Figure 3.A.1
Population by age and sex, 1990, 1953, 2008 and 2051



Source: NSSI.

Table 3.A.1
The structure of insured persons by group and sex, 30 September 2010

Insurance basis	Average number of persons, 1 January – 30 September 2010			Number of persons on 30 September 2010		
	Men	Women	Total	Men	Women	Total
Employees of legal entities	662,502	575,002	1,237,504	665,148	579,185	1,244,333
Workers	65,886	72,999	138,885	65,599	72,264	137,863
Craftsmen	52,214	21,644	73,858	52,218	21,833	74,051
Farmers	17,719	13,451	31,170	18,177	13,628	31,805
Self-employed persons engaged in professional activity	12,823	10,662	23,485	12,644	10,010	22,654
Persons employed with international organizations abroad	294	17	311	292	17	309
Prolonged insurance	3,752	3,334	7,086	3,540	3,182	6,722
TOTAL	815,190	697,109	1,512,299	817,618	700,119	1,517,737

Table 3.A.2
The structure of insured persons by group and age, 30 September 2010

Insurance basis	Insured persons below 40	Insured persons between 40 and 49	Insured persons 50 and older	Total
Employees of legal entities	635,467 (51.0%)	341,878 (27.5%)	266,988 (21.5%)	1,244,333 (100%)
Workers	97,859 (71.0%)	26,846 (19.5%)	13,158 (9.5%)	137,863 (100%)
Craftsmen	29,232 (39.5%)	23,840 (32.2%)	20,979 (28.3%)	74,051 (100%)
Farmers	5,360 (16.9%)	8,415 (26.4%)	18,030 (56.7%)	31,805 (100%)
Self-employed persons engaged in professional activity	9,645 (42.6%)	5,779 (25.5%)	7,230 (31.9%)	22,654 (100%)
Persons employed with international organizations abroad	66 (21.3%)	77 (25.0%)	166 (53.7%)	309 (100%)
Prolonged insurance	1,717 (25.5%)	2,094 (31.2%)	2,911 (43.3%)	6,722 (100%)
Total	779,346 (51.4%)	408,929 (26.9%)	329,462 (21.7%)	1,517,737 (100%)

4. The Czech Republic

Jan Škorpík and Marek Suchomel

4.1. Overview

4.1.1. Historical overview

Pension reform in the Czech Republic has been in progress since the early 1990s. Following the end of the Communist era in 1989, economic reforms were initiated, one of which was a reform of the social system including the pension system.

The whole system has since undergone major changes aimed at removing the socialist social security concept and replacing it with a modern pension insurance system based on the market economy.

The main changes made to the Czech pension system in the 1990s are summarized as follows:

- In 1990, the pension and sickness insurance administration merged into a single organization.
- In 1992, equal treatment between employees and self-employed persons was introduced and preferential treatment for special groups was abolished.
- In 1993, social insurance contributions were reintroduced.
- In 1994, the Law on Supplementary Pension Insurance with State Support was promulgated.
- In 1995, the Pension Insurance Act was promulgated.
- In 1997, non-contributory periods were restricted and indexation rules were specified.
- In 2001, changes were made that provided disincentives for early retirement pensions and incentives for deferred retirement pensions.

In 2003, the following amendments were made:

- the retirement age was further increased;
- options for early retirement pensions and non-contributory periods granted for education were limited; and
- the Law on Supplementary Pension Insurance with State Support was amended to be consistent with EU regulation.

The recent amendment made to the Pension Insurance Act in 2008 can be seen as a further step in the pension reform process. The key parameters of the pension system benefits were adjusted gradually in order to ensure their long-term stability. In addition, the former criteria for total and partial disability were replaced by a three-degree invalidity classification, and a more flexible approach was provided to pensioners performing gainful activity who no longer have to work under temporary contracts but can sign (or continue in) contracts for an unlimited time.

In 2011, several major changes were implemented in the Czech pension system. This chapter mainly explains the Czech pension system as of 2010 and describes more recent changes in section 4.5.

4.1.2. Basic Legislation

The main piece of legislation covering the Czech pension system is the Pension Insurance Act (Law No. 155/1995 Coll.). It sets out the benefit provisions for State pensions, including the pension formula, the qualifying conditions and the statutory retirement age.

With regards to the financing of the State pension system, the Law on Social Security Contributions (Law No. 589/1992 Coll.) sets out the contribution rate, the ceilings on contributions and the population coverage.

The Czech Social Security Administration is responsible for the collection of contributions, the assessment of pension claims and the payment of benefits. The Czech Social Security Administration was established and is administered by the Law on the Administration of Social Security (Law No. 582/1991 Coll.).

A voluntary fully funded pension scheme has been established and is administered by the Law on Supplementary Pension Insurance with State Support (Law No. 42/1994 Coll.).

4.1.3. Coverage

The State pension scheme is a universal system that guarantees basic benefits to the whole population. While slight differences may be found between employees and self-employed persons, these are due to the different employment statuses and income patterns of the groups, not because of different legal treatment.

The Czech pension system has achieved extensive population coverage. Over 99 percent of the economically active population and the population over the retirement age are covered by the pension system. Yet despite this high degree of coverage, there are reported cases of non-compliance and contribution evasion in the forms of unregistered work (especially for second jobs) and underreported earnings.

The practice of contribution evasion is observed in the informal economy. The estimated size of the informal economy in the Czech Republic was approximately 20 percent of GDP in 2005 and was projected to grow slightly. The estimated amount of social insurance contribution evasion was not available.

The voluntary fully funded scheme that supplements the State pension pillar provides asset management services to almost 90 percent of the economically active population, but only a small number receive payments from their savings in the form of life annuities.

Table 4.1
The economically active population (in thousands)

	Total	Employees	Large establishments	Small establishments	Self-employed
1994	5,291	4,754	3,861	893	537
1995	5,221	4,646	3,712	934	575
1996	5,200	4,637	3,631	1,006	563
1997	5,133	4,547	3,563	894	586
1998	4,892	4,289	3,378	911	603
1999	4,727	4,117	3,234	883	610
2000	4,635	4,016	3,169	847	619
2001	4,694	4,066	3,177	889	628
2002	4,709	4,068	3,157	911	641
2003	4,666	4,020	3,084	936	646
2004	4,768	4,041	3,093	948	727
2005	4,825	4,085	3,127	958	740
2006	4,875	4,161	3,194	967	714
2007	4,968	4,254	3,267	987	714
2008	5,064	4,339	3,342	997	725

4.2. Benefits

4.2.1. Qualifying conditions

There are three types of qualifying conditions for old-age pensions. The first is the attainment of the statutory retirement age with at least a 35-year insurance period. The insurance period consists of both contributory and non-contributory periods. The second is the attainment of the statutory retirement age and completion of at least a 30-year contributory period. The third is the completion of at least a 20-year insured period and attaining an age at least five years older than the statutory retirement age.

From 2009 to 2019, the qualifying period for the first condition mentioned above will be gradually extended from 25 years to 35 years. A similar transitional measure is in progress for the other qualifying conditions. The second condition will not become effective until after 2014, when the insurance period required under the first condition exceeds 30 years. The third condition is also scheduled to be extended from 15 to 20 years between 2010 and 2014.

The required qualifying period for an invalidity pension is determined by the age at which the invalidity occurred, as shown in Table 4.2.

Table 4.2 The qualifying period for invalidity pensions	
Age	**Qualifying period**
19 or below	less than 1 year
20 to 22	1 year
22 to 24	2 years
24 to 26	3 years
26 to 28	4 years
28 to 38	5 years for the last 10 years prior to the occurrence of the invalidity
39 or above	10 years for the last 20 years prior to the occurrence of the invalidity

Entitlements to survivors' pensions are dependent on the pension rights of the deceased. If the deceased person was receiving or was entitled to a pension, the surviving spouse is entitled to a widows' or widowers' pension for a minimum of one year. After one year, it can be extended permanently if any of the following conditions are fulfilled:

- The survivor has reached the retirement age or is within four years of the retirement age for men;
- The survivor suffers from a third degree invalidity;
- The survivor is caring for dependent children (with no age limit for handicapped children);
- The survivor is caring for their own parents or the parents of the deceased spouse (living in the same household) who require constant attendance.

A surviving child is entitled to an orphans' pension under the same conditions. The entitlement ceases when the child enters the labour market or reaches the age of 26.

4.2.2. Retirement age

The Pension Insurance Act (Law No 155/1995 Coll.) sets out the statutory retirement ages. Under the previous legislation, the retirement age was 60 years for men and 53–57 years for women depending on their number of children.

In 1996, the statutory retirement age was increased. It is scheduled to reach 65 years for men and women with one or no children. This will be achieved by increasing the retirement age by two months per year for men and four months per year for women. As under the previous legislation, the retirement age for women with more than two children can be lowered to 62–64 years depending on their number of children. Table 4.3 illustrates the statutory retirement age by sex, year of birth and number of children[1].

1 Further changes in the schedule of the statutory retirement age were introduced in 2011. See section 4.5.1.

Table 4.3
Statutory retirement age by sex, year of birth and number of children

Year of birth	Men	Women (number of children raised)					
		0	1	2	3	4	5 or more
before 1936	60	57	56	55	54	54	53
1936	60 + 2m	57	56	55	54	54	53
1937	60 + 4m	57	56	55	54	54	53
1938	60 + 6m	57	56	55	54	54	53
1939	60 + 8m	57 + 4m	56	55	54	54	53
1940	60 + 10m	57 + 8m	56 + 4m	55	54	54	53
1941	61	58	56 + 8m	55 + 4m	54	54	53
1942	61 + 2m	58 + 4m	57	55 + 8m	54 + 4m	54 + 4m	53
1943	61 + 4m	58 + 8m	57 + 4m	56	54 + 8m	54 + 8m	53 + 4m
1944	61 + 6m	59	57 + 8m	56 + 4m	55	55	53 + 8m
1945	61 + 8m	59 + 4m	58	56 + 8m	55 + 4m	55 + 4m	54
1946	61 + 10m	59 + 8m	58 + 4m	57	55 + 8m	55 + 8m	54 + 4m
1947	62	60	58 + 8m	57 + 4m	56	56	54 + 8m
1948	62 + 2m	60 + 4m	59	57 + 8m	56 + 4m	56 + 4m	55
1949	62 + 4m	60 + 8m	59 + 4m	58	56 + 8m	56 + 8m	55 + 4m
1950	62 + 6m	61	59 + 8m	58 + 4m	57	57	55 + 8m
1951	62 + 8m	61 + 4m	60	58 + 8m	57 + 4m	57 + 4m	56
1952	62 + 10m	61 + 8m	60 + 4m	59	57 + 8m	57 + 8m	56 + 4m
1953	63	62	60 + 8m	59 + 4m	58	58	56 + 8m
1954	63 + 2m	62 + 4m	61	59 + 8m	58 + 4m	58 + 4m	57
1955	63 + 4m	62 + 8m	61 + 4m	60	58 + 8m	58 + 8m	57 + 4m
1956	63 + 6m	63	61 + 8m	60 + 4m	59	59	57 + 8m
1957	63 + 8m	63 + 4m	62	60 + 8m	59 + 4m	59 + 4m	58
1958	63 + 10m	63 + 8m	62 + 4m	61	59 + 8m	59 + 8m	58 + 4m
1959	64	64	62 + 8m	61 + 4m	60	60	58 + 8m
1960	64 + 2m	64 + 2m	63	61 + 8m	60 + 4m	60 + 4m	59
1961	64 + 4m	64 + 4m	63 + 4m	62	60 + 8m	60 + 8m	59 + 4m
1962	64 + 6m	64 + 6m	63 + 8m	62 + 4m	61	61	59 + 8m
1963	64 + 8m	64 + 8m	64	62 + 8m	61 + 4m	61 + 4m	60
1964	64 + 10m	64 + 10m	64 + 4m	63	61 + 8m	61 + 8m	60 + 4m
1965	65	65	64 + 8m	63 + 4m	62	62	60 + 8m
1966	65	65	65	63 + 8m	62 + 4m	62	61
1967	65	65	65	64	62 + 8m	62	61 + 4m
1968	65	65	65	64	63	62	61 + 8m
after 1968	65	65	65	64	63	62	62

4.2.3. Pension benefit formula

For old-age and invalidity pensions, the pension formula consists of a basic amount and an earnings-related amount.

The basic amount is a flat rate benefit of 2,170 CZK in 2010 prices. This amount is adjusted on 1 January every year.

The earnings-related amount reflects the past earnings of each individual and is calculated as a product of (i) a 1.5 percent accrual rate, (ii) the personal assessment base, and (iii) the individual's number of insured years.

The personal assessment base is calculated as follows. First, past monthly earnings are multiplied by a set of coefficients that revaluate them in terms of current earnings. Then, the average revaluated earnings are calculated as an average of revaluated monthly earnings over the reference period. Non-contributory periods are excluded for the calculation of the personal assessment base. According to the current legislation, the reference period is the 30 years before retirement, but income earned prior to 1986 is not taken into consideration in the absence of full salary records. Therefore the reference period in effect was 24 years in 2010 and will be 30 years in 2016.

Next, the personal assessment base is determined by applying two reduction thresholds to the average revaluated earnings. In 2010, these thresholds were 10,500 CZK and 27,000 CZK. These amounts are adjusted on 1 January every year. The personal assessment base is the sum of (i) 100 percent of the average revaluated earnings below the first threshold, (ii) 30 percent of the average revaluated earnings between the two thresholds, and (iii) 10 percent of the average revaluated earnings above the second threshold.

Survivors' pensions are derived from either old-age pensions or invalidity pensions. In standard cases, a widow(er)s' pension consists of the full basic amount and 50 percent of the earnings-related amount of the pension that the deceased spouse was receiving or was entitled to. An orphans' pension is the sum of the full basic amount and 40 percent of the earnings-related amount of the pension of the deceased parent. Special rules apply if the recipient of the survivors' pension is already receiving their own old-age or invalidity pension, in which case the recipient is paid the higher of the two pensions in full plus half of the amount of the lower pension.

4.2.4. Early and deferred retirement pensions

All persons are given the possibility to leave the labour market before reaching the statutory retirement age, but at the cost of a substantial reduction in their pension amount.

Early retirement pensions are allowed for those who retire up to three years prior to reaching the statutory retirement age or who are over 60 years of age. Their pension amount is reduced by 0.9 percent for every 90 days of early retirement for the first 720 days and by 1.5 percent for every 90 days of early retirement in excess of 720 days.

On the other hand, a pension can be deferred to any age higher than the statutory retirement age. In these cases, the pension amount is increased by 1.5 percent for every 90 days of deferment from the statutory retirement age.

Special provisions have been laid down in case a person is receiving a pension and concurrently conducting gainful activity. In one option, the pensioner agrees to receive half of their pension and, in return, will have the pension increased by 1.5 per cent for every 180 days of employment. The other option is for the pensioner to continue to draw their full pension, although in this case the pension will only increase at a rate of 0.4 per cent per 360 days of employment. Both options result in a slight increase in the percentage amount of the pension established by actuarial principles.

4.2.5. Indexation of pensions

All pensions are indexed on an annual basis. The Pension Insurance Act (Law No 155/1995 Coll.) stipulates that pensions are to be indexed to reflect price increase and a third of the real wage increase. However, the actual increase in pensions is accomplished through governmental decree, which can prescribe a higher rate of indexation than the statutory minimum.

The basic amount and the earnings-related amount are indexed separately, and the resulting total increase for the average pension must achieve the requisite rate of increase. Table 4.4 presents the rates of indexation of the average pension in recent years.

Indexation is undertaken on 1 January every year. For the purpose of indexation, the price increase is measured from August two years earlier to July of the preceding year, while wage growth is measured annually over the two preceding calendar years.

Table 4.4
Rates of pension indexation, 1996–2011 (%)

Year	Rate of indexation of the average pension
1997	9.0
1998	6.3
1999	4.7
2000	5.5
2001	7.4
2002	0.0
2003	3.2
2004	2.1
2005	5.7
2006	5.0
2007	6.2
2008	4.0
2009	3.5
2010	0.0
2011	3.7

In periods of high inflation when the cumulative inflation over the previous reference period exceeds 5 percent, a special indexation is undertaken to safeguard the living standards of pensioners. Conversely, if the sum of the price increase and one third of the real wage increase is lower than 2 percent, indexation is not undertaken in that year but postponed to the following year (taking into account the cumulative rates since the previous indexation).

4.2.6. The supplementary pension scheme

The voluntary fully funded pension scheme (supplementary pension insurance with State contributions) provides additional pensions. The scheme is characterized by high levels of participation and low contribution levels. Almost 95 percent of the accumulated account balances are withdrawn in lump sums rather than in the form of life annuities.

Ten pension funds manage the individual accounts of 4.4 million participants, who provide an average contribution of 430 CZK per month to the supplementary pension scheme. Since 1994, the entire system has accumulated assets worth approximately 215 billion CZK, or 5.4 percent of GDP.

Due to an extremely conservative investment policy pursuant to strict regulation, a positive zero yield guarantee, and customer demands, the funds were left virtually unharmed by the financial crisis of 2008. Nevertheless, in the years before the crisis revenues were very low.

4.2.7. Adequacy of benefits

Tables 4.5 and 4.6 present the number of pensioners and the average pension by type from 2005 to 2010[2]. Currently, the Czech pension system provides approximately 3.5 million pensions to 2.82 million pensioners. There are 2.26 million old-age pensioners representing nearly 95 percent of the population aged 60 years or above. Considering the current statutory retirement age, these tables suggest that almost all elderly persons are covered by the system and receive old-age pensions.

Table 4.5
Number of pensioners by type, 2005–2010

Year	Old-age		Invalidity			Widow(er)s'	Orphans'	Others	Total
	Full	Early	III. degree	II. degree	I. degree				
2005	1,656,890	285,189	385,149	184,906	—	60,632	52,543	19,791	2,645,100
2006	1,667,628	309,065	385,764	194,291	—	57,411	50,968	18,657	2,683,784
2007	1,677,398	333,883	383,913	202,773	—	54,195	49,415	17,584	2,719,161
2008	1,690,727	358,803	377,723	211,022	—	51,507	47,754	16,475	2,754,011
2009	1,697,687	395,207	370,154	215,790	—	49,281	46,798	15,474	2,790,391
2010	1,817,312	428,395	244,048	54,973	167,308	46,711	46,021	14,325	2,819,093

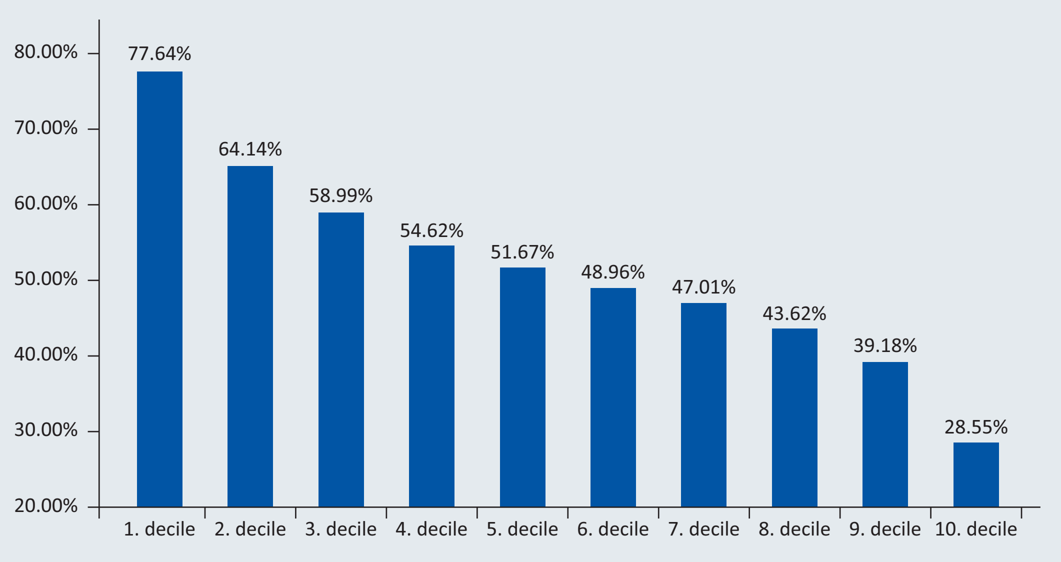
2 Prior to 2010, third degree invalidity corresponds to total invalidity and second degree invalidity corresponds to partial invalidity. In 2010 the invalidity pensions were transformed into old-age pensions at 65 years of age. This explains the sizable increase in the number of old-age pensioners between 2009 and 2010 and the drop in the number of invalidity pensions in the same year.

Table 4.6
Average monthly pensions by type, 2005–2010 (in CZK)

Year	Old-age		Invalidity			Widow(er)s'	Orphans'	Others	Total
	Full	Early	III. degree	II. degree	I. degree				
2005	7,953	6,895	7,537	4,584	—	5,143	3,780	3,775	7,238
2006	8,437	7,234	7,962	4,847	—	5,385	3,998	3,859	7,653
2007	9,040	7,697	8,496	5,161	—	5,705	4,278	3,994	8,176
2008	9,963	8,533	9,337	5,893	—	6,407	4,989	4,545	9,039
2009	10,412	8,899	9,681	6,076	—	6,567	5,145	4,511	9,413
2010	10,485	8,985	9,656	6,671	6,140	6,575	5,194	4,407	9,506

Figure 4.1 presents the net replacement rates (defined as the percentage of the average old-age pension in the average net wage) by income deciles in 2010. The average net replacement rate is 53 percent. Despite high pensioner coverage and reasonably high pension levels in the Czech Republic, pension expenditure stood at 9.3 percent of GDP. The reform measures introduced in the 1990s alongside the relatively favourable demographic situation in the Czech Republic enable the State to keep the pension-to-GDP ratio at relatively low levels. This situation is expected to change in the coming years if reforms are not undertaken.

Figure 4.1
Net replacement rates by income deciles, 2010



As seen in Figure 4.1, there are significant differences in the net replacement rates by income level due to the redistributive elements of the pension benefit formula. The replacement rate for persons in the top income decile is lower than 30 percent of their previous income[3]. Solidarity, which is a core principle of the public pension system, proves to be a well-suited policy tool to combat old-age poverty and ensure adequate replacement rates to persons with low incomes. Such policies help explain why the Czech Republic has one of the world's lowest poverty levels for persons in old age.

The voluntary funded pension is expected to complement the State pension, and therefore the role of the privately funded pillar is rather limited. It is estimated that approximately 94 percent of all pension income comes from the State pension.

4.3. Financing and expenditure

4.3.1. Contributions

The State pension system is financed on a pay-as-you-go basis. Therefore, the expenditure of benefits in a given year is met by the revenue from the contributions collected in that same year.

The legal provisions governing the financing of the State pension system are provided for under the Act on Social Security Contributions and State Employment Policy Contributions (No. 589/1992 Coll.), which came into effect on 1 January 1993.

By reintroducing social security contributions, the Government aimed to increase the link between contributions and benefits. Social security contributions and contributions for State employment policies, as well as penalties, surcharges and fines imposed under the law, constitute the revenue of the State budget.

The district Social Security Administration authorities collect social security contributions (for pension and sickness insurance), and contributions for State employment policies.

Contributions are paid by employees, employers and the self-employed. Table 4.7 presents the contribution rates for pension insurance by category from 1993 to the present.

Table 4.7
Contribution rates for pension insurance by category, 1993–2011 (%)

	1993–1995	1996–2003	2004–2011
Employers	20.4	19.5	21.5
Employees	6.8	6.5	6.5
Self-employed	27.2	26.0	28.0

3 Recently, the Constitutional Court ruled on this issue; see Section 5.1.

Table 4.8 presents the average assessment base for contributions for employees and the self-employed. For employees, the assessment base for contributions is calculated based on the employee's creditable income prior to taxation. The average assessment base of employees has been consistently lower than the national average wage. Recently this discrepancy has widened.

Table 4.8
Average assessment base for contributions, 1994–2008

Year	Average assessment base for contributions (CZK/month)				Ratio (2) / (1) (%)	Average wage in national economy (CZK/month) (3)	Ratio (1) / (3) (%)
	Employees (1)	Employees in large establishments	Employees in small establishments	Self-employed (2)			
1994	5,983	6,217	5,035	2,977	49.7	6,896	86.8
1995	7,409	7,709	6,217	3,350	45.2	8,172	90.7
1996	8,698	9,142	7,099	3,551	40.8	9,676	89.9
1997	9,672	10,154	7,978	3,426	35.4	10,696	90.4
1998	10,944	11,326	9,525	3,067	28.0	11,693	93.6
1999	11,805	12,270	10,104	3,461	29.3	12,655	93.3
2000	12,625	13,023	11,138	3,557	28.2	13,490	93.6
2001	13,472	13,992	11,616	3,735	27.7	14,640	92.0
2002	14,385	15,059	12,051	4,062	28.2	15,711	91.6
2003	15,334	16,178	12,553	4,300	28.0	16,769	91.4
2004	16,300	17,213	13,321	5,028	30.8	17,882	91.2
2005	17,081	18,045	13,936	5,914	34.6	18,809	90.8
2006	18,013	19,013	14,714	6,580	36.5	20,050	89.8
2007	19,274	20,373	15,636	7,149	37.1	21,527	89.5
2008	20,062	21,116	16,527	7,777	38.8	23,280	86.2

Self-employed persons can choose their own assessment base on the condition that it must not be less than 50 percent[4] of their self-employed income after the deduction of necessary business expenses, or less than the prescribed minimum, which is 25 percent of the national average wage.

Until 2007 the maximum annual assessment base for the self-employed was fixed at CZK 486,000 per year. Starting on 1 January 2008, the maximum annual assessment base was set at four times the national average wage. In 2010 and 2011, the maximum assessment base has been increased to six times the national average wage.

4 Until 2003 it was 35 percent. It subsequently increased to 40 percent in 2004, 45 percent in 2005 and 50 percent in 2006 and thereafter.

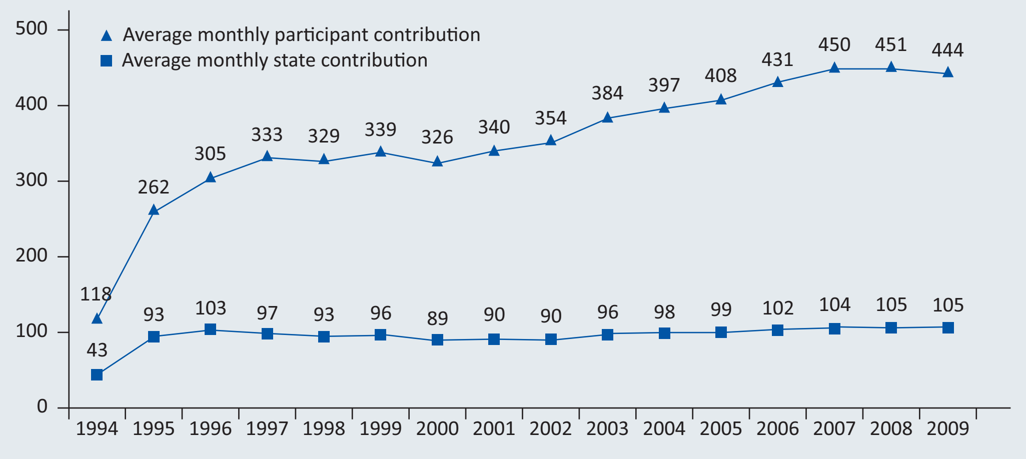
As seen in Table 4.8, the average assessment base of the self-employed stood at 49.7 percent of that of employees in 1994. Thereafter this ratio decreased quickly to around 28 percent in 1998–2003. As a result of the public finance reform in 2004, the average assessment base of the self-employed gradually increased, reaching 38.8 percent of the average assessment base of employees by 2008. Changes made to contribution amounts are supposed to, *inter alia*, also raise benefit levels so that self-employed persons are less at risk of poverty in old age.

4.3.2. State support of the supplementary pension scheme

The State provides incentives for individuals to join the State-subsidized supplementary pension insurance scheme, operated by private pension funds. They are also given incentives to join the life insurance schemes operated by private insurance companies.

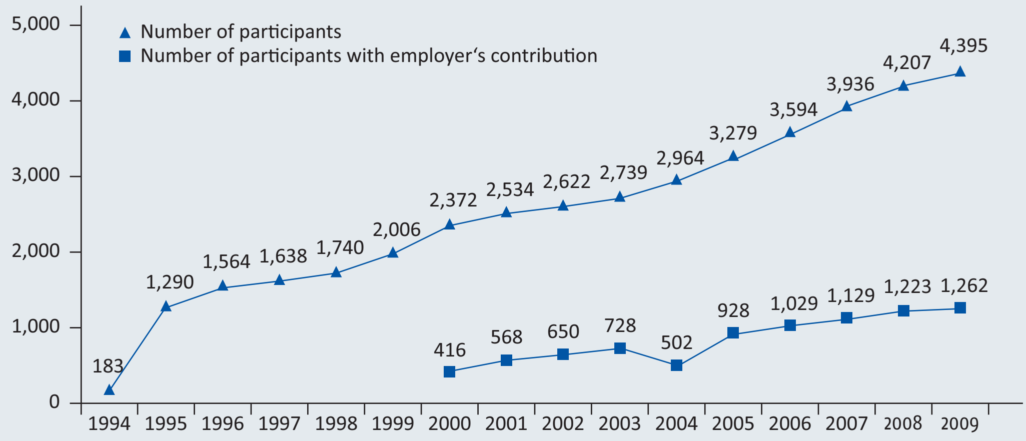
Any individual over 18 years of age with permanent residence in the territory of the Czech Republic or domiciled in the territory of another Member State may become a member of this scheme, provided that they are insured by either the State pension insurance scheme or the health insurance scheme in the Czech Republic. One member can conclude a contract with only one pension fund. Under the contract, a member will pay a monthly contribution of at least CZK 100 into the fund.

Figure 4.2
Average monthly contributions to the supplementary pension scheme, 1994–2009



The State supports the supplementary pension insurance through State subsidies and an income tax allowance. The amount of the State subsidy ranges from CZK 50 per month (if the member pays contributions of at least CZK 100) to CZK 150 (if the member pays contributions of at least CZK 500) and exhibits a pro-rated rate between these two extremes. Contributions may be paid by employers on behalf of their participating employees, subject to the participant's prior consent. Employers can also pay contributions based on collective bargaining agreements. Since 2000, tax allowances have been introduced for both participants and employers. Participants can deduct contributions that are between CZK 4,000 and CZK 12,000 from their tax base annually. Apart from tax allowances, the supplementary pension insurance contributions paid by employers are not included in the assessment bases of the State pension insurance scheme.

Figure 4.3
Members of the supplementary pension scheme, 1994–2009



4.3.3. State budget

Social security contributions and contributions to the State employment policies constitute about 35 percent of all State revenue and cover approximately 70 percent of all social funds paid out from the State budget.

On 1 January 1996, a separate account for pension insurance was created within the State treasury. All financial operations are carried out through this account[5]. The funds collected in the account can only be used for pension benefit payments and State budget transfers to cover deficits arising from the difference between the pension system's revenue and expenditure. Such use was possible only with approval by the Chamber of Deputies of the Czech Parliament.

The special pension insurance account became a special reform reserve account within the State treasury on 1 March 2008. The account receives revenue from pension insurance contributions and related penalties and fines, and it disburses pension insurance benefits including the expenses related to the collection of contributions and the payment of pension benefits. Every year the Ministry of Finance transfers the difference between the pension system's revenue and expenditure from the State budget into this account.

Dividends on State financial assets, administered by the Ministry of Labour and Social Affairs, have been credited to this account since 2004. The Ministry of Finance can invest in this account in the form of Government bonds, bonds of the Czech National Bank, bonds issued by OECD Member States, bonds of the central banks of these States, and bonds of the European Central Bank. Any revenues earned

5 The calculation method for pension insurance revenue and expenditure is regulated by the Ministry of Finance (Law No. 218/2000 Coll., on the Budgetary Rules). Administrative expenses in the budgetary chapter of the Ministry of Labour and Social Affairs are calculated on the basis of the administrative expenses of the Czech Social Security Administration, as provided for by the Regulation.

through investment constitute the revenue of this account. Reports on the management of funds in this account form part of the Final State Account[6]. It is envisaged that the funds in the special pension reform account, totalling 18 billion CZK in 2009, will be used for pension reforms pursuant to the resolution of the Chamber of Deputies at the suggestion of the Government.

Table 4.9
Revenue and expenditure of the Czech Social Security Administration, 1996–2009 (in billion CZK)

Year	Revenue	Expenditure			Difference between revenue and expenditure	Special Account
		Total	Pension expenditure	Administrative expenditure		
1996	133.93	129.55	126.80	2.75	4.38	4.38
1997	146.33	152.85	150.23	2.62	–6.52	4.38
1998	156.34	168.83	166.12	2.71	–12.49	4.38
1999	161.83	181.27	177.85	3.42	–19.44	4.38
2000	170.46	190.11	186.85	3.26	–19.65	4.38
2001	185.95	204.45	201.11	3.34	–18.50	—
2002	198.42	217.34	213.65	3.69	–18.92	—
2003	209.62	229.53	225.83	3.70	–19.91	—
2004	243.28	234.95	230.90	4.05	8.33	8.33
2005	258.33	251.77	247.39	4.38	6.56	14.89
2006	276.91	277.78	272.91	4.87	–0.87	5.58
2007	304.93	295.03	289.85	5.18	9.90	15.47
2008	320.03	317.43	312.53	4.90	2.60	18.07
2009	310.31	347.14	339.79	7.35	–36.83	18.07

Table 4.9 presents the revenue and expenditure of the Czech Social Security Administration (CSSA) from 1996 to 2009. During the period from 1997 to 2003, the CSSA operated with a deficit that contributed to the aggregate deficit of the State budget. In 2001 and 2006, the special fund was used to cover part of the deficit in each year.

In 2004, 2005, 2007 and 2008, surpluses within the pension system were transferred to the special pension insurance account. In 2006, CZK 9.31 billion of these funds were used for pension benefits under Act No. 584/2006 Coll. In 2009, due to the economic crisis, the revenue of the pension system decreased by CZK 9.72 billion while expenditures increased by 29.71 billion. As a consequence, the pension system recorded its largest deficit since the reintroduction of social insurance contributions totalling CZK 36.83 billion.

6 The Final State Account summarizes the actual income and the actual expenditure of the State budget in the past year.

4.3.4. Future projections

4.3.4.1. Demographic projection

As in other European countries, the demographic development of the Czech Republic is characterized by a low fertility rate and a continuous increase in the life expectancy. These trends are expected to continue well into the future.

Table 4.10
Total fertility rate and life expectancy, 2008–2065

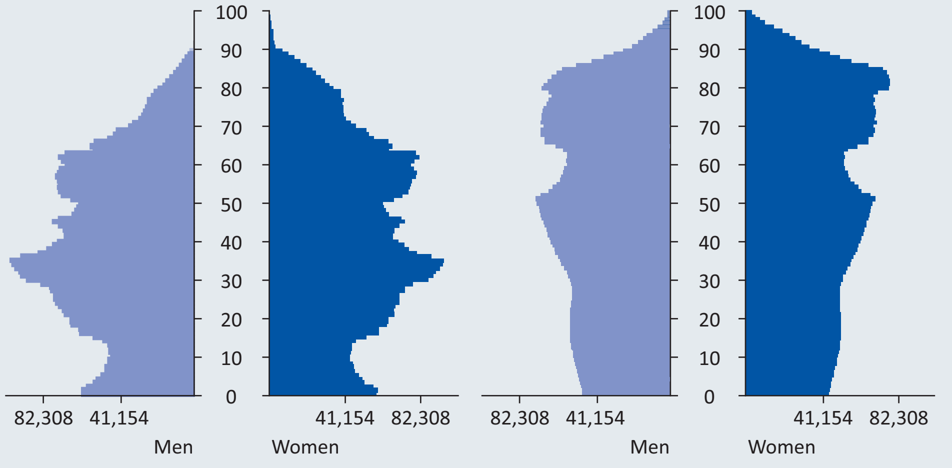
Year	Total fertility rate	Life expectancy (in years)	
		Men	Women
2010	1.51	74.3	80.5
2020	1.68	76.8	82.5
2030	1.70	78.9	84.2
2040	1.71	80.6	85.5
2050	1.73	82.2	86.8
2060	1.74	83.6	87.9
2070	1.75	84.9	88.9

Source: Charles University in Prague, Faculty of Science. 2010. "Prognosis of population development in the Czech Republic in 2008–2070".

As seen in Table 4.10, the total fertility rate is expected to increase slightly from 1.51 to 1.75 by 2070, but this is still under the replacement level of 2.05. On the other hand, the life expectancies for both sexes are assumed to increase by one year every five years on average. The combined effects of these factors would lead to a significant change in the country's demographic structure, as illustrated in Figure 4.4. It is observed that the two baby boomer generations born in the post-war period and in the 1970s are not expected to be replaced by an adequate number of newborns.

The demographic projection also shows the rapid ageing of the Czech population. The percentage of persons aged 65 or more in the total population is projected to increase from 15 percent to more than 32 percent in 2065. In particular, the very old population (those aged 85 or more) is estimated to increase by more than 7.5 times by 2065. On the contrary, the working age population (aged between 15 and 64 years) is expected to shrink from the current 70.6 percent to 54.6 percent by 2065. As a consequence, the average age of the population is expected to increase by about nine years, from the current 40.5 years to 49 years, by 2065.

Figure 4.4
Population pyramid, 2010 and 2060



4.3.4.2. Future projections of the pension system

In view of the future demographic transition, the Ministry of Labour and Social Affairs carried out projections of the pension system in 2010 for the period from 2010 to 2100. It has been assumed that pensions will be indexed in line with the minimum rate provided by the law throughout the projection period (i.e. 100 percent of the increase rate in prices and one-third of the increase rate in real wages). Figures 4.5 and 4.6 present these projection results.

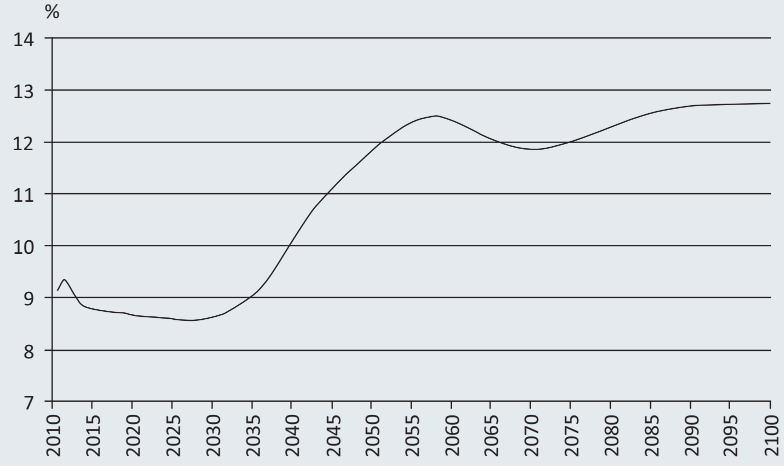
As seen in Figure 4.5, pension expenditure is estimated to increase rapidly starting in 2035 until stabilizing at about 13 percent of GDP in 2055. Consequently, as shown in Figure 4.6, the system is expected to produce a growing, long-lasting deficit that may reach about 4.5 percent of GDP. Applying higher rates of pension indexation than the minimum statutory rate would result in a significant growth in total expenditure.

The expected ageing of the Czech population will place increasing pressure on the pension system. In the projection period, the two baby boomer generations are expected to retire. The transition of these persons from economically active to retired will lead to a significant rise in pension expenditure, which should be observed between 2030 and 2050[7].

Changes to the pension system should therefore aim to eliminate the potential future deficits. These can include accumulating reserves for the anticipated surge in the pension expenditure associated with the retirement of sizable generations born in the 1970s.

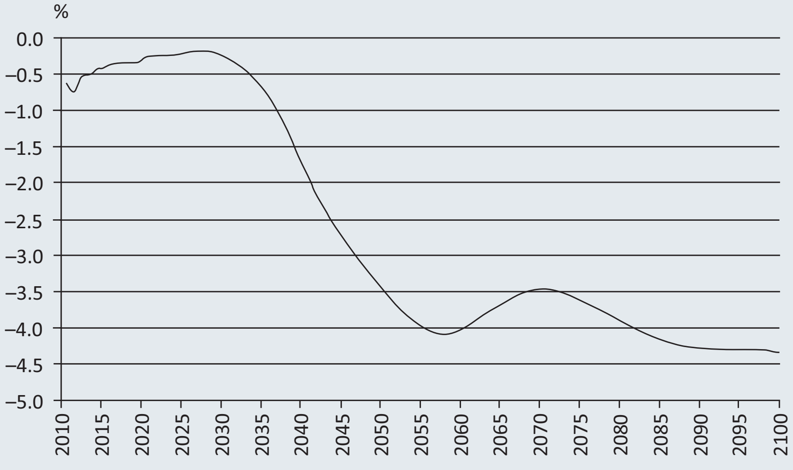
7 It should be noted that the projected pension expenditure relies heavily on the key parameters of the current pension system, in particular the retirement age.

Figure 4.5
Projected expenditure of the pension system, 2010–2100 (percentage of GDP)



Note: The pensions are assumed to be indexed in line with the minimum rate as provided by current law.

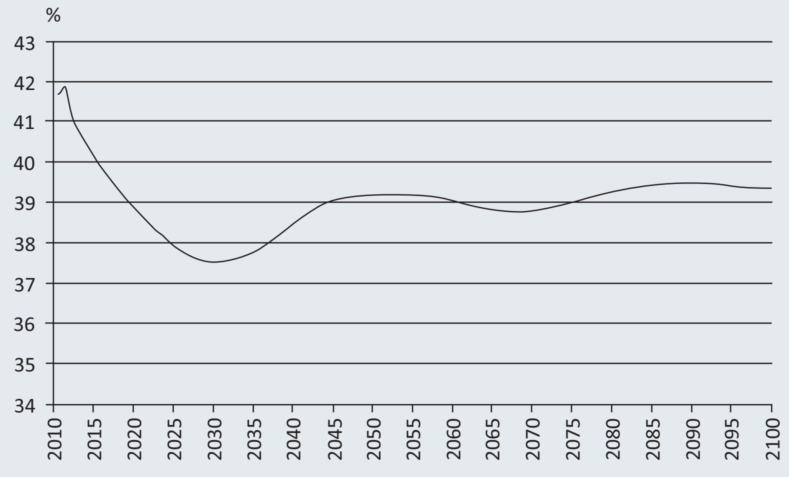
Figure 4.6
Projected balance of the pension system, 2010–2100 (percentage of GDP)



Note: The pensions are assumed to be indexed in line with the minimum rate as provided by current law.

Figure 4.7 presents the projected average old-age pension as a percentage of the average gross wage (referred to as the system replacement ratio) for the period 2010-2100. The system replacement ratio is projected to decline in the next 20 years due to the increasing share of early retirement pensions (which are reduced pensions), but then increase from 2030 until reaching a stable level at 39 percent around 2045.

Figure 4.7
The projected average pension as a percentage of the average wage, 2010–2100



Note: The pensions are assumed to be indexed in line with the minimum rate as provided by current law.

4.4. Social dialogue in the pension reform

Social dialogue is an important part of the political process in the Czech Republic in the areas in which public and private interests meet, such as pension reform. The Council for Economic and Social Agreement in the Czech Republic was established in 1990 and consists of representatives from the Government, the trade unions and employers' organizations. The Council for Economic and Social Agreement serves as a social dialogue forum for various day-to-day questions that arise.

The pension reform in the Czech Republic is perceived as a continuous process involving virtually all parties. For this reason there is regular discussion on pension issues amongst the social partners. When the pension reform process began in the early 1990s, a Working Group for Pension Reform was created under the auspices of the Council and has been active ever since. The Working Group for Pension Reform is a consultative body on pension reform. It is the first group informed of any policy changes proposed by the Government, and can deliberate and improve upon them. The Working Group provides an opportunity for experts to discuss the issue of pension reform detached from public opinion, the media and other pressure groups. In most cases a consensus or compromise is reached within the Council.

The social partners are also invited to the meetings of the Committee for Social Policy and those of the relevant Subcommittees in both chambers of the Czech Parliament. During these meetings, the social partners can express their views and concerns regarding the proposed legislation, raise objections and suggest amendments. The legislators will then submit the proposed bill to Parliament based on the discussions of the Committee for Social Policy, and the bill is subsequently subject to the standard legislative process (or returned to the legislators for substantive changes).

Other public and private institutions – such as universities, political parties, pension funds and non-profit organizations – also undertake research and make recommendations to the Government and other key stakeholders. These findings and recommendations are taken into consideration in the preparation of the pension reform.

In January 2010 an *ad hoc* commission – the Expert Advisory Forum (Poradní expertní sbor) – was established by the Minister of Finance and the Minister of Labour and Social Affairs to study and report on the possible options for pension reform. It consisted of representatives from both ministries, representatives of the trade unions and employers, and experts from the private sector (i.e. from the pension funds, insurance companies and financial services). In June 2010 the Expert Advisory Forum published its final report that proposed recommendations in the form of two options (See Section 5.2). After the general election in June 2010, the newly formed Government announced that it would prepare the further reform in line with the findings of the Expert Advisory Forum.

There have not been major protests by the trade unions against the pension reform process since a strike against the Government's pension policy in 1994. This is likely because the trade unions can formally present their opinions to the Government and reasonably influence future pension policies, and because of the moderate approach taken by the unions on pension issues.

4.5. Current issues

4.5.1. Constitutional Court ruling

On 16 May 2010 the Czech Constitutional Court ruled that the current pension formula for high-income persons is unconstitutional. The ruling refers to the pension level (gross replacement rate) for persons whose income is at the maximum assessment base (four times the average wage[8]). The pension formula produces a pension equal to 19 percent of these persons' previous salaries, as opposed to 44 percent on average.

The Constitutional Court found the replacement level for high-income persons to be inadequate and abolished the Article of the Pension Insurance Act that would have determined the personal assessment base for pension calculation beginning on 30 September 2011. Since the calculation of the personal assessment base will be impossible, there will be no basis for calculating pensions and, therefore, all pensions granted after 29 September 2011 will be fixed at the minimum pension because this is the only pension value independent on the personal assessment base. It should be noted that the minimum pension is below the subsistence minimum level.

In response to this, the Ministry of Labour and Social Affairs has developed a proposed measure based on the following principles:

1) The pensions of the lowest income group should not be affected by the reform.
2) The pension system financing should not be negatively affected by the reform (at least in the medium- to long-term). The changes should therefore be made based on both the maximum assessment base for contributions (the contribution ceiling) and the pension formula.

8 As mentioned earlier, this maximum rate was increased to six times the average wage in 2010 and 2011.

An alternative pension formula should therefore be developed which reflects the contributory principle. To that end, a new formula was created that was derived from the existing one with different key parameters. The personal assessment base will be determined by applying only one reduction threshold to the average revaluated earnings. In addition, the threshold will be set at 44 per cent of the average wage in the economy. Therefore, the personal assessment base is calculated as the sum of (i) 100 percent of the average revaluated earnings below the reduction threshold and (ii) 26 percent of the average revaluated earnings above the threshold up to a maximum of four times the average wage.

Figures 4.8 and 4.9 show the impact of the adopted measure on different income groups. As can be seen from Figure 4.8, the gross replacement rate for the first decile is expected to maintain its current levels while the gross replacement rate for the highest income decile is expected to increase from 29 percent to 33 percent. The increase in the pensions of the highest income persons is compensated by a decrease in the pensions of all other income groups by 2 to 6 percent. As seen in Figure 4.9, the break-even point is at 1.5 times the average wage.

Figure 4.8
Gross replacement rates by income deciles

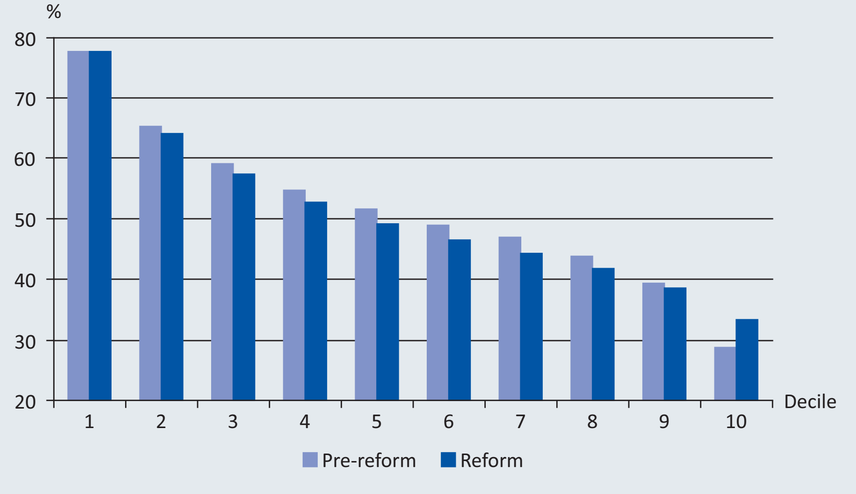
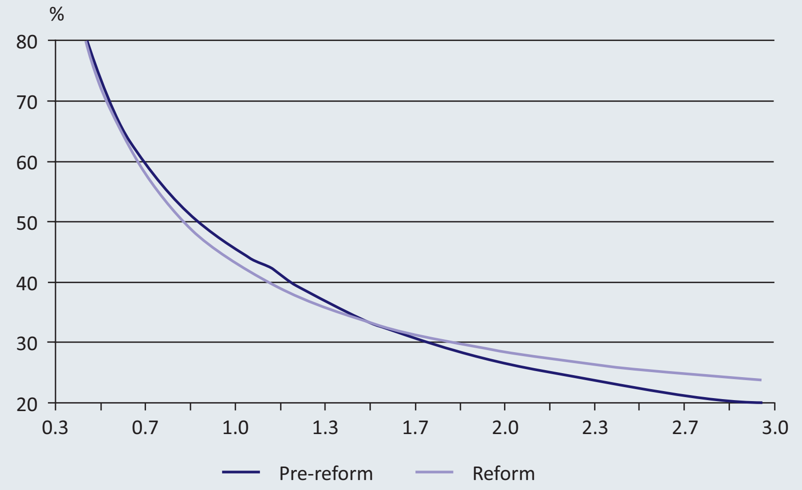


Figure 4.9
Gross replacement rate by income level



The Czech Government also took this opportunity to introduce the first set of reform measures into the State pension system. The primary objective of these measures is ensuring the financial sustainability of the pension system. The most important change is the adoption of a new schedule for increasing the statutory retirement age according to the year of birth of the insured persons, as indicated in Table 4.11 and Figure 4.10. In the first years, the schedule will not change for men. The retirement age for women will increase by six months per year until it equals the retirement age for men. This process will not end by 2035 as originally planned, but will continue with an increase in the retirement age for both men and women without any maximum at the pace of two months per year.

Table 4.11
Statutory retirement age by sex, year of birth and number of children (2011 amendment)

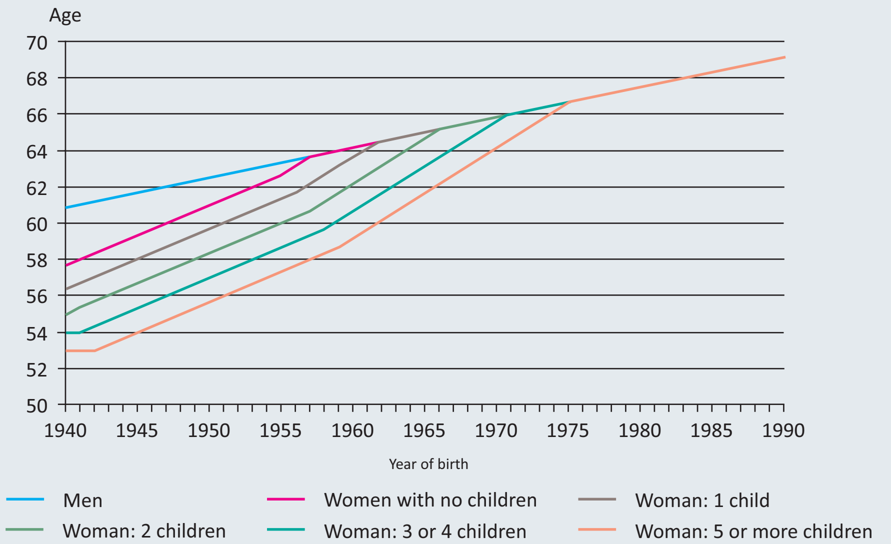
Year of birth	Men	Women (number of children raised)				
		0	1	2	3 or 4	5 or more
before 1936	60	57	56	55	54	53
1936	60 + 2m	57	56	55	54	53
1937	60 + 4m	57	56	55	54	53
1938	60 + 6m	57	56	55	54	53
1939	60 + 8m	57 + 4m	56	55	54	53
1940	60 + 10m	57 + 8m	56 + 4m	55	54	53
1941	61	58	56 + 8m	55 + 4m	54	53
1942	61 + 2m	58 + 4m	57	55 + 8m	54 + 4m	53
1943	61 + 4m	58 + 8m	57 + 4m	56	54 + 8m	53 + 4m
1944	61 + 6m	59	57 + 8m	56 + 4m	55	53 + 8m

Table 4.11 *(continued)*
Statutory retirement age by sex, year of birth and number of children (2011 amendment)

Year of birth	Men	Women (number of children raised)				
		0	1	2	3 or 4	5 or more
1945	61 + 8m	59 + 4m	58	56 + 8m	55 + 4m	54
1946	61 + 10m	59 + 8m	58 + 4m	57	55 + 8m	54 + 4m
1947	62	60	58 + 8m	57 + 4m	56	54 + 8m
1948	62 + 2m	60 + 4m	59	57 + 8m	56 + 4m	55
1949	62 + 4m	60 + 8m	59 + 4m	58	56 + 8m	55 + 4m
1950	62 + 6m	61	59 + 8m	58 + 4m	57	55 + 8m
1951	62 + 8m	61 + 4m	60	58 + 8m	57 + 4m	56
1952	62 + 10m	61 + 8m	60 + 4m	59	57 + 8m	56 + 4m
1953	63	62	60 + 8m	59 + 4m	58	56 + 8m
1954	63 + 2m	62 + 4m	61	59 + 8m	58 + 4m	57
1955	63 + 4m	62 + 8m	61 + 4m	60	58 + 8m	57 + 4m
1956	63 + 6m	63 + 2m	61 + 8m	60 + 4m	59	57 + 8m
1957	63 + 8m	63 + 8m	62 + 2m	60 + 8m	59 + 4m	58
1958	63 + 10m	63 + 10m	62 + 8m	61 + 2m	59 + 8m	58 + 4m
1959	64	64	63 + 2m	61 + 8m	60 + 2m	58 + 8m
1960	64 + 2m	64 + 2m	63 + 8m	62 + 2m	60 + 8m	59 + 2m
1961	64 + 4m	64 + 4m	64 + 2m	62 + 8m	61 + 2m	59 + 8m
1962	64 + 6m	64 + 6m	64 + 6m	63 + 2m	61 + 8m	60 + 2m
1963	64 + 8m	64 + 8m	64 + 8m	63 + 8m	62 + 2m	60 + 8m
1964	64 + 10m	64 + 10m	64 + 10m	64 + 2m	62 + 8m	61 + 2m
1965	65	65	65	64 + 8m	63 + 2m	61 + 8m
1966	65 + 2m	65 + 2m	65 + 2m	65 + 2m	63 + 8m	62 + 2m
1967	65 + 4m	65 + 4m	65 + 4m	65 + 4m	64 + 2m	62 + 8m
1968	65 + 6m	65 + 6m	65 + 6m	65 + 6m	64 + 8m	63 + 2m
1969	65 + 8m	65 + 8m	65 + 8m	65 + 8m	65 + 2m	63 + 8m
1970	65 + 10m	65 + 10m	65 + 10m	65 + 10m	65 + 8m	64 + 2m
1971	66	66	66	66	66	64 + 8m
1972	66 + 2m	66 + 2m	66 + 2m	66 + 2m	66 + 2m	65 + 2m
1973	66 + 4m	66 + 4m	66 + 4m	66 + 4m	66 + 4m	65 + 8m
1974	66 + 6m	66 + 6m	66 + 6m	66 + 6m	66 + 6m	66 + 2m
1975	66 + 8m	66 + 8m	66 + 8m	66 + 8m	66 + 8m	66 + 8m
1976	66 + 10m	66 + 10m	66 + 10m	66 + 10m	66 + 10m	66 + 10m
1977	67	67	67	67	67	67

Note: The statutory retirement age of those born after 1977 will be further increased by two month every calendar year.

Figure 4.10
Schedule for increasing the statutory retirement age



The pension indexation rules have also been tightened. The Government will no longer have the authority to set the rate of indexation by decree. Instead, the Pension Act stipulates that the present statutory indexation (which takes inflation and one-third of real wage growth into account) should be applied strictly, and additional indexation will not be possible. The entitlement conditions for early pensions and widow(er)s' pensions will also be tightened.

However, in order to further advance the contributory principle, the reference period for the calculation of the personal assessment base will be gradually extended to cover all of the earnings gained by each individual.

The basic ideas of these additional parametrical changes can be found in the work of the Expert Advisory Forum, which is described below. The legislation (Law No. 589/1992 Coll.) was passed the Czech Parliament in June and July of 2011 and came into effect on 22 July 2011, and the remaining legislation will become effective on 1 January 2012.

4.5.2. The pension reform options proposed by the Expert Advisory Forum

The Expert Advisory Forum was established in January 2010 by the Minister of Finance and the Minister of Labour and Social Affairs. The objectives of the Expert Advisory Forum were (i) to carry out the updated projection of the State pension system and (ii) to make recommendations on changes to the pension system that would make it more resistant to various risks in the medium- to long-term[9]. The Expert Advisory Forum published its final report in June 2010, just after the general election.

9 The background materials, data and documents of the Expert Advisory Forum are available at http://www.mfcr.cz/cps/rde/xchg/mfcr/xsl/vf_duchod_ref_pes.html.

The Expert Advisory Forum has agreed that the goal of the pension reform is to achieve socially adequate and financially sustainable pensions based on the principles of (i) diversification, (ii) fiscal sustainability, (iii) inter-generational equity, and (iv) a close link between one's pension and one's previous earnings (the contributory principle).

To accomplish pension reform, the conflicting interests of all stakeholders involved (insured workers, employers, the State, the pension system administrators and so on) must be reconciled, and agreement should be reached as to the final form the pension system should take and the types of measures that will secure its financial sustainability.

The Expert Advisory Forum has concluded that in the Czech Republic the aforementioned goals can best be achieved by means of a multi-pillar pension system, which takes advantage of both the pay-as-you-go (PAYG) and fully funded pension pillars and secures an appropriate combination of the solidarity and contributory principles. The current State pension system, which primarily aims to protect insured persons (in particular low- and middle-income groups) from poverty through the provision of adequate pensions, should remain the basis for the national pension system. Nevertheless, continuous parametric adjustments should be made to the system to secure its long-term financial sustainability. The reform measures recommended by the Expert Advisory Forum are summarized as follows:

- The ongoing gradual increase in the retirement age should continue at the scheduled pace (i.e. two months per year) without any upper limit, provided that the life expectancy continues to rise. The retirement age for women should be increased at the temporarily higher rate of six months per year until it equals the statutory retirement age for men. This means that the statutory retirement age for men and for women will be equalized by 2035. Consideration should also be given to the introduction of occupational pension plans for persons in hazardous and physically strenuous jobs. These would be within the supplementary pension pillar, and contributions would be paid by the employers and/or the insured employees.
- Upon the implementation of the funded pillar (planned for 2015), the lifetime payment of widows' and widowers' pensions should be abolished. This measure will not affect current pensioners. A new mechanism should also be introduced which appropriates the assessment base between husbands and wives for the purposes of calculating individual pension entitlements.
- The contribution rate should be reduced by 5 percentage-points, from 28 percent to 23 percent. To fill the revenue gap, tax revenue earned through the application of a uniform VAT rate of 19 percent (estimated at around CZK 50 billion) should be used to cover the costs for non-contributory periods[10].
- The maximum rate of the assessment base for contributions should be reduced to three times the average wage. The reference period for the calculation of average earnings should continue to be gradually extended until it is sufficient to cover insured persons' whole careers.
- The income adjustment in case there is a concurrence of pensions and work earnings should be resolved by the tax system rather than by the pension system[11].

10 A reduction in the contribution rate has been unanimously proposed by the Expert Advisory Forum, while only a majority has recommended the unification of the VAT rate for pension system purposes.

11 Currently pensions are generally exempt from taxation. One way they are taxed is if the pensioner earns above a certain threshold from gainful activity. Another way pensions are taxed is as part of one's total income (pensions and wages) once it exceeds a certain threshold.

The Expert Advisory Forum unanimously concluded that the creation of a funded pillar is essential for achieving greater diversification and strengthening the contributory principle of the pension system as a whole. However, no consensus has yet been reached regarding the specific design and implementation plan of the funded pillar. The following two variants have been suggested, with a majority of experts supporting Variant I.

The main features of Variant I are as follows:

- The State pension system will gradually be divided into two independent pension pillars. The first pillar shall consist of the reformed PAYG State pension system with the aforementioned amendments, to which 20 percentage-points of the total 23 percent contribution rate will be transferred. The second pillar shall consist of a new funded pillar, financed from 3 percentage-points diverted from the total 23 percent contribution rate.
- Participation in the second pillar will be compulsory for all insured persons under 40 years of age on the date of implementation, and the first-pillar pension will be proportionally reduced for these individuals. Insured persons who are 40 years of age or older on the date of implementation will remain exclusively in the first-pillar State pension system.
- The Czech Social Security Administration will collect contributions and administer the second pillar. Private pension funds, investment companies and other asset managers will manage the investment of pension savings in the second pillar. At the request of its members, the assets of individual savings accounts in the second pillar can be invested exclusively in Czech State bonds. The remaining balance in a second-pillar individual savings account shall be paid out in the form of life annuities. If a member dies before retirement, the funds will be transferred to the individual account of the designated beneficiary.

The main features of Variant II are as follows:

- The first pillar consists of the reformed PAYG State pension system with the aforementioned amendments. This pillar receives the full contribution rate of 23 percent.
- All insured persons can decide whether or not to join the second pillar. Once an insured person decides to enter the second pillar, they are not given the option to leave the second pillar. The contribution rate for the second pillar is at least 3 percent, which will be subsidized by the State. The same ceiling for the assessment base for contributions applies here as under the first pillar, i.e. three times the average wage. The second pillar will be managed by private pension funds. The pension funds shall offer participants several options with respect to their investment policy. The remaining balance of an individual second-pillar savings account shall be paid out in the form of life annuities. However, occupational pension plans may pay annuities to persons working in hazardous jobs for a fixed period.
- The existing pension funds will continue to manage the supplementary pension insurance scheme for those persons who do not join the second pillar.

4.5.3. Estimated implications of the proposed pension reform

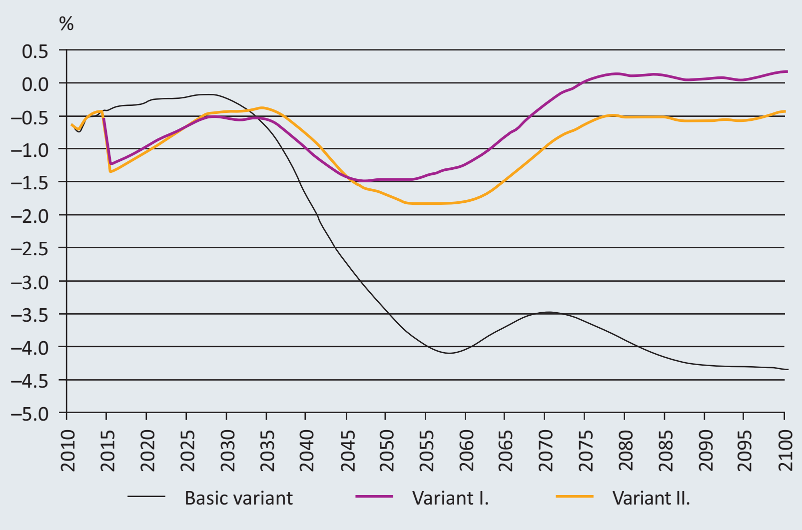
The Expert Advisory Forum has carried out financial projections of the State pension system based on these variants. These projections are based on the latest population projections and the macroeconomic scenario. The macroeconomic scenario has been set out based on recent historical data, expected labour productivity in the EU-12 and an assumed convergence of the Czech Republic to the EU-12. Table 4.12 summarizes the assumed key macroeconomic indicators.

Table 4.12
Assumptions of key macroeconomic indicators, 2010–2100

		2010–2020	2020–2030	2030–2040	2040–2050	2050–2060	2060–2070	2070–2080	2080–2090	2090–2100
Economic level										
Labour productivity	growth in %	2.4	2.3	2.1	2.0	1.9	1.8	1.7	1.7	1.6
	EU-12 = 100	68.9	74.9	80.0	84.6	87.9	90.8	93.0	94.7	96.0
Labour market										
Unemployment rate	%	6.8	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Average real wage	growth in %	2.4	2.3	2.1	2.0	1.9	1.8	1.7	1.7	1.6
Prices										
Inflation rate	%	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0

Figure 4.11 shows the effects of the proposed reform by comparing the projected balance of the State pension system under the two variants with the projection under current legislation (called the Basic variant). Figure 4.12 shows the cumulative balance under these variants.

Figure 4.11
Comparison of the projected balances of the State pension system, 2010–2100 (percentage of GDP)



It is observed in Figure 4.11 that the parametric adjustments in both variants significantly improve the balance of the State pension system, and thus its long-term financial sustainability. As can be seen from Figure 4.12, the estimated cumulative deficit for the period from 2010 until 2100 is more than 260 percent of GDP under the Basic variant. Under the proposed reform, this cumulative deficit is estimated to be reduced to around 50 percent of GDP under Variant I and 80 percent of GDP under Variant II.

Figure 4.12
Comparison of the projected cumulative balances of the State pension system, 2010–2100 (percentage of GDP)

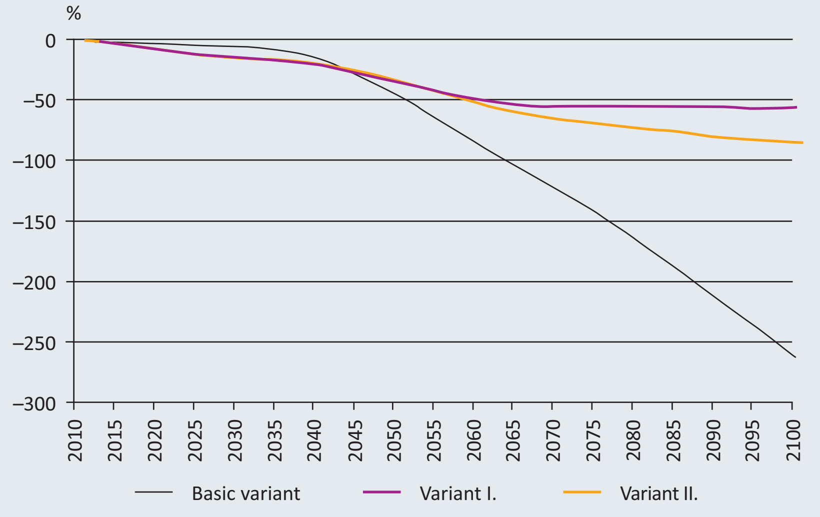


Figure 4.13
Comparison of the projected gross replacement rates (first and second pillar), 2010-2100

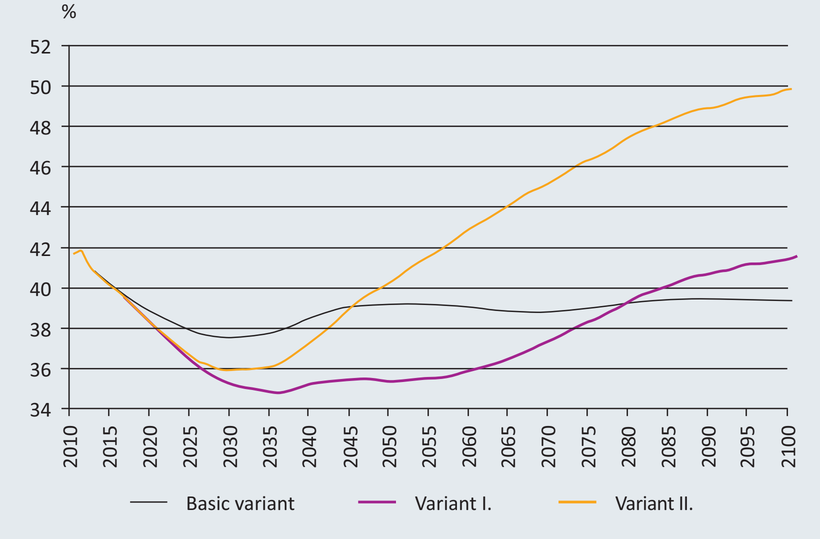


Figure 4.13 compares the projected gross replacement rates under both pillars. It is observed that the replacement rate under Variant I is lower than the replacement rate under the basic variant for the next 70 years, after which time it is expected to catch up. The replacement rate under Variant II is expected to overtake that of the basic variant much more quickly. Around 2035, the estimated replacement rate under Variant II is expected to rise and ultimately reach 50 percent by 2100. On the other hand, the contribution rate is 3 percentage-points higher under Variant II. It should be noted that the estimates of the replacement levels of defined-contribution pensions are sensitive to economic assumptions, in particular real interest rates. In view of the uncertainties in economic factors, projections should be made under several alternative assumptions to account for many different possible outcomes.

Figure 4.14
Projected assets of the funded pillar, 2015–2100 (percentage of GDP)

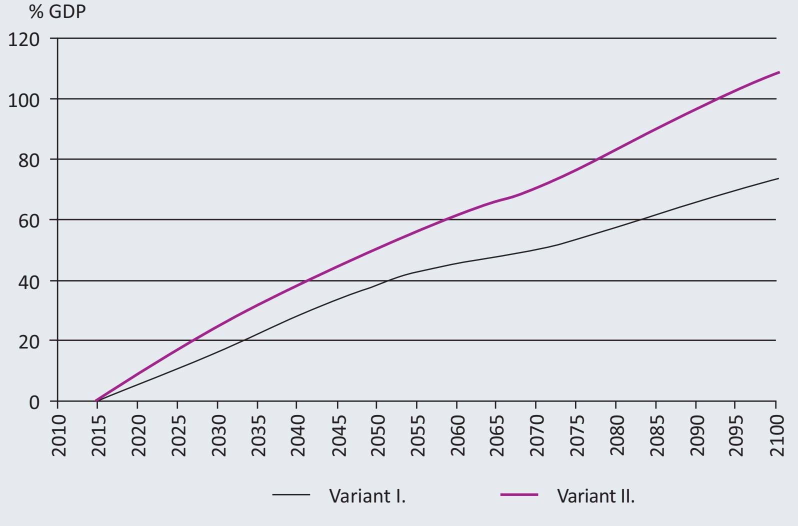


Figure 4.14 presents the projected assets of the funded pillar for the period from 2015 to 2100. It is estimated that by 2100 the value of the assets in the funded pillar will reach 75 percent of GDP under Variant I and 110 percent of GDP under Variant II.

4.5.4. Pension reform bill

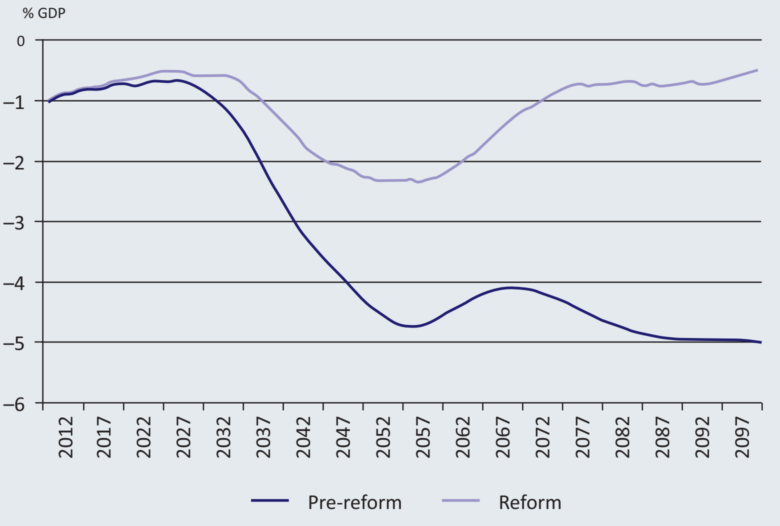
Based on the work of the Expert Advisory Forum, another step of the pension reform has been taken. In 2010, the newly appointed Government gave priority to the pension reform by introducing a funded pension pillar and starting political discussions on the topic. As a result of these debates, a pension reform bill has been approved and is currently in the parliamentary process as of August 2011.

A key element of the proposed reform is the introduction of a fully funded pillar. It is funded by redirecting 3 percentage-points from employees' contribution rate (currently 6.5 percent) and requiring one to pay an additional 2 percent. Participation is voluntary, but the decision to join the funded pillar cannot be revoked at a later stage. The benefits will be disbursed either in the form of life annuities or in fixed-term annuities.

Along with the introduction of a funded pension scheme, the pension reform bill proposes significant changes to the supplementary pension scheme and other legislation to accommodate for the new design of the pension system.

Figure 4.15 presents the updated projection results of the balance of the State pension system under the reformed and the pre-reform legislation. Since the pension reform bill is similar to Variant II proposed by the Expert Advisory Forum, it has similar financial impacts on the balance of the State pension system (see Figure 4.11).

Figure 4.15
Projected assets of the funded pillar, 2015–2100 (percentage of GDP)



4.6. Conclusion

The pension system in the Czech Republic is subject to frequent changes. There are a number of variables that influence the performance and sustainability of the pension system, regardless of whether the system is pay-as-you-go, fully funded, defined-benefit or defined-contribution.

The Czech experience is rather unique given the country's recent transition from a socialist social security scheme to a modern social insurance model. The measures which supported this transformation were initiated in the first half of the 1990s. These changes can be largely attributed to political factors that existed at that time. Although the transformation process is considered complete, the pension reform process is still a work in progress. Political factors have been a crucial driving force behind the changes that have been made to the pension system since 1996.

The central focus of the ongoing social debate today is on how to strike a balance between solidarity and contributory principles. Social dialogue plays a vital role in this process, as the different social partners seek solutions that are broadly appealing to all parties concerned.

New challenges are also arising which necessitate pension reform. The most important of these are the long-term demographic trends, in particular the ageing of the population. These trends will have the most direct impact on the pay-as-you-go defined-benefit system. However, the potential impact of the population ageing on funded, defined-contribution systems should not be ignored either. The economic crisis which began in 2008 is also influencing the debate on pension reform, and has made economists and politicians worldwide take the economic performance of their respective countries into deeper consideration.

These factors will inevitably affect the viability of all types of pension schemes. Pay-as-you-go schemes are essentially a mechanism for redistributing income in the national economy. Therefore, their viability depends on the amount of money collected and the number of people this money must be distributed amongst. On the other hand, fully-funded schemes are by no means immune to these factors either. They are dependent upon the level of an individual's lifetime savings for retirement, the investment performance of these savings, and the life expectancies.

In light of these developments, the primary objective of governmental policies should be to find a balance achieving adequacy and sustainability within the boundaries set forth by various social demands, demographic trends, and economic development. It is for this reason that the pension reform in the Czech Republic is perceived as a continuous process. The pension system requires a stable framework. However, as the conditions surrounding it change significantly, it has to be redefined through the adjustment of its key parameters on practically a yearly basis.

In the past, the Government – regardless of its composition – has strived to introduce significant changes by providing the general public with sufficient time to understand these changes and prepare for their impact, as it did when it introduced the schedule for increasing the retirement age. In 1995, workers nearing retirement age had only one year to prepare for the gradual increase in the retirement age; in 2011, a comparable change in the retirement age was technically announced more than 20 years before its implementation. It can therefore be said that the process of pension reform in the Czech Republic has evolved into a more stable and transparent mechanism. While some minor parametric changes can be made *ad hoc*, the most important ones are made in advance.

Nevertheless, there is more work to be done in the Czech Republic. As described above, the Czech pension system is exposed to certain drawbacks and risks. The most serious of them is the virtual non-existence of diversification in the pension income, as the system is currently designed as a single pillar pension system. This should be addressed by the Government in the near future, as the legislation for the implementation (planned in 2013) of a fully-funded second pillar is currently being prepared. Even when this next step in the pension reform is complete, there remain more changes to be made to all three pension pillars, for the overall development of the Czech Republic will continue to influence the shape and needs of the pension system.

5. Hungary

Kenichi Hirose[1]

5.1. Overview

5.1.1. Historical overview

Since its establishment in 1929, Hungary's pension scheme has undergone a number of changes reflecting different political and economic circumstances. Shortly after the end of World War II, a social security pension system was established which was gradually extended to cover all persons participating in gainful employment, including self-employment.

With the demise of communism in 1989 and the severe economic contraction and rapid increase in unemployment that followed, nearly entire generations claimed early retirement pensions. As a result, the number of contributors to the pension system decreased sharply, and the system faced an immediate need for reform. A resolution passed by Parliament in 1991, with its subsequent amendments, resulted in significant changes being made to the Hungarian pension system. The insurance period necessary for persons to qualify for pensions was extended, the number of years taken into account in calculating the reference average salary for pensions was increased, an insurance income ceiling was introduced, and the statutory retirement age was gradually increased from 60 years for men and 55 years for women to 62 years for both sexes by 2010.

In January 1998, after a long debate, the mandatory privately managed funded pension system was introduced. The main feature of this reform was a partial privatization of the State pension system, meaning that part of employees' contributions are paid into mandatory private pension funds while all of employers' contributions are remitted to the State social security system.

From 2010 to 2011, major changes were implemented which *de facto* nationalized the mandatory privately managed funded pension system. Since these changes took place during the preparation of this chapter, it mainly explains the Hungarian pension system as of 2010 and describes more recent changes in the last section.

5.1.2. Basic legislation

The basic legislation regulating the Hungarian pension system is as follows:

- Act No. 80 of 1997 on Persons Entitled to Social Security Benefits and Private Pensions and on the Coverage of These Services;
- Act No. 81 of 1997 on Social Security Pension Benefits;
- Act No. 82 of 1997 on Mandatory Private Pensions and Private Pension Funds; and
- Act No. 96 of 1993 on Voluntary Mutual Insurance Funds.

1 I am greatly indebted to the authors of the articles and reports listed in the references in drafting this chapter.

In addition, supplementary – and generally more favourable – rules apply to certain special groups, including the armed forces, miners, artists, and workers whose retirement meets special employment policy objectives.

5.1.3. The current system's structure

Since 1998, Hungary's pension system has consisted of three pillars.

The first pillar is a publicly managed pension scheme known as the Social Security Pension Scheme or the State pension system. Participation is mandatory for all employees. It is financed through contributions from employees and employers.

The second pillar is a mandatory privately managed funded system for old-age pensions. Participation is mandatory for new entrants into the labour market. This scheme is a partial substitution for the Social Security Pension Scheme. Contributions to this system are diverted from the total of the mandatory pension contributions paid by employees (see Table 5.1). The members of the second pillar then receive a social security pension that is reduced by 25 percent. Employers and employees can make additional voluntary contributions up to the maximum total contribution rate of 10 percent.

Table 5.1
Mandatory pension contribution rates, 1998–2010

Year	Contribution rates as a percentage of gross contributory income				Ceiling of the contributory income (HUF/year)	Ceiling as a multiple of average gross salary
	Pillar I		Pillar II	Total		
	By employer	By employee	By employee			
1998	24.0	1.0	6.0	31.0	1,565,850	1.9
1999	22.0	2.0	6.0	30.0	1,854,200	2.0
2000	20.0	2.0	6.0	28.0	2,020,320	1.9
2001	20.0	2.0	6.0	28.0	2,197,300	1.8
2002	18.0	2.0	6.0	26.0	2,368,850	1.6
2003	18.0	1.5	7.0	26.5	3,905,500	2.3
2004	18.0	0.5	8.0	26.5	5,307,000	3.0
2005	18.0	0.5	8.0	26.5	6,000,600	3.2
2006	18.0	0.5	8.0	26.5	6,325,450	3.1
2007	21.0	0.5	8.0	29.5	6,748,850	3.0
2008	24.0	1.5	8.0	33.5	7,137,000	3.0
2009	24.0	1.5	8.0	33.5	7,446,000	3.0
2010	24.0	1.5	8.0	33.5	7,665,500	3.0

Note: The ceiling applies only to employees' contribution.

The third pillar is a voluntary privately managed funded pension. This pillar aims to supplement the benefits of the two mandatory pillars. Both employers and employees can pay contributions. Tax deductions are available for both contributions and benefits up to certain prescribed limits.

In addition, there is a means-tested, tax-funded benefit designed to provide social assistance for persons in need who do not have a sufficient contribution record. Other pension mechanisms include funded occupational programmes and pre-retirement savings plans.

5.1.4. Organizational structure

The Central Administration of National Pension Insurance (ONYF) is responsible for the administration of mandatory social security pension insurance. Since 2011, the ONYF has been supervised by the Ministry of National Resources[2]. The ONYF administers the Pension Insurance Fund and seven regional pension insurance directorates, as well as the Pension Payment Directorate and the Pension Insurance Legal Remedy Directorate.

The Pension Insurance Fund is supervised by the Pension Insurance Controlling Body, in accordance with Act 39 of 1998 on the Governmental Supervision of the Financial Funds and the Social Insurance Organisations. The Pension Payment Directorate's main task is the payment of pensions and other non-social security benefits. In addition, it assesses survivors' pensions in the case of death of a pensioner. The Pension Insurance Legal Remedy Directorate is a pension insurance administrative body of second instance. It rules on appeals from official cases involving the pension insurance administration.

Private pension funds and voluntary funds are supervised by the Hungarian Financial Supervisory Authority (HFSA). The HFSA conducts audits of the pension funds every two years. It also operates as the central register of funds and determines the obligatory yield for the funds' investments. The pension funds are obliged to submit quarterly and annual reports to the Supervisory Authority.

5.2. Coverage, compliance and collection

In Hungary, all employed persons must be insured by the social security system. The number of insured persons is estimated to be 4.5 million, which is less than 70 percent of the working age population (the population aged 15 and 65 years).

Table 5.2 summarizes the distribution of the contributory income in 2007. It is observed that 76 percent of insured persons paid contributions from salaries of less than 2 million HUF per year. This low contributory income could lead to inadequate pensions for many Hungarians in the future.

Self-employed persons must also be mandatorily insured by the social security system and make contributions based on their gross income. In practice, however, they frequently make contributions based on the minimum wage even if their actual income is much higher.

It is estimated that about 30 percent of the economically active population works in the informal economy and that about 35 percent of personal income is not captured.

2 Prior to 2010, the Ministry of Social and Labour Affairs was in charge of supervising the ONYF.

In 2007, the authority for collecting pension contributions from employers was shifted to the Central Tax Office. The Central Tax Office then transfers the contributions to the social security fund and to the mandatory private funds[3].

Table 5.2
Distribution of the gross contributory income by sex, 2007

Amount (HUF/year)	Number of contributors (in thousands)			Percentage (%)			Average contributory salary (in thousand HUF)		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Less than 1 million	902	1,059	1,961	40.1	45.6	42.9	514	501	507
1–2 million	766	747	1,513	43.1	32.2	33.1	1,436	1,413	1,425
2–3 million	263	277	540	11.7	11.9	11.8	2,425	2,429	2,427
3–4 million	122	116	238	5.4	4.9	5.2	3,448	3,428	3,438
4–5 million	68	53	121	3.0	2.3	2.6	4,450	4,040	4,445
5–6 million	38	26	64	1.7	1.1	1.4	5,446	5,452	5,461
6 million or more	90	90	135	4.0	1.9	3.0	10,647	9,220	10,177
Total	2,249	2,232	4,572	100.0	100.0	100.0	1,820	1,484	1,649

Source: Central Administration of National Pension Insurance (ONYF).

5.3. Benefits

5.3.1. Social security pensions

5.3.1.1. Qualifying conditions and the retirement age

Old-age pensions are payable to insured persons who have reached the statutory retirement age and have at least a 15-year insurance period[4].

The statutory retirement age is currently 62 years for both men and women. From 2014, however, it will be increased gradually to 65 years by 2022.

Since September 2009, the termination of any legal employment relationship has become another condition to qualify for an old-age pension. It affects those who apply for old-age pensions at or above the statutory retirement age.

3 Before 2007, second-pillar contributions were paid directly by employers into the members' funds. The introduction of this new collection system initially caused significant delays in the payment of contributions into the individual accounts of private pension funds.

4 An insurance period refers to the period during which pension contributions are paid, as well as non-contributory periods (such as periods spent in higher education, compulsory military service, and childcare leave).

5.3.1.2. Old-age pension formula

Under current legislation, the social security old-age pension is calculated by applying the pension rate to the reference salary. Members of mandatory private funds receive 75 percent of the social security old-age pension.

The reference salary is the average of the revaluated net monthly earnings of an individual earned between 1988 and retirement[5]. To calculate the reference salary, the nominal net earnings are calculated by deducting the theoretical personal tax amount (irrespective of whether the insured person has actually paid taxes) and social security contributions from one's gross earnings[6]. The nominal net earnings are then revaluated by applying the valorisation factors, which are determined annually by law.

Pension rates are determined by the number of insurance years. The pension rate is 33 percent for a 10-year insurance period, and is increased by 2 percentage-points for each year between 11 and 25-year insurance periods, 1 percentage-point for each year between 26 and 36-year insurance periods, 1.5 percentage-points for each year between 37 and 40-year insurance periods, and by 2 percentage-points for each year thereafter. Thus, the resulting pension rate equals 63 percent for a 25-year insurance period, 68 percent for a 30-year insurance period, 73 percent for a 35-year insurance period, and 79 percent for a 40-year insurance period, respectively.

For pensions awarded after 2013, a new pension formula shall be applied which differs from the current formula in two ways. First, reference salaries are to be calculated on the basis of one's gross contributory income. Second, the pension rate will be calculated as 1.65 percent for each insurance year. For the members of mandatory private funds, the accrual rate will be reduced to 1.22 percent per insurance year[7]. The minimum pension is set for pensioners with at least a 20-year insurance period. In 2011, the amount of the minimum old-age pension is HUF 28,500 (102 euro) per month. This amount has not been increased since 2008.

5.3.1.3. Early retirement

The law also contains provisions to qualify insured persons for old-age pensions before they reach the statutory retirement age if they have completed sufficiently long insurance periods. The detailed rules on this practice are as follows:

- An old-age pension is fully payable to insured persons who have completed a 40-year insurance period and ceased gainful activity:
  - at 60 years of age or older for men born in 1949–1950; and
  - at 59 years of age or older for women born in 1951–1953[8].

5 The individual income records before 1998 are not available.

6 Since 2008, social security contributions paid by employees have been deducted when calculating net earnings. This measure resulted in an immediate decrease of 8.5 percent in the value of newly awarded pensions.

7 Initially, the Act No. 82 of 1997 on Mandatory Private Pensions and Private Pension Funds planned to increase the contribution rate for the second-pillar system to 8 percent (out of the total 31 percent). Thus, the reduced accrual rate was calculated as 1.65 x (1 – 8/31) = 1.22.

8 Before 2009, the required insurance period was 38 years for full pensions and 33 years for reduced pensions. In addition, the required insurance period for women was shortened by one year per child up to three years (referred to as the children privilege).

- An old-age pension with a reduced amount is payable to insured persons who have completed a 37-year insurance period and ceased gainful activity:
  - at 60 years of age or older for men born in 1950;
  - no more than 2 years before the statutory retirement age for men born in 1951 and after;
  - no more than 3 years before the statutory retirement age for women born in 1954–1957;
  - no more than 2.5 years before the statutory retirement age for women born in 1958; and
  - no more than 2 years before the statutory retirement age for women born in 1959 and after.
- Alternatively, an old-age pension with a reduced amount is payable to insured men who have completed a 42-year insurance period and ceased gainful activity:
  - no more than 2.5 years before the statutory retirement age for men born in 1952; and
  - no more than 3 years before the statutory retirement age for men born in 1953–1954.

The rate of reduction is determined by the number of years missing from the required insurance period and the difference between the statutory retirement age and the actual age of the applicant.

Since 2011, old-age pensions are payable in full to insured women, regardless of their age, who have completed a 40-year qualifying period (with at least a 32-year contribution period) and have ceased gainful activity. Here, the qualifying period includes the contribution period and any periods when the woman received maternity benefits, childcare allowances, or child-raising support. For women raising five or more children, the 40-year requirement is reduced by one year per child with a maximum reduction of seven years.

As Figure 5.1 shows, a substantial number of old-age pensioners, in particular males, complete insurance periods of more than 40 years. This explains the fact that more than 15 percent of old-age pensioners are younger than 62 years of age. It should also be noted that there is a significant difference in the completed insurance periods between men and women. The average insurance period for men (38.9 years) is 7.1 years longer than that for women (31.8 years).

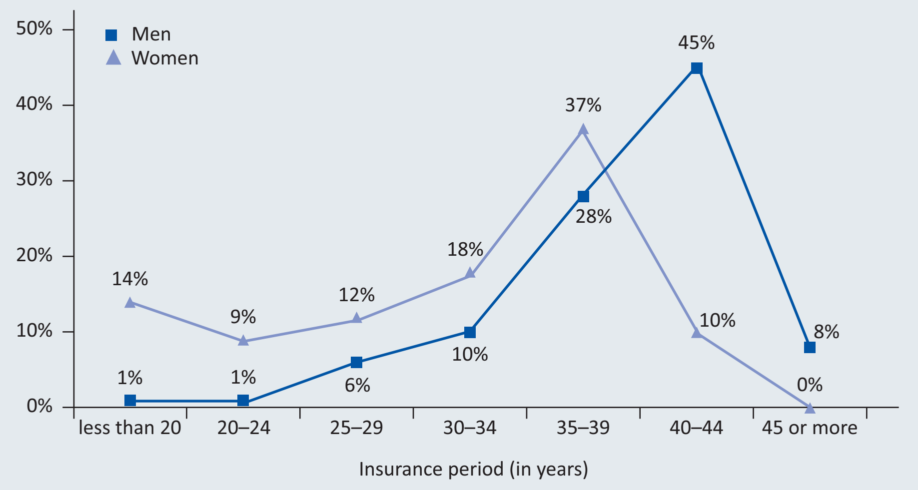
In addition to workers with long insurance periods, early retirement is also available for workers undertaking hazardous and physically strenuous work.

For insured persons who have worked in these activities for at least ten years for men or eight years for women, their pensionable age is decreased by two years from the statutory retirement age. For workers with longer working periods, their pensionable age is further decreased by one year for every additional period of five years for men or four years for women, up to five years.

Similarly, the pensionable age for insured persons who have worked under high atmospheric pressure for at least six years is decreased by two years from the statutory retirement age. The pensionable age is further decreased by one year for every additional period of three years, up to five years.

Official service members of the armed forces (including members of the police and army) are entitled to early retirement under more favourable conditions according to special provisions.

Figure 5.1
Distribution of insurance periods of old-age pensioners by sex, 2009



Source: Central Administration of National Pension Insurance (ONYF).

5.3.1.4. Disability pensions

Disability pensions are payable to insured persons whose degree of health damage[9] is 50 percent or greater. There are three categories of disability based on the severity of the condition:

- Class III consists of those persons whose degree of health damage is 50 to 79 percent and are unable to continue work without rehabilitation, or are not recommended to take rehabilitation by the specialized rehabilitation body.
- Class II consists of those persons whose degree of health damage is 80 percent or more but do not require constant care.
- Class I consists of those persons whose degree of health damage is 80 percent or more and require constant care.

In addition, disabled persons should not earn more than 70 percent of their previous earnings or receive other social security benefits.

The qualifying period depends on the age of the claimant at the time their disability occurred (see Table 5.3). For workers older than 35 years, at least ten years of insurance period is required to qualify for disability pensions.

9 Since 2008, disability pensions have been determined based on the degree of health damage instead of one's loss of working capacity.

Table 5.3
Insurance period required for disability pensions

Age at which disability occurred	Qualifying period
21 years and below	2 years
Between 22 and 24 years	4 years
Between 25 and 29 years	6 years
Between 30 and 34 years	8 years
Between 35 and 44 years	10 years
Between 45 and 54 years	15 years
55 years and older	20 years

If one's insurance period is less than 25 years, the amount of their Class III disability pension is between 37.5 and 63 percent of the reference salary, depending on their degree of health damage, their age, and the length of their insurance period. If the insurance period is 25 years or more, the amount of a Class III disability pension is calculated using the old-age pension formula. The disability pension for Categories I and II is increased by five percent and ten percent, respectively.

If one's disability is due to work-related injuries or diseases, there is no insurance period required. In general, more favourable rules are applied to work-related disability pensions. The amount of an accident-related disability pension can be calculated on the basis of one's contributory income in the year directly preceding the accident, if requested by the applicant. In addition, the pension amount should be at least 60 percent, 65 percent, or 70 percent of the average monthly income for Categories III, II or I, respectively. The pension amount is increased by one percent for every year in excess of the required qualifying period, although the pension may not exceed the amount of the average monthly income.

The monthly minimum disability pension is HUF 30,850 for Class I, HUF 29,800 for Class II, and HUF 28,500 for Class III. As with old-age pensions, these amounts have not been increased since 2008.

In 2008, pursuant to Act No. 84 of 2007 on Rehabilitation Pensions, a new pension was introduced for the disabled. In addition to providing income support, the rehabilitation pension aims to assist disabled workers in their reintegration into the labour market through vocational rehabilitation.

Persons eligible for rehabilitation pensions are those who are disabled and categorized as Class III due to a work-related accident or occupational disease, and who can continue to work with appropriate rehabilitation. The amount of the rehabilitation pension is 120 percent of the Class III disability pension. The rehabilitation pension is payable for the period necessary for rehabilitation, up to three years.

The rehabilitation pension is reduced by 50 percent if a person continues gainful activity and their average net monthly income for three successive months exceeds 90 percent of their reference salary and the minimum wage. Although rehabilitation pensions are tax exempt, if a pensioner is earning additional sources of income while receiving a rehabilitation pension, the pension amount is accounted for when determining their taxable income.

5.3.1.5. Survivors' pensions

Widow(er)s' pensions are payable to spouses, divorced spouses, or domestic partners of deceased pensioners or deceased insured persons. As a general rule, a temporary widow(er)s' pension is paid for one year (or 18 months with orphans) after the death of the spouse. The temporary widow(er)s' pension is converted into a permanent pension if the beneficiary has reached the pensionable age, is disabled, or cares for two orphans or more.

The amount of the widow(er)s' pension is 60 percent of the pension of the deceased person. The permanent widow(er)s' pension is reduced by 70 percent if the widow(er) receives an old-age or disability pension of their own.

In addition, orphans' allowances are payable until 16 years of age or until the completion of one's full-time education up to 25 years of age. The amount of the orphans' allowance is 30 percent of the pension of the deceased person. The amount is doubled if both parents are deceased, or if the surviving parent is disabled. Since 2008, the minimum amount of an orphans' allowance has been fixed at HUF 24,150 per month.

5.3.1.6. Pension indexation

Under the new pension indexation rule introduced in 2010[10], the rate of pension indexation is linked to the GDP growth rate. In January of every year, pensions are adjusted in the following way:

- If the expected GDP growth is less than 3 percent, pensions are increased in line with the expected rate of increase in the consumer prices.
- If the expected GDP growth is between 3 and 4 percent, the rate of pension indexation is 80 percent of the expected increase in consumer prices plus 20 percent of the expected increase in the average net salary.
- If the expected GDP growth is between 4 and 5 percent, the rate of pension indexation is 60 percent of the expected increase in consumer prices plus 40 percent of the expected increase in the average net salary.
- If the expected GDP growth is 5 percent or more, the rate of pension indexation is 50 percent of the expected increase in consumer prices plus 50 percent of the expected increase in the average net salary.

For example, for 2011, the expected GDP growth was 3 percent, the expected rate of increase in consumer prices was 3.5 percent, and the expected rate of increase in the average net salary was 4.9 percent. Thus on 1 January 2011, pensions were increased by 3.8 percent (= 3.5 x 0.8 + 4.9 x 0.2). For 2012, since the draft State budget assumes 1.5 percent GDP growth, pensions will be indexed only in line with the price increase.

10 In 1992, Hungary introduced wage indexation. In 2000, this indexation was based on 70 percent of the rate of increase in the average net salary plus 30 percent of the increase in consumer prices. From 2001 onwards, indexation has been based on 50 percent of the rate of increase in the average net salary plus 50 percent of the increase in consumer prices.

If the difference between the indexation rate based on the expected data and the indexation rate based on the realized data exceeds one percentage point, pensions are retroactively adjusted in November. For instance, the pension amount of November 2011 was increased by 6 percent due to this adjustment.

In 2003, the Government introduced the so-called 13th month pension, initially equal to the amount of a quarter-month's pension. The amount was then gradually raised to a half-month's pension in 2004, a three-quarter month's pension in 2005 and a whole month's pension in 2006–2008. In 2009, the amount of this benefit was reduced to a half-month with a cap set at HUF 80,000, payable only to pensioners who are older than the statutory retirement age. In 2010, the Government abolished this benefit completely as an austerity measure.

For pensioners who are gainfully employed, a different indexation method is applied.

5.3.2. Mandatory funded pension

The main objective of introducing the mandatory funded pension in 1998 was to diversify the systemic risk associated with the single State pension system. Other important reform objectives included reducing the State's pension liabilities and improving the incentives for workers to pay social security contributions.

As mentioned earlier, a major change took place in the mandatory privately-managed funded pension system at the end of 2010. This section presents the mandatory funded pension system in its pre-reform state in 2010. Table 5.4 summarizes the key data on the mandatory private pension funds from 2000 to 2009.

Table 5.4
Basic data on the mandatory private pension funds, 2000–2009

Year	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Number of funds	21	21	19	18	18	18	19	20	20	19
Members (in thousands)	2,187	2,253	2,225	2,304	2,402	2,511	2,650	2,788	2,955	3,019
Contributions (in billion HUF)	78	95	112	159	211	242	276	212	433	357
Value of assets (in billion HUF)	176	283	407	566	877	1,217	1,583	1,970	1,972	2,649
Assets as a % of GDP	1	2	2	3	5	6	8	10	10	14

Source: Hungarian Financial Supervisory Authority (HFSA).

5.3.2.1. Membership

New entrants to the labour market after 1998 must join the mandatory private pension funds. Those persons who were already insured by the State pension scheme in 1998 were given the choice to either join the mandatory private pension funds or remain full members of the social security pension system. It should be noted that if an insured person in 1998 opted to join the mandatory private pension funds, their social security old-age pension was reduced by 25 percent regardless of their insured period prior to 1998. Despite this disadvantage, more than two million workers joined the mandatory private pension funds, many of whom were currently insured. As Table 5.5 shows, 27.8 percent of the members of mandatory private pension funds in 2007 were aged 40 years or above.

By the end of 2010, the number of the mandatory private pension fund members increased to 3.1 million workers, accounting for almost 70 percent of the insured population. It should be noted that in 2002 and 2009 the Government provided a limited number of members with the opportunity to return fully to the social security system, but this had little impact on the private funds' membership.

Table 5.5
Age distribution of members of the mandatory private pension funds, 2007

Age	Number	Percentage (%)
19 or younger	38,756	1.4
20–24	297,738	11.1
25–29	566,343	21.1
30–34	602,144	22.4
35–39	431,880	16.1
40–44	332,738	12.4
45–49	246,164	9.2
50–54	143,788	5.4
55 or older	22,695	0.8
Total	2,682,246	100.0

Source: Hungarian Financial Supervisory Authority (HFSA).

5.3.2.2. Pension funds

The Hungarian private pension institutions are non-profit, autonomous legal entities that are the financial vehicles of the private pension systems. Mandatory private pension funds may also be established, separately or jointly, by employers, chambers of trade, trade unions, and voluntary pension funds. There are no capital requirements to set up these institutions. They are legally owned by the members who elect the boards of these institutions. Their main governing body is the general assembly of the members or their representatives. Table 5.6 summarizes the membership and assets of the 18 mandatory private pension funds at the end of 2010. As can be seen, the five largest funds made up 74.7 percent of all membership and 82.1 percent of assets.

Private pension funds credit their members' contributions to their individual accounts and invest the capital to provide a steady income for members throughout their retirement. The financial returns on the investment of assets are credited to the individual accounts according to special accounting rules. The funds are required to maintain statutory minimums of investment and comply with the accounting standards set forth by the State Financial Supervisory Authority.

Table 5.6
Membership and assets of the mandatory private pension funds, 31 December 2010

	Members	Share (%)	Assets (million HUF)	Share (%)
Aegon	602,017	19.3	565,571	18.5
Allianz Hungaria	477,345	15.3	402,441	13.1
Aranykor	72,165	2.3	86,140	2.8
AXA	282,758	9.1	289,222	9.5
Budapest (GE Money Bank)	30,441	1.0	53,285	1.7
DIMENZIO	12,546	0.4	30,662	1.0
Életút Első Országos	2,427	0.1	4,116	0.1
ERSTE	66,285	2.1	53,189	1.7
Évgyűrűk	104,324	3.3	87,265	2.9
GENERALI	76,156	2.4	50,094	1.6
HONVÉD	23,728	0.8	52,830	1.7
ING	523,767	16.8	550,499	18.0
MKB	38,346	1.2	62,869	2.1
OTP	756,021	24.2	703,428	23.0
Postás	26,899	0.9	30,665	1.0
Quaestor	6,709	0.2	3,761	0.1
Vasutas	7,459	0.2	13,184	0.4
VIT	8,807	0.3	21,193	0.7
Total	3,118,200	100.0	3,060,416	100.0

Source: Hungarian Financial Supervisory Authority (HFSA).

5.3.2.3. Investment performance

Table 5.7 presents the composition of the assets of the mandatory private pension funds from 2004 to 2009. In their initial stage of implementation, over 80 percent of total assets were invested in domestic Government bonds. However, the share of Government bonds has continuously decreased, reaching 48 percent in 2009.

Table 5.7
Composition of assets of the mandatory private pension funds, 2004–2009 (%)

Year	2004	2005	2006	2007	2008	2009
Cash and deposits	1	1	2	1	3	2
Government bonds	74	73	67	58	54	48
Equities	8	8	10	15	14	12
Investment funds	9	10	14	17	25	31
Other	9	8	7	8	4	7
Total	100	100	100	100	100	100

Source: Hungarian Financial Supervisory Authority (HFSA).

The long run investment performance of the mandatory private pension funds has been less than satisfactory, as the funds were not even able to keep pace with the rate of inflation. For the ten-year period from 2000 to 2009, the internal rate of return was 5.1 percent, while the average inflation rate was 5.6 percent for the same time period. For the five-year period from 2005 to 2009, the internal rate of return was 4.5 percent as opposed to the average inflation rate of 5.4 percent.

From 2008 onwards, pension funds must offer three types of portfolios with different risk profiles and members are automatically assigned one of them according to their age (see Table 5.8). For instance, those members who are supposed to retire within five years must choose the least risky "classic" portfolio. Members below the age of 45 are in a better position to bear risk and are thus assigned to the "growth" portfolio. More than 80 percent of the members either chose or were assigned by default to the riskiest "growth" portfolio, although they could choose less risky portfolios.

Table 5.8
Characteristics of three portfolios of the mandatory private pension funds

Portfolio	Default group members	Investment limitations		
		Real estate	Equities	Other risky assets
Classical	Within 5 years of the retirement age	0%	max 10%	0%
Balanced	Between 5 and 15 years from the retirement age	0%	min 10% max 40%	max 5%
Growth	15 years or more from the retirement age	max 20%	min 40%	max 5%

These three portfolio choices were introduced several months before the financial crisis hit Hungary in late 2008. As indicated in Table 5.9, the portfolios that were exposed to risky investment instruments recorded substantial losses in 2008, and the mandatory funds suffered much larger losses than the voluntary funds. Because of these experiences, pension funds subsequently adopted more conservative investment strategies and some even lowered their equity holdings below the minimum limits. By the end of 2009, many funds managed to regain their losses, although there was a significant disparity of performance across individual funds.

Table 5.9
Average net rates of return of the mandatory private pension funds, 2008–2009 (%)

Portfolio	Period		
	2008	2009	2008–2009
Classical	–7.5	11.9	4.0
Balanced	–13.7	16.2	0.4
Growth	–18.1	22.1	–0.1

Source: Hungarian Financial Supervisory Authority (HFSA).

5.3.2.4. Administrative efficiency

Administrative fees were initially high due to the set-up costs of the new system, but now only recurrent operational and management costs are charged. Table 5.10 presents the administrative fees of the mandatory private pension funds from 2002 to 2009. One positive trend is that the administrative fees, measured as a proportion of the assets managed, have decreased from about four percent to one-and-a-half percent, although the reduction has been disproportionate and unsatisfactory.

Table 5.10
Administrative fees of the mandatory private pension funds, 2002–2009

Year	2002	2003	2004	2005	2006	2007	2008	2009
Average administrative fees per member (HUF/member/year)								
Operational	6,017	7,629	4,762	5,058	5,321	4,735	7,320	5,907
Assets management	2,983	4,077	2,727	3,704	4,332	3,870	4,553	4,566
Total	9,000	11,706	7,489	8,761	9,652	8,604	11,874	10,473
Administrative fees as a percentage of the assets' value								
Operational	2.04	1.91	1.59	1.21	1.01	0.77	1.13	0.82
Assets management	1.01	1.02	0.82	0.89	0.82	0.63	0.70	0.63
Total	3.05	2.93	2.41	2.10	1.83	1.39	1.83	1.45
Operational fees as a percentage of annual contributions								
	6.45	5.90	5.42	5.24	5.11	6.23	4.83	5.04

Source: Hungarian Financial Supervisory Authority (HFSA).

In 2007, the largest share (43 percent) of administrative fees went to administration and accounting, followed by 21 percent for marketing and commissions, 15 percent for personnel costs, 12 percent for supervision and the guarantee fund, and 9 percent to other areas.

According to current regulation, at least 95.5 percent of contributions must be credited to the members' individual accounts, while 0.8 percent of contributions are set aside in various contingency or liquidity reserves to cover any unforeseen expenses that may arise. The remaining 3.7 percent are used to cover the operational and management costs of the fund. In reality, however, the administrative costs have never stayed within the threshold of 3.7 percent of contributions. The difference has been covered through the financial assistance of sponsors. The introduction of the three portfolio scheme in 2008 increased administrative costs significantly, but had no apparent effect on asset management fees. It should also be noted that there is no evidence of economies of scale concerning administrative fees; the per capita costs for large funds are almost the same as for smaller funds.

In 2004, a 0.8 percent limitation was placed on asset management fees. Major asset managers keep their fees at or very near the maximum, however, which is high compared to the asset management fees in other European countries.

5.3.2.5. Payment phase

Upon retirement, a member can purchase annuities or receive lump-sum benefits from the balance in their individual account. According to the law, retiring members with 15 years of membership or more may purchase the following types of annuities:

- single life annuities;
- single life annuities with a guarantee period;
- single life annuities with fixed-term survivors' benefits; or
- joint life annuities.

Pension funds can provide annuities or purchase them from insurance companies. Due to the complex requirement of providing indexed unisex annuities, however, no private pension fund or insurance company is willing to offer annuity services under such conditions. Therefore, during the accumulation phase, individual accounts simply reflect personal savings, and members essentially belong to an investment association not significantly different from a standard mutual fund. Only at retirement will members become part of an insurance pool, thus sharing in the mortality risk.

In 2010, only three years before the appearance of annuity recipients, the Government set forth two proposals to provide inflation-proof unisex annuities. The first proposal would allow members to transfer their final balance to the Government institution, most likely the Central Administration of National Pension Insurance, which would provide annuities indexed in line with price increases. The second proposal would transform pension funds into specialized insurance institutions which provide non-indexed unisex life annuities. These proposals were sent to the Constitutional Court in 2010. Hence, the Government regulation on the benefit payout phase, including the rules for the provision of annuities, has not been issued yet.

If a member of the mandatory private pension funds becomes disabled before reaching the retirement age, the disabled member can either (i) purchase annuities with the balance in their individual account and receive a 25 percent reduced social security disability pension, or (ii) transfer their balance to the social security pension system and receive a full social security disability pension. In practice, the second option results in higher benefits in almost all cases.

Similarly, if a member of the mandatory private pension fund dies before reaching the retirement age, their survivors can either (i) receive the final balance in lump sum and receive a 25 percent reduced social security survivors' pension, or (ii) transfer the balance to the social security pension system and receive a full social security survivors' pension.

5.3.2.6. Assessment of the implementation of the second-pillar system

After launching the second-pillar pension system, there has been heated debate amongst pension experts over the rationale of the reform. Advocates claim that a properly implemented system could, in the long run, meet expectations while simultaneously reducing the risks under the State pension system, justifying the difficulties and high costs being incurred during this transition period. Opponents assert that this reform does not satisfactorily improve the fairness, coverage, financing, and transparency of the current pension system and fails to provide a solution to Hungary's demographic problems. In the meantime, the reform has resulted in a growing deficit in the State pension system, which must be covered by the State budget.

On some key points, however, there is a great deal of agreement.

- The private pension funds performed much worse than expected over the first 12 years of their implementation, even if the negative impacts of the financial crisis were not taken into consideration. There is significant room for improvement in the operation of the funds, and the measures taken recently (such as the introduction of cost limits, centralized collection, and multiple portfolios) are only a partial solution.
- A large concentration of investments in domestic Government bonds is contrary to risk diversification. This investment strategy, in the long run, does not provide enough advantages as compared to its transition costs.

Table 5.11 compares the estimated replacement rates for an average worker (i.e. a worker who earns the average wage throughout their career). The main assumptions underlying these estimates are as follows:

- For the social security pension, a new pension formula which is due to be introduced in 2013 has been assumed.
- The members of the mandatory private pension system will receive 75 percent of the social security pension as calculated by the new formula, plus single life annuities purchased with the funds from their individual account.
- It has been assumed that the growth rate of real wages will be zero percent (i.e., wages will increase in line with prices), and that the tax rate of pensions will be 16 percent.

Table 5.11 shows that if the real rate of return on investments is zero percent or less, then the mixed pension system will produce smaller pensions than the social security system. On the other hand, if there is a positive real rate of return on investments in the long-term (approximately more than one percent per annum), the mixed system could yield a higher pension than the social security system[11].

11 The estimates are different for higher income groups. For instance, if the ceiling of the pensionable income is kept at three times the average gross salary, then the expected replacement rate of the social security pension of a worker who earned more than five times the average gross salary is 39.6 percent for a 40-year insurance period.

As seen earlier, most mandatory private pension funds failed to achieve positive real rates of return between 2000 and 2009. In addition, those members who enrolled in mandatory private pension funds lost 25 percent of their social security pension benefits for their whole insurance period (including the period prior to 2008). For these members, even a three percent real rate of return is insufficient to compensate the losses they incurred from switching from the social security pension system.

Table 5.11
Comparison of estimated replacement rates for the average worker
(percentage of the reference salary)

Insurance period (years)	Social security pension	Social security pension for members of mandatory private pension funds	Total pensions of the mixed system	
			Real rate of return 0%	Real rate of return 3%
15	19	14	19	21
20	33	25	32	34
25	41	31	39	43
30	50	37	47	53
35	58	43	55	63
40	66	50	62	73

Source: Matits, 2010.

5.3.3. Voluntary pension funds

In Hungary, the membership and assets of the voluntary private pension funds are less than one-third of those of the mandatory pension funds, and have only achieved a very moderate increase over the past ten years (see Table 5.12).

Occupational pension schemes, which are included in employment contracts, are not typical in Hungary. Only a small part of employers undertake any commitment to pay voluntary contributions into a scheme.

The continual changes being made to Government policy also led to low participation in the voluntary pension system. In 1995, the State allowed employers to deduct contributions for voluntary pension funds from their tax bases. In 2009, the maximum tax deduction amount was lowered to half of the minimum wage per employee. Although one-third (one half in the first four years) of employees' contributions are tax deductible up to HUF 100,000 per year, this limit has been fixed since 1993. Furthermore, the Government introduced a 25 percent tax on the pension contributions paid by individuals in 2010. These gradual decreases in tax allowances have unquestionably inhibited the development of the voluntary pension funds in Hungary.

Table 5.12
Basic data on the voluntary private pension funds, 2000–2009

Year	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Number of funds	93	89	89	82	75	76	69	68	66	63
Members (in thousands)	1,078	1,138	1,146	1,208	1,249	1,293	1,358	1,385	1,370	1,328
Contributions (in billion HUF)	54	60	67	73	78	86	93	100	100	91
Payments (in billion HUF)	7	12	14	17	31	56	58	72	94	88
Value of assets (in billion HUF)	224	292	358	434	512	590	661	744	749	756
Assets as a % of GDP	1	2	2	2	3	3	3	4	4	4

Source: Hungarian Financial Supervisory Authority (HFSA).

As shown in Table 5.13, the total administrative fees of the voluntary pension funds are slightly lower than those of the mandatory pension funds. On the one hand, the asset management fees of the voluntary funds are more than 10 percent lower than the mandatory funds, due possibly to the fact that the voluntary sector is more competitive than the mandatory sector. On the other hand, operation costs related to contributions were higher in 2009 for the voluntary funds than for the mandatory funds. This is likely a consequence of higher fixed costs and much lower contributions to the voluntary funds.

Table 5.13
Comparison of administrative fees of the mandatory and voluntary private pension funds, 2002 and 2009

Year	2002		2009	
	Mandatory Funds	Voluntary Funds	Mandatory Funds	Voluntary Funds
Management costs as a percentage of the average value of assets				
Operational	2.04	1.16	0.82	0.87
Asset management	1.01	0.84	0.63	0.56
Total	3.05	2.00	1.45	1.43
Costs of operation as a percentage of total contributions				
	6.45	5.60	5.04	7.16
Total management cost per member (HUF/Member/Year)				
Operational	6,017	3,300	5,907	4,908
Asset management	2,983	2,390	4,566	3,189
Total	9,000	5,690	10,473	8,097

Source: Hungarian Financial Supervisory Authority (HFSA).

5.3.4. Adequacy of benefits

As already noted, no annuity payments will be made from the second pillar until 2013. Therefore, the analysis of pension benefits in this section concerns only those from the social security pension.

As shown in Table 5.14, the average pension covered 67.4 percent of the average net wage in 2010. This level was 62 percent in 2000 and decreased to around 60 percent in 2002–2003. However, partly due to the 13th month pension introduced in 2003, the average pension began to increase in 2004 and reached 71.5 percent in 2008. Then, due to cutbacks in the 13th month pension, the average pension in comparison to the average net wage decreased in 2009 and 2010.

Table 5.14
Ratio of the average pension to the average net wage, 2000–2010

Year	Average pension (HUF/month) (1)	Average net wage (HUF/month) (2)	Ratio (%) (1) / (2)
2000	34,595	55,785	62.0
2001	40,269	64,913	62.0
2002	46,825	77,622	60.3
2003	53,386	88,753	60.2
2004	59,815	93,715	63.8
2005	67,098	103,149	65.0
2006	73,790	110,951	66.5
2007	79,329	114,282	69.4
2008	87,452	122,267	71.5
2009	86,418	124,086	69.6
2010	89,386	128,428	67.4

Source: Central Administration of National Pension Insurance (ONYF), Statistical Yearbook of the Central Administration of National Pension Insurance, 2010.

Table 5.15 looks at the number of pensioners and the average pension by sex, age and benefits in 2008, and Figure 5.2 depicts the distribution of old-age pensions in 2008. The following observations are made:

A large majority of the elderly population receives pensions. In 2007, the number of pensioners was 85 percent of the population aged 62 years and older.

In total, 35.6 percent of pensioners are younger than 62 years. For old-age pensions, 15.2 percent of pensioners are younger than 62 years, since the average age of newly-awarded pensioners is still below 60 years. This has been increasing, however, due to increases in the retirement age and stricter qualifying conditions for early retirement.

There is a considerable difference in the average pensions of men and women. The average pension for women (excluding survivors' pensions) is 15 percent lower than the average pension for men.

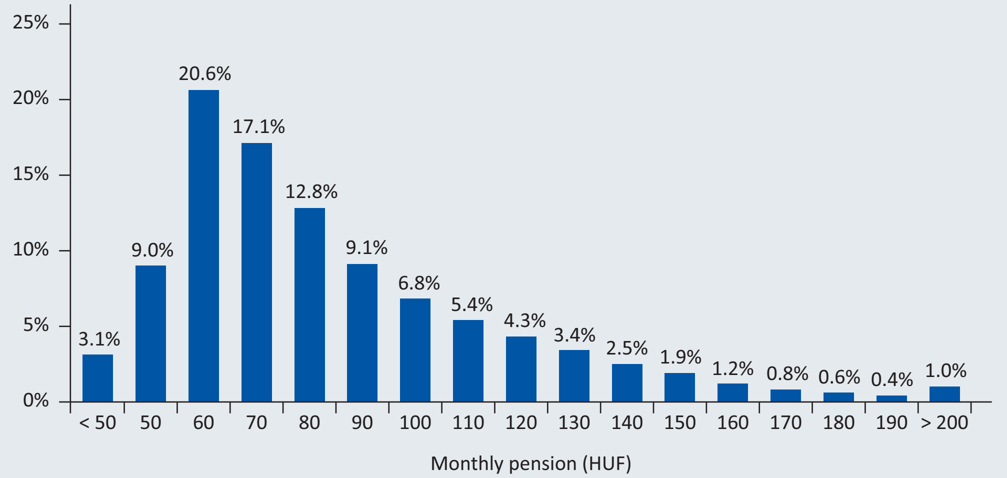
Table 5.15
Number of pensioners and the average pension by sex, age and benefits, 2008

	Number of pensioners			Average pension (HUF/month)			Average pension as a % of the average net wage		
	Below 62 years	62 years or older	Total	Below 62 years	62 years or older	Total	Below 62 years	62 years or older	Total
Males									
Old-age	99,431	542,758	642,189	114,557	87,274	91,498	108.9	82.9	86.9
Invalidity	313,756	179,600	493,356	53,743	75,335	61,603	50.6	70.9	58.0
Survivors'	56,662	471	57,133	30,595	32,089	30,608	28.9	30.4	29.0
Others	24,254	985	25,239	73,271	46,951	72,243	68.9	44.1	67.9
Total	494,103	723,814	1,217,917	64,284	84,220	76,133	60.8	79.6	72.0
Females									
Old-age	162,293	911,833	1,074,126	87,857	74,220	76,280	82.9	70.5	72.5
Invalidity	344,738	182,356	527,095	44,620	68,332	52,824	42.2	64.7	50.0
Survivors'	82,497	112,987	195,484	33,600	56,709	46,957	31.5	53.1	44.0
Others	4,571	34,634	39,205	23,728	21,621	21,867	22.8	20.8	21.0
Total	594,099	1,241,811	1,835,910	52,248	70,295	65,261	49.6	66.8	62.0
Both sexes									
Old-age	261,724	1,454,591	1,716,315	98,000	79,091	68,524	93.1	75.1	64.8
Invalidity	658,494	361,956	1,020,451	48,966	71,807	57,683	46.2	67.8	54.4
Survivors'	139,159	113,458	252,617	32,376	56,607	43,259	47.9	53.0	40.6
Others	28,825	35,619	64,444	65,414	22,321	41,596	61.7	21.6	61.6
Total	1,088,202	1,965,625	3,053,827	57,713	75,422	69,112	54.7	71.5	65.5

Note: The data on average pensions do not include the 13th month pension.
Source: Central Administration of National Pension Insurance Hungary (ONYF).

In 2008, the average old-age pension was 85,100 HUF per month (less than 300 euro). However, 63 percent of pensioners receive pensions that are less than HUF 90,000. Of all old-age pensioners, 42 percent receive pensions that are less than the minimum wage. On the other hand, 6 percent receive pensions that are more than twice the minimum wage.

Figure 5.2
Distribution of old-age pensions, 2008



Source: Central Administration of National Pension Insurance (ONYF).

5.4. Expenditure and financing

5.4.1. Pension expenditure

As shown in Table 5.16, the ratio of the number of pensioners to the number of contributors (the system dependency ratio) of the Hungarian pension system has been more or less stable for the last ten years. It has been within the range from 51 to 59 percent, or, in reciprocal terms, from 1.7 to 1.8 contributors supporting one pensioner.

Table 5.17 shows an increasing trend of the pension expenditure as a percentage of GDP. In 2010, the pension expenditure equaled 10.6 percent of Hungary's GDP. The table also presents the transfers from the State budget to cover the deficit (not including transfers from the State budget that cover other obligatory pension expenses). The deficit of the social security pension system constitutes more than 10 percent of its expenditure. Since the deficit is caused by the diversion of contributions to the second-pillar pension system, it can be said to represent the transition costs associated with the introduction of the second-pillar system.

Table 5.16
System dependency ratio, 2000–2009

Year	Number of contributors (1)	Average number of pensioners (2)	System dependency ratio (%) (2) / (1)
2000	4,357	2,399	55.1
2001	4,341	2,380	54.8
2002	4,334	2,369	54.7
2003	4,350	2,353	54.1
2004	4,385	2,339	53.3
2005	4,423	2,345	53.0
2006	4,525	2,345	51.8
2007	4,715	2,743	58.2
2008	4,765	2,755	57.8
2009	4,889	2,733	55.9

Source: Central Administration of National Pension Insurance (ONYF), Statistical Yearbook of the Central Administration of National Pension Insurance, 2010.

Table 5.17
Pension expenditure and the deficit of the social security pension system, 1998–2010

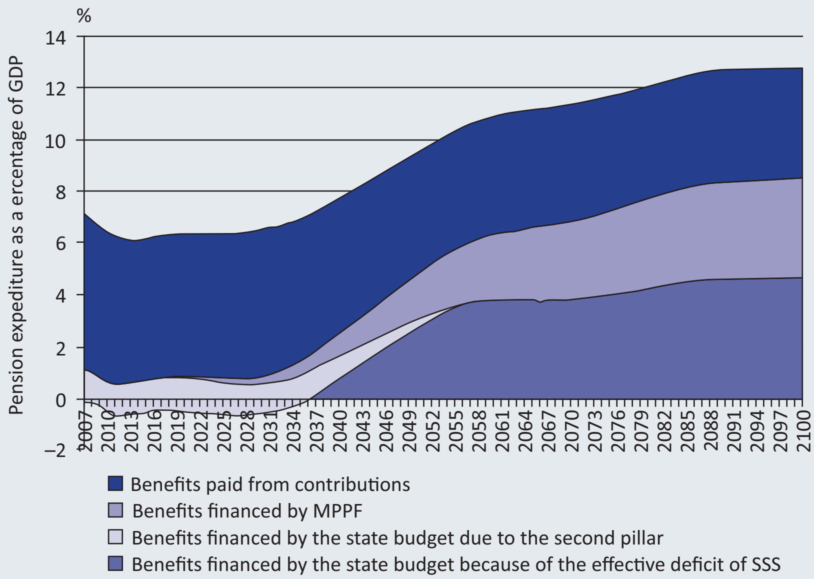
Year	Pension expenditure (in million HUF)	As a % of GDP	Transfer from the State budget to cover the deficit (in million HUF)	As a % of GDP
1998	781,849	7.8	20,100	0.19
1999	894,332	7.8	57,245	0.49
2000	995,867	7.4	63,231	0.47
2001	1,150,272	7.5	81,315	0.53
2002	1,376,489	8.0	88,665	0.51
2003	1,507,644	8.0	130,518	0.69
2004	1,678,885	8.1	168,097	0.81
2005	1,888,078	8.6	211,248	0.96
2006	2,084,238	8.8	240,881	1.02
2007	2,611,589	10.3	297,495	1.17
2008	2,891,679	10.9	330,333	1.23
2009	2,834,441	10.9	354,099	1.36
2010	2,887,822	10.6	310,317	1.14

Source: Central Administration of National Pension Insurance (ONYF), Statistical Yearbook of the Central Administration of National Pension Insurance, 2010; Changes in the Hungarian pension system in 2010–2011. Social Security Observer No. 14, 2011.

5.4.2. Future projections

In 2007, a Pension and Old-Age Roundtable comprised of pension experts was established to discuss measures to improve the fairness, transparency, financing, coverage, adequacy and sustainability of the Hungarian pension system by 2050. Its comprehensive report published in 2009 includes the projection of expenditure of the mandatory pension systems (i.e., the social security pension and the mandatory private pension funds) and the sources needed to finance them (see Figure 5.3). It should be noted that the projection is based upon the legislation in force in 2006.

Figure 5.3
The projected pension expenditure and its financing sources, 2007–2100



Source: Report of the Pension and Old-Age Roundtable on its Activities, 2009.

From these projection results, the following observations emerge:

- According to the demographic projections, the ratio of the population aged 65 years and older to the working age population aged 15 to 64 years (the old-age dependency ratio) is estimated to increase from 24.2 percent in 2010 to 57.6 percent by 2060.
- The current contribution rate, which is already 34 percent of the gross wage, is not sufficient to finance the growing pension expenditure. If the contribution rate remains fixed at its current level, contributions will cover less than 50 percent of the pension expenditure by 2100. Unless the contribution rate is almost doubled, the recurring deficit will have to be covered by the State budget.
- Financing the mixed pension system strains the State budget. Currently the transfers from the State budget are covering the deficit due to the diversion of contributions into the second pillar. The projection results show that without this diversion to the second pillar, the social security pension system would not incur any deficit and might even record a surplus from contributions until the mid-2030s. However, if the contribution rate remains unchanged, a proper deficit caused by insufficient contributions would gradually emerge and its magnitude would eventually increase from its current level of around 1 percent of GDP to 4 percent of GDP by 2100.

- An increasing number of elderly persons are in turn expected to receive inadequate pensions. It is estimated that the proportion of pensions less than the subsistence income level will increase from the current two percent to almost twenty percent by the mid-2040s, but would gradually decrease to three percent by 2100 as a result of a higher retirement age. Moreover, it is estimated that the number of elderly persons without a pension (due to the incompletion of the 15-year qualifying period) will increase to several hundred thousand by 2050.

5.5. Recent developments

5.5.1. Nationalization of the second-pillar pension system

Hungary was hit hard by the financial crisis. To restore its financial stability, Hungary accepted a 20 billion euro international financial package from the IMF, the European Union and the World Bank in October 2008.

In order to improve its fiscal balances, the Government made a number of changes to the pension system in 2009. Key changes include (i) gradually increasing the statutory retirement age from 62 years to 65 years, (ii) eliminating the 13th month pension, (iii) changing the pension indexation rules from the so-called Swiss indexation to indexation linked with GDP growth, (iv) freezing the minimum pension, (v) postponing the 2009 pension indexation to 2010, and (vi) tightening the eligibility conditions for early retirement pensions and disability pensions. These measures have already been explained in earlier sections of this chapter.

At the end of 2010, a series of major changes took place in the mandatory private pension system. First, the Parliament approved (on 25 October 2010) and the President signed into law (on 2 November 2010) the following two Acts.

Act No. 100 of 2010 on the Freedom of Choice of Private Pension Funds makes participation in the second pillar no longer compulsory. Members of the formerly mandatory private pension funds may return to the State pension system or stay voluntarily in the private pension funds.

Act No. 101 of 2010 on the Amendments of Mandatory Private Pension Funds Contributions stipulates that contributions to the second-pillar pension system are suspended for 14 months, from November 2010 to December 2011. Consequently, the whole pension contributions will be paid into the State pension system during this period.

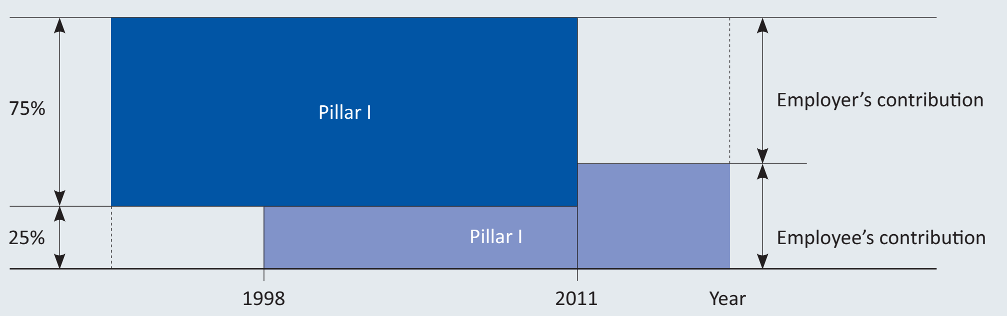
Soon after the enforcement of these two laws, the Prime Minister announced the *de facto* nationalization of the private pension funds.

On 13 December 2010, Act No. 154 of 2010 on the Pension Reform and Debt Reduction Fund and the Amendments to the Act on the Freedom of Choice of Private Pension Funds was adopted. According to this Act, all old-age savings of mandatory private pension fund members are automatically transferred to the Pension Reform and Debt Reduction Fund created under the State budget, unless members make a special declaration by the end of January 2011 stating that they choose to stay in the private pension fund.

The members who return to the State pension system will have their full State pension rights restored in exchange for the transfer of the balance accrued in their individual second-pillar accounts. Those members who decide to stay in the private pension system are permitted to pay the whole employees' contribution rate (10 percent since 2011) instead of the previous 8 percent to their private pension fund. However, they also will forego their rights to the social security pension that would accrue to them under the State pension system after 2011 (in addition to the 25 percent from the period prior to 1998), even though their employers' contributions (24 percent) will continue to be channelled to the State pension system (see Figure 5.4).

In the end, 96.9 percent of members with assets worth HUF 2.8 trillion (10 percent of GDP) have agreed to automatically switch back to the State pension system. Only 97,400 members, or 3.12 percent of all members, decided to remain in the private pillar, the majority of them young workers. Those members who remained perhaps believe that the long-term performance of the private funds will outperform the State pension, or that the legislation will eventually be reversed before they reach retirement age. Those private pension funds which have less than 2,000 members after the reform must cease operation and transfer their remaining portfolios to other funds. The process of switching back to the State pension system, including the transfer of assets from the private pension funds, is taking place during 2011.

Figure 5.4
Illustration of the accrual of pension rights for private fund members



The Hungarian Government has stated that the main reasons for the change of the system were negative consequences (although there were certain positive elements) of the implementation of the three-pillar pension system, in particular the poor investment performance of the second pillar and the growing deficit in the social security pension system caused by the transition costs associated with the introduction of the second pillar.

Under pressure to make structural deficit cuts, this reform also intended to reduce the Government debt and Government deficit by using the assets previously owned by the private pension funds to improve the State's fiscal situation in the short- and medium-term.

5.5.2 Concluding remarks

After the recent structural reform, the Hungarian pension system is steering towards a two-tier system, comprised of the social security pension system and the voluntary private pension system which provides supplementary pensions.

As a result of the virtual closing down of the second-pillar pension system, it is expected that the social security pension system shall be financed through contributions without any subsidy from the State budget at least in the coming few years[12]. However, in view of the expected long-term developments in the population structure and labour market in Hungary, there is growing pressure to increase the contribution rate in the future.

Although the Government announced that it would prepare the legislation necessary for the operation of the new pension system, no concrete measures have yet been enacted at the end of 2011. Based on indirect sources, future measures are likely to focus on extending the working life by further limiting early retirement and disability pensions (including the revision of the cost-sharing measures for disability pensions), and improving the transparency of the system by providing insured persons with information on their amount of contributions paid into the system. At the same time, the Government must develop measures to support the voluntary private pension funds so that they can play a larger role in supplementing the social security pension. As matters related to pensions are intimately related to demographic and employment trends, the necessary steps should be taken in advance to avoid abrupt policy changes.

The key challenges facing the Hungarian pension system are not exceptionally different from those facing other European countries. As widely acknowledged, there is no one-fits-all solution to these common challenges. One might say, however, that Hungary's unique solution represents yet another large-scale social experiment comparable to others which have been carried out in Hungary over the past twenty years.

12 Social assistance benefits will be removed from the social security pension fund and transferred to a State social assistance fund.

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6. Poland

Zofia Czepulis-Rutkowska

6.1. Overview

6.1.1. Introduction

This chapter aims to describe the old-age pension system of Poland as of 2010[1] and searches to explain its evolution.

The first Polish old-age pension scheme was established after World War I, in 1927, when Poland regained its independence. It was an insurance-based scheme largely based on the German model. The social insurance tradition was retained in Poland throughout the socialist period that followed World War II. In this respect, Poland was different from the Soviet Union and other socialist countries that adopted budgetary funded schemes. Although the Polish old-age pension scheme underwent multiple transformations after World War II, it kept its shape as an insurance-based, contribution-financed scheme throughout the period.

In 1991, the extraordinarily challenging circumstances facing Polish society during the early stages of economic transition necessitated the reform of the pension system. The political climate demanded an increase in benefits, as low benefit levels had led many pensioners into poverty under the system inherited from the communist era.

The reformed pension system provided high levels of benefits, especially in the early 1990s, with its generous pension formula and wage indexation. The system also granted pension rights quite generously. When the economic transition resulted in high unemployment, the pension system (i.e. both old-age and disability pensions) was used by workers as a way to exit the labour market. This resulted in a dramatic increase in the number of pensioners.

High benefit levels, coupled with an increased number of pensioners, resulted in the rapid growth of the pension expenditure. The pension expenditure was considered excessive in comparison with other important social expenditure, such as education and health care. It soon became evident that the pension system must be reformed in order to restore its sustainability.

Several reform proposals were therefore put forward for public debate. Most of them envisaged the introduction of a funded pillar. The following conclusions were reached during discussions on the new pension policy design:

1 In 2011, major changes were introduced to the old-age pension system. These recent changes are outlined in the last section of this chapter. The evolution of the pension system following these changes will be the subject of future research.

- The sustainability of the pension system should be secured by curtailing its generosity.
- A mixture of pay-as-you-go (PAYG) and funded pension systems would diversify financial risks and secure the rate of return in the long run.
- The defined-contribution scheme provides better incentives for persons to engage in formal employment and therefore expands the formal sector in the labour market.
- Introducing a funded pillar should mobilize resources in the capital market and promote the development of institutional investments in the domestic capital market.
- The resources accumulated by the pension funds should increase savings and contribute to economic growth.
- The pension reform provides an opportunity to address the issue of the long-term pension debt.

In 1999, a radical pension reform was introduced that changed the system that had been in force since 1991. The introduction of the new pension system required strong public support to overcome political and institutional resistance from interest groups and experts supporting the old scheme. The following factors were most important in contributing to the swift implementation of reform:

- the establishment of the Open Pension Funds prior to the adoption of the reform (which created new actors who were strongly supportive of the reform[2]);
- the organization of the reform process, in particular the establishment of the Government Plenipotentiary for Social Security Reform in 1996 as an administrative structure independent from the Ministries;
- the policy advice provided by international financial institutions, in particular the World Bank, which advocated introducing defined-contribution funded pension schemes;
- the guarantee to respect the acquired rights;
- the postponement of the implementation of certain regulations to later dates (such as the establishment of a benefit payment institution); and
- the informational and promotional campaign that advocated strongly for the new system.

6.1.2. The current system's structure

At present the following four basic old-age pension schemes are operating in Poland:

- the employees' scheme (covering the self-employed as well),
- the farmers' scheme,
- the pension scheme for uniformed services, and
- the judges and prosecutors' scheme[3].

2 The laws introduced prior to the 1999 pension reform include the Law of August 1997 on the organization and operation of pension funds, the Law of 22 August 1997 on employee pension programs and the Law of 25 June 1997 on applying the proceeds from the privatization of a portion of the State treasury assets for purposes connected with reforming the social insurance system.

3 Formally there was no pension scheme for judges and prosecutors, but the right to remuneration for periods of inactivity.

For historical reasons, different categories of employed and self-employed persons are covered by different pension schemes. The employees' scheme is by far the largest in terms of the number of participants and the amount of resources involved. The second largest scheme is the farmers' system. In view of its importance, this national report is primarily focused on the employees' scheme[4].

Currently, two employee schemes are functioning in parallel: the old scheme, which is of a temporary nature, and the new funded pillar, which was intended to entirely replace the old scheme. It should be noted, however, that in 2010 – at the initiative of the Ministry of Labour and Social Policy and the Ministry of Finance – significant modifications to the new scheme were introduced that aimed at the reduction of the funded pillar. These came into force in 2011.

The old pension system, implemented in 1991, covers insured persons born before 1949 and in principle does not admit any new entrants[5]. It is a defined-benefit, pay-as-you-go (PAYG) scheme financed by contributions and State budget allocations. Currently, the replacement rate of the old scheme is between 50 and 60 percent. The replacement rate is higher for persons with lower earnings because all pensioners retain a substantial minimum fixed amount (equivalent to 24 percent of the national average wage).

The new pension system, introduced in 1999, covers all persons born in or after 1949. The new pension system is comprised of the following three pillars:

- The first pillar is a mandatory, pay-as-you-go, defined-contribution pension system. It is administered by the Social Insurance Institution (Zakład Ubezpieczeń Społecznych, or ZUS). Two-thirds of contributions (or 12.2 percent[6] of the assessment base) are transferred into this scheme.
- The second pillar is a mandatory, funded, defined-contribution pension system. It is administered by private pension fund companies managing the Open Pension Funds. One third of contributions (7.3%[7] of the assessment base) are transferred into this scheme.
- The third pillar consists of various voluntary funded pensions run by private institutions. Public support is provided through individual retirement accounts and Occupational Pension Programmes.

Under the new pension system, the same total contribution rate is applied as it was under the old system. In the new system, however, the contributions are divided between the first and second pillars.

The farmers' pension scheme covers farm owners and their families. About 95 percent of its expenditure is financed through the State budget, although some contributions are paid into it as well. Eligibility for benefits is based on the farmers' individual contribution records. The scheme is administered by the Agricultural Social Insurance Fund (KRUS).

Pension schemes for the uniformed services and for judges and prosecutors are financed through the State budget. They are administered by the pension departments of their respective ministries.

4 There is a proposal to extend the employees' system to all categories of workers, although there is still no agreement between pension experts on this matter.

5 As an exception, miners continue to be covered by the old employees' scheme, but with more generous eligibility criteria and a more generous pension formula.

6 In 2011, it was increased by 5.0 percentage-points to 17.2 percent.

7 In 2011, it was decreased by 5.0 percentage-points to 2.3 percent.

The following list provides the key legislation governing the Polish pension system:

- the Law of 13 October 1998 on the social insurance system (consolidated text: Journal of Laws of 2007 No. 11, text 74 as amended);
- the Law of 17 December 1998 on pensions from the Social Insurance Fund (consolidated text: Journal of Laws of 2004 No. 39, Text 353 as amended);
- the Law of 21 November 2008 on funded old-age pensions (Journal of Laws No. 228, Text 1507);
- the Law of 28 August 1997 on the organization and operation of pension funds (consolidated text: Journal of Laws of 2004 No. 159, Text 1667 as amended);
- the Law of 30 April 2004 on pre-retirement benefits (Journal of Laws No. 120, Text 1252);
- the Law of 31 December 2008 on "bridge pensions" (Journal of Laws No. 237, Text 1656); and
- the Law of 20 December 1990 on the social insurance of farmers (consolidated text: Journal of Laws of 2008 No. 50, Text 291 as amended).

6.2. Coverage, compliance and collection

6.2.1. Coverage

Pension system coverage is compulsory and almost universal for all persons engaged in gainful activity. The system covers employees, self-employed persons of different types, and other categories of workers in the formal economy.

The compulsory employee pension insurance, administered by the ZUS, covers not only employees but also members of agricultural cooperatives, freelance workers, persons running non-agricultural businesses, members of Parliament, recipients of unemployment benefits, persons on child care leave and recipients of maternity allowances. When persons cease to be covered by the compulsory pension insurance, they can continue to be insured on a voluntary basis provided that they are not entitled to any other social insurance benefits.

The employees' scheme, as mentioned earlier, is comprised of both the old and new schemes. Affiliation with the scheme depends on the age of the insured person. Persons born before 1948 are to remain in the old scheme, while those born between 1949 and 1968 are assigned to the new scheme and are given the right to choose whether or not to participate in the funded second-pillar scheme. If they decide to opt out of the funded pillar, all of their benefits are calculated under the new first-pillar scheme.

The farmers' scheme, administered by the KRUS, covers farmers and the members of their households who work permanently on the farm and are not covered by any social insurance scheme. Pension insurance is compulsory for farmers with farms larger than one hectare. Otherwise they are insured on a voluntary basis.

The uniformed services – army, police and prison officers – have separate schemes which are similar in terms of coverage and benefit amounts. These groups are covered compulsorily and become eligible for pensions after 15 years of service irrespective of their age. The Pension Institution of the Ministry of Internal Affairs and Administration and the Army Pension Institution administer the uniformed services pensions.

In 2009, more than 14.5 million insured persons were registered with the ZUS (see Tables 6.1 and 6.2). The slight decrease in the number of insured workers from 2001 to 2003 was due to rising unemployment during that period. With employment increasing again after 2004, the number of insured persons has also increased, albeit at a slower pace following the economic crisis of 2008.

Table 6.1
Number of insured persons in the ZUS, 2001–2010

Year	Number of insured persons in the ZUS (in thousands)	Rate of increase (%)
2001	12,851	–1.6
2002	12,761	–0.7
2003	12,739	–0.1
2004	12,857	0.9
2005	13,131	2.1
2006	13,354	1.7
2007	14,075	5.4
2008	14,513	3.1
2009	14,535	0.2
2010	14,656	0.8

Source: ZUS, 2011. "Important information on social insurance".

Employees comprise the largest category of insured persons, followed by the self-employed. There was an increase in the number of self-employed workers particularly in 2008 and 2009. Anecdotal evidence suggests that this may be in part due to the fact that some employers asked their employees to switch their work status to self-employed in order to save on social security contributions and other labour costs. It should also be noted that the termination of self-employment contracts is not subject to the Labour Code.

Table 6.2
Number of insured persons in the ZUS by category, 2006–2009

Year	2006		2007		2008		2009	
	thousands	%	thousands	%	thousands	%	thousands	%
Total	10,290	100.0	14,075	100.0	14,513	100.0	14,535	100.0
Employees	10,290	77.0	11,043	78.5	11,341	78.2	11,079	76.2
Self-employed	2,186	16.2	2,197	15.7	2,335	16.1	2,516	17.4
Special contract	476	3.3	515	3.7	527	3.6	574	3.9
Others	65.5	0.3	60.7	0.5	60.6	0.5	49.5	0.3
Unemployed	499	3.1	215	1.6	231	1.6	319	2.2

Source: Social insurance institution data, 2010.

The number of insured persons in the farmers' system is around 1.5 million. The number is stable but has been decreasing slightly since 2007. For many years, the number of pensioners was greater than the number of insured persons under this scheme. However, the situation has been reversed since 2006, due mainly to a faster rate of decrease in the number of pensioners (see Table 6.3).

Table 6.3
Insured persons and beneficiaries in the farmers' pension system, 2000–2010 (in thousands)

Year	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Insured	1,452	1,502	1,560	1,589	1,540	1,582	1,615	1,598	1,574	1,570	1,535
Beneficiaries	1,887	1,842	1,798	1,755	1,709	1,662	1,586	1,508	1,456	1,426	1,375
Insured/ beneficiaries (%)	76.9	81.5	86.7	90.5	90.1	95.2	101.8	106.0	108.1	110.1	111.6

Source: www.krus.gov.pl.

As a rule, pension system coverage is based on participation in the formal labour market. One notable exception to this is the category of persons working under the civil code agreement. The economically inactive population are not compulsorily covered, except for persons receiving unemployment benefits. Proposals to introduce a citizen pension covering persons employed in the so-called "grey economy" were recently put forward by the Minister of Labour and Social Policy, although the introduction of such a pension system may face multiple obstacles. Discussions have recently begun on extending coverage to persons not currently covered by the law.

6.2.2. The informal economy and contribution evasion

The following are typical examples of how persons may avoid paying (in part or in full) their social insurance contributions:

- unregistered employment, which results in the non-payment of contributions;
- registered employment with understated remuneration on official insurance documents, allowing persons to pay contributions at the minimum contributory wage (with the difference between the actual and the reported remuneration paid in cash through informal agreement between the employer and the employee);
- false reporting of employment contracts, for example referring to persons as "self-employed" even though they are actually involved in an employment relationship which should be subject to the Labour Code, or signing civil code agreements instead of employment contracts;
- joining social insurance systems in other European Union countries which apply lower mandatory contribution rates.

The results of research on employment in the grey economy in Poland are diverse and inconclusive.

Recent research[8] shows that grey economy employment in transitional countries is higher than in developed countries, caused by relatively high social insurance contributions and weak control institutions in

8 In Cichocki S., Tyrowicz J. 2010. "Źródła zatrudnienia nierejestrowanegp w Polsce" (Sources of unregistered employment in Poland), Bank I Kredyt No. 41, p. 1.

the labour market. By economic sector, employment in the grey economy is the highest in agriculture, trade, and tourism, where business is seasonal. For about 40 percent of persons working in the grey economy, their grey economy employment constitutes their main source of income.

Research on the Polish labour market carried out by the Central Statistical Office considers "informal employment" to describe only those situations where informal employment is the main source of income for the worker involved. Following this approach, only 1 to 2 percent of the active population is engaged in informal employment.

However, research[9] conducted in 2008 shows that 1.3 million persons, i.e. 10 percent of the employed population, are employed in the grey economy, the majority of whom rely on their grey economy income as their main income. The most common forms of grey economy employment are household help, agriculture, construction, and services. Unregistered employment is also more prevalent in small and medium-sized businesses than in larger firms. Research indicates that the grey economy accounts for between 15 percent (as estimated by the Central Statistical Office) and 26 percent (as estimated by Friedrich Schneider) of the national income[10].

Currently there is no conclusive research analyzing the impact of the financial crisis on the incidence of informal employment. There is, however, anecdotal evidence that the recent crisis has indeed contributed to expanding the grey economy.

6.2.3. Collection of contributions and wages

Pension contributions are collected by the ZUS and the KRUS. It should be noted, however, that 95 percent of the revenue of the farmers' system is financed through the State budget. The pension systems for the uniformed services and for judges and prosecutors are entirely financed by the State budget.

Table 6.4 presents the share of the total wage bills in GDP. This share has increased in recent years, although it has not again reached the level of 30 percent that was seen in 2000.

Table 6.4
Total wage bills and the gross domestic product, 2000–2009

Indicators	2000	2005	2007	2008	2009
Gross Domestic Product (in million PLN)	744,378	983,302	1,176,737	1,272,838	1,343,657
Wage bills (in million PLN)	224,357	259,739	314,737	362,717	384,767
Wage bills as a % GDP	30.1%	26.4%	26.7%	28.5%	28.6%

Source: Statistical Yearbook 2010, Table 9 (p. 574), Table 1 (p. 177).

9 Research carried out by the Ministry of Labour and Social Policy and the CASE Foundation.

10 Błaszczak, A. 2010. "Wyciągnać biznes z szarej strefy" (Drawing business out of the grey sphere), rp.pl.

Table 6.5 presents the distribution of the gross wages of paid employment in October 2008. The average gross wage was 3,232 PLN for both sexes, 3,557 PLN for men and 2,893 PLN for women. The percentage of employed persons receiving wages below the average was 65.4 percent for both sexes, 60.3 percent for men and 70.6 percent for women.

Table 6.5
Distribution of the gross wages of paid employment, October 2008 (%)

Wages (PLN/month)	Total	Men	Women
Up to 1,616	18.6	16.2	21.0
1,616–2,262	20.1	17.2	23.1
2,262–2,909	18.8	18.9	18.7
2,909–3,878	19.6	19.9	19.3
3,878–5,171	11.9	13.4	10.5
5,171–6,464	4.8	6.0	3.5
6,464–9,050	3.6	4.7	2.5
9,050 and more	2.6	3.7	1.4
Total	100.0	100.0	100.0

Source: Statistical Yearbook 2010, Table 6 (p. 182).

6.3. Benefits

6.3.1. Qualifying conditions and the retirement age

Under the old system, old-age pensions are provided to men at 65 years of age with at least a 25-year insurance period[11] and to women at 60 years of age with at least a 20-year insurance period. In special circumstances, there are rules that provide reduced pension rights for men with 20-year insurance periods and women with 15-year insurance periods, provided that they have reached the statutory retirement age.

In the new pension system, the only condition necessary to qualify for an old-age pension is the attainment of the statutory retirement age of 65 years for men and 60 years for women, respectively. The payment of pensions under the new system began in January 2009, when women born after 31 December 1948 reached 60 years of age. However, to be eligible for the minimum pension, one must accumulate an insurance period of 25 years for men and 20 years for women with an assessment base no less than the minimum wage.

There is an ongoing debate in Poland as to whether or not the statutory retirement age for women should

11 Insurance periods consist of contributory and non-contributory periods. The upper limit for a non-contributory period is one-third of the insurance period for persons to become eligible for benefits.

equal that of men. In the 1999 reform, a retirement age of 62 years for both men and women was initially proposed. However, this proposal faced strong opposition, particularly from trade unions, and was withdrawn. Recently, the Prime Minister's Advisory Board put forward a proposal to gradually raise the retirement age for women to 65 years over a ten-year period. The Minister of Labour and Social Policy, although not against this proposal, argued that it would first be necessary to enhance employment opportunities for women.

Table 6.6 presents the age distribution of newly awarded old-age pensioners in 2010. Although the statutory retirement age is 65 years for men and 60 years for women, the average effective retirement age is 60 years for men (five years premature) and 59 years for women (one year premature). These differences between the statutory and the average effective retirement ages are ascribed to bridging pensions, and to the fact that certain groups of workers (such as miners) can retire early. It should also be noted that disability pensioners become old-age pensioners upon reaching the retirement age.

Table 6.6
Age distribution of newly awarded old-age pensioners, 2010 (%)

Age	Men	Women	Both sexes
Total	100.0	100.0	100.0
49 and under	8.2	0.3	4.4
50–54	5.0	2.6	3.9
55–59	2.9	32.3	17.1
60–64	58.4	63.2	60.7
65 and over	25.5	1.6	13.9
Average age (years)	60.2	59.0	59.6

Source: ZUS, 2011. "Important information on social insurance".

As can be seen from Table 6.7, the life expectancy at birth was 72.1 years for men and 80.6 years for women in 2010. In the same year, the life expectancy at age 65 was 15.1 years for men and 19.4 years for women, and the life expectancy at age 60 was 18.3 years for men and 23.5 years for women. Hence, the difference in the life expectancy between men and women at their respective statutory retirement ages is 8.4 years. This difference is due to the longer life expectancy of women and the lower retirement age for women. The equalization of the retirement age for both sexes has been, as mentioned above, a recurring topic in the pension reform debates.

The statutory retirement age for farmers' pensions is also set at 65 years for men and 60 years for women. The obligatory insurance period is 25 years. It is possible to start receiving pensions five years earlier with reduced amounts.

In the pension system for uniformed service members, the required service period is only 15 years.

Table 6.7
Life expectancies at birth, at age 60 and at age 65, by sex, 2000–2010 (in years)

Years	Men			Women		
	At birth	At age 60	At age 65	At birth	At age 60	At age 65
2000	69.7	16.7	13.6	78.0	21.5	17.5
2005	70.8	17.5	14.4	79.4	22.7	18.6
2006	70.9	17.7	14.5	79.6	22.8	18.8
2007	71.0	17.7	14.6	79.7	22.9	18.9
2008	71.3	17.9	14.7	80.0	23.1	19.0
2009	71.5	17.9	14.7	80.1	23.2	19.1
2010	72.1	18.3	15.1	80.6	23.5	19.4

Source: Central Statistical Office. "Life tables of Poland 1990-2010".

6.3.2. Old-age pension formula

The old system utilizes a defined-benefit pension formula, whereas the new system relies on a defined-contribution pension formula.

Under the old system, old-age pensions are calculated as the sum of:

(i) 24 percent of the base amount (the "social element");

(ii) 1.3 percent of the assessment base for each contributory year; and

(iii) 0.7 percent of the assessment base for each non-contributory year[12].

Here, the base amount is the average wage in the economy[13], whereas the assessment base is the average revalorized individual wage up to 2.5 times the average wage.

Under the new system, the public old-age pension is calculated by dividing (i) the final balance in one's individual account (consisting of pension contributions and one's initial capital with interest) by (ii) the life expectancy at the retirement age using the unisex life tables.

In order to take account of the contributions made before 1999, the so-called "initial capital" is calculated for insured persons who were born after 31 December 1948 and were insured before 1 January 1999. The initial capital is calculated as the product of the hypothetical old-age pension that the person would have received on 1 January 1999 according to the old rules and the life expectancy of both sexes at the age of 62 in that same year. The initial capital amount is credited to their individual account.

The balance in one's individual account earns interest equalling the rate of increase in the wage bill subject to contributions, established by the Ministry of Labour and Social Policy.

12 Non-contributory periods are taken into account for up to one-third of the total contributory period.

13 In March 2009, the base amount was 2,578.26 PLN.

The minimum pension was initially set at 35 percent of the average wage in 1990 and was subsequently increased to 39 percent in 1994. However, as pensions have been indexed according to prices since 1996, the percentage of the minimum pension relative to the average wage has decreased. In March 2010, the minimum pension was 706.3 PLN, which was 21.9 percent of the average wage (41.5 percent of the average old-age pension or 53.6 percent of the minimum wage). The maximum old-age pension is 100 percent of the assessment base, which is subject to the ceiling of 2.5 times the base amount.

The farmers' pension consists of a contributory part and a supplementary part. To calculate these amounts, the basic farmers' pension is first calculated in a similar manner as the minimum pension under the employees' system. In 2010, the basic pension equaled 706 PLN. The contributory part is 1 percent of the basic pension for each year of insurance. The supplementary part equals 95 percent of the basic pension if the insurance period is less than 20 years. The supplementary pension rate is decreased by 0.5 percentage-points for each year beyond the 20-year threshold, although it cannot be lower than 85 percent of the basic pension. Since contributions from farmers are typically low[14], the contributory part is small. However, thanks to the supplementary part, the average farmers' pension is more or less comparable to the basic minimum pension.

Uniformed service pensioners who have completed 15 years of service can receive 40 percent of their income earned during their last year of service prior to retirement. An additional 2.6 percent will accrue for each year of service in this work category in excess of 15 years. Hence, for an average worker with an insurance period greater than 17 years, this formula results in a higher pension than if the formula of the employees' system was applied. The pensions for attorneys and judges are calculated as 75 percent of their earnings prior to retirement.

Concerning tax treatment, old-age pensions in Poland are subject to personal income tax.

6.3.3. Disability and survivors' pensions

Disability and survivors' pensions are calculated using the old-age pension formula of the old system[15].

There are three categories of disability pensions: those compensating for (i) a complete incapacity for work with a loss of independent existence, (ii) a complete incapacity for work, and (iii) a partial incapacity for work. The disability pension for persons with a partial incapacity for work equals 75 percent of the pension for persons with a complete incapacity for work.

In addition, persons meeting the qualifying conditions for the disability pension and who have received an affirmative decision on the advisability of their vocational retraining due to their incapacity to work in their previous occupation are eligible for a training pension. The training pension equals 75 percent of the assessment base.

14 The monthly contribution for the majority of farmers (those farming less than 50 hectares) was around 70 PLN in 2010. Farmers with larger-sized farms pay much higher contributions. The average contributions are 156 PLN for farm areas of 50–100 hectares, 240 PLN for 100–150 hectares, 325 PLN for 150–300 hectares and 410 PLN for more than 300 hectares.

15 The disability pension formula relies on a hypothetical number of insurance years, equaling the number of years from the occurrence of one's disability until 65 years of age.

The amount of a survivors' pension for one survivor equals 85 percent of the deceased's pension that accrued before death. For two or three survivors, the rate is increased to 90 percent and 95 percent, respectively.

Following a long debate on the reformation of the disability pension, a new law was proposed that would make the disability pension formula more similar to the old-age pension formula under the new system. If enforced, this law would result in lower disability pensions, particularly for lower income persons.

The amount of the minimum disability pension for persons with a complete incapacity for work and the amount of the survivors' pension are the same as the minimum old-age pension, which was 706.29 PLN per month in 2010. The amount of the minimum disability pension for persons with a partial incapacity for work and the amount of the training pension was 543.29 PLN per month.

6.3.4. Early retirement pensions

Early retirement pensions can be claimed by men at 60 years of age who have accumulated 35-year insurance periods and women at 55 years of age with 30-year insurance periods. Some occupational groups employed under special conditions (such as miners, uniformed services, judges and prosecutors) or of a certain pre-defined nature may retire earlier and receive a bridging pension until reaching the statutory retirement age.

The original aim of the 1999 reform was to eliminate all possibilities for persons to retire before reaching the statutory retirement age. However, a transitional period for early retirement was introduced for certain groups of people working under special conditions or in occupations of a strenuous nature. These groups can receive a bridging pension for the period between their early retirement and the statutory retirement age. Employers are obligated to pay an extra 1.5 percent contribution into a special Bridging Pension Fund for employees entitled to the bridging pension.

The bridging pension was introduced to gradually limit early retirement while still respecting the pension rights of workers that had already accrued. Persons who were born after December 1948 and were employed under special conditions before 1 January 1999 qualify for a bridging pension. In addition, persons qualifying for a bridging pension must (i) attain 60 years of age for men and 55 years of age for women, and (ii) complete a 25-year insurance period for men and a 20-year period for women (not including insurance periods from the farmers' pension scheme), at least 15 years of which was performed under special conditions or was of a special character.

While the scope of "special conditions" was originally defined broadly, this changed in 1999 when bridging pensions were introduced. According to the new definition, work under special conditions is related to the risk factor associated with the nature of the job or its occupational hazards, which are more likely with age to cause the deterioration of one's health and therefore limit one's ability to work. Also included are works of a special nature, defined as demanding special psychophysical efficiency that decreases with age. The category of workers working under special conditions has diminished in size because of these changes.

Pre-retirement allowances are available to certain categories of unemployed elderly persons. Pre-retirement allowances are payable to persons close to the statutory retirement age who have accumulated a sufficient insurance period[16] and have been registered as unemployed for at least six months due to the termination of their contract by an employer.

In the past, disability pensions and unemployment benefits were used as an alternative to early retirement. However, this practice was curtailed when their eligibility criteria were tightened and stricter procedures were applied to the granting of benefits. After the 1999 pension reform, the issue of the possible misuse of disability pension benefits resurfaced in public discussion. It was noted that since the new disability pension formula yields a higher amount, there is a tendency for persons to claim disability pensions instead of old-age pensions. Such incentives would diminish if the proposed law amending the disability pension formula to be similar to the new old-age pension formula was adopted.

6.3.5. Indexation of pensions

Currently, pensions are indexed in line with increases in the Consumer Price Index in the preceding calendar year and at least 20 percent of the real average wage growth observed in the preceding calendar year.

Pension indexation is carried out on 1 March every year. Benefits subject to indexation include old-age pensions, disability pensions, survivors' pensions, pre-retirement benefits and allowances, supplements and benefits payable, as well as periodically-funded pensions and bridging pensions. Minimum pensions (including social pensions) are also subject to indexation. Table 6.8 shows the rates of indexation from 1999 to 2010.

Table 6.8
Rates of indexation of pensions from the ZUS, 1999–2010

Year	Rates of indexation (%)
1999	8.7
2000	4.3
2001	12.7
2002	0.5
2003	3.7
2004	1.8
2005	No indexation
2006	6.2 / 2.3
2007	No indexation
2008	6.6 / 4.2
2009	6.1
2010	4.6

Note: In 2006 and 2008, two rates were applied for indexation. The lower rate was applied to benefits granted within 12 months of the previous indexation, while the higher rate was applied to benefits granted earlier. Following the law at the time, pensions were not indexed in 2005 and 2007, as the price increase was less than 5 percent. In 2007, cash allowances were paid to supplement low pensions.

16 To qualify for a pre-retirement allowance, one condition is that men must reach 61 years of age and have a 25-year insurance period and women must reach 56 years of age and have a 20-year insurance period. Additional conditions must also be fulfilled.

There have been frequent changes made to the indexation method over the last 20 years. From 1 December 1991 to 31 December 1995, all pensions (including the minimum pension) were indexed according to wages. Since 1996, pensions have been indexed based on expected price increases[17].

In 2003 an *ex post* indexation was introduced, taking into account the price increases over the previous year plus at least 20 percent of the difference between the wage increase and price increase. In 1999 and 2000, 15 and 20 percent of the difference between the wage increase and price increase was added to the indexation, respectively. In 2004, it was decided that indexation would be carried out only if prices had increased by at least 5 percent, but that indexation would occur no less than every three years. The current indexation method has been in place since 7 September 2007.

6.3.6. Adequacy of pensions

Table 6.9 summarizes the number of pensioners and the average pension by type. In 2009 there were about 7.5 million pensioners receiving benefits from the ZUS. The total expenditure related to these benefits amounted to 147.9 billion PLN.

Table 6.9
Number of pensioners and the average pension by type, 2010

Type of pension	Number of pensioners (in thousands)	%	Average monthly pension (in PLN)	% of the net average monthly earnings*	% of the gross average monthly earnings
Total	7.491	100.0	1588.9	56.3	49.3
Old-age	4.996	66.6	1698.4	60.2	52.6
Disability	1.228	16.5	1.261.4	44.7	39.1
Survivors'	1.267	16.9	1.475.1	52.3	45.7

* Net earnings are calculated by deducting the contributions paid by the insured person from their gross wage.
Source: ZUS. 2010. "Important information on social security 2010". Concise Statistical Yearbook 2011, Table 3 (p. 97).

Table 6.10
Average pensions for farmers and soldiers by type, 2008

Type of pension	Farmers' pensions		Pension system for soldiers	
	Average monthly pension (in PLN)	% of the average gross monthly earnings	Average monthly pension (in PLN)	% of the average gross monthly earnings
Old-age	896.25	25.3	2,509.72	85.3
Disability	679.37	23.1	2,495.74	84.8
Survivors'	886.19	30.1	2,144.91	72.9

Source: Statistical Yearbook 2010, Table 2 (p. 178).

17 Law of 25 September 1995.

Table 6.10 presents the average pensions for farmers and soldiers for comparison. The average old-age pension for farmers in 2008 was 44 percent lower than the one for employees, while the average old-age pension for soldiers was 57 percent higher than the one for employees.

Although the farmers' pension appears to be much lower than the employees' pension, it must be remembered that farmers typically do not pay personal income tax and that their social insurance contributions are quite low. Furthermore, the cost of living in rural areas is lower than in urban areas. Thus farmers' pensions are actually not disadvantageous as compared to employees' pensions. Anecdotal evidence suggests that a pensioner in a farmer's household is an important source of cash income for that household.

On the other hand, the average old-age pension for soldiers is 57 percent higher than the one for employees.

Evaluating the adequacy of benefits leads one to question the definition and criteria pertaining to these benefits. How is adequacy to be interpreted? Which is more appropriate to apply, relative or absolute measures of adequacy? And which benefits are to be considered?

The adequacy of benefits is often considered in connection to poverty prevention and the maintenance of living standards. For old-age pensions, 50 percent of the average person's earnings is generally considered sufficient to prevent poverty. However, maintaining the living standard generally requires a benefit level that is above the poverty line.

In Poland, the average replacement rate is used to measure the benefit level. At the beginning of the 1990s, the average replacement rate for old-age pensions exceeded 70 percent. However, as documented in Table 6.9, the average replacement rate for old-age pensions declined to less than 55 percent of the average gross earnings in 2009. This decline is mainly due to the introduction of price indexation and the fact that disability pensions, which are on average lower than old-age pensions, automatically transform into old-age pensions after the pensioner reaches the retirement age.

A further reduction in the replacement rate is expected under the reformed scheme. According to various calculations, the replacement rate could fall to as low as 30 percent. The removal of the social element in particular (i.e. a fixed-rate component of the pension formula used in the old system) will negatively affect low-income persons. In view of the projected decline in the average replacement rate, social services for the elderly will need to be developed in order to maintain the adequacy of the system in terms of poverty prevention.

In addition to old-age pension benefits, health care and long-term care benefits play an important role in maintaining the quality of life for the elderly. Currently, the health care system is characterized by long waiting periods, particularly when persons are seeking specialists or hospital care. The long-term care system is underfinanced and fragmentary in character.

6.4. Mandatory funded pension

6.4.1. Basic structure

In 2010 there were 14.9 million members of the second-pillar Open Pension Funds (OPFs). Table 6.11 summarizes the sex and age composition of the OPF members.

Many factors have lead to this distribution. Young women tend to enter into the labour market slightly later than young men, and as a result there is a slightly lower proportion of young women in the OPFs. Additionally, fewer women over the age of 50 are members of OPFs. This is due to the fact that a higher proportion of women in this age group (between 30 and 50) decided to stay in the State pension system because of its lower mandatory retirement age and shorter period of capital accumulation.

Table 6.11
Membership of the Open Pension Funds by sex and age, 31 December 2010

Age	Men		Women		Total	
	thousands	%	thousands	%	thousands	%
Total	7,821.9	100.0	7,109.0	100.0	14,931.0	100.0
17 years and younger	14.5	0.2	9.9	0.1	24.4	0.2
18–20	115.6	1.4	82.5	1.2	198.1	1.3
21–25	870.5	11.1	754.0	10.5	1,624.5	10.9
26–30	1,481.5	18.9	1,368.7	19.3	2,850.2	19.1
31–35	1,478.1	18.9	1,364.2	19.2	2,842.3	19.0
36–40	1,237.3	15.8	1,162.4	16.4	2,399.7	16.1
41–45	895.9	11.5	855.1	12.0	1,751.0	11.7
46–50	734.2	9.4	721.9	10.2	1,456.1	9.8
51 and over	994.2	12.8	790.3	11.1	1,784.5	11.9

Source: Quarterly KNF Bulletin, Pension Funds 4/2010.

Each OPF offers one investment portfolio. There is, however, an ongoing discussion about introducing multiple funds with different investment portfolios in each pension fund. Under the multiple fund system, persons approaching retirement age are automatically transferred into a more secure fund in order to avoid substantial losses before retirement.

As Table 6.12 shows, strong concentrations are observed both in terms of membership and the accumulated assets of pension funds. The top three funds accounted for 53 percent of all fund members and 62 percent of their total assets in 2010.

Table 6.12
Membership and assets of the Open Pension Funds, 31 December 2010

Open Pension Fund	Members		Assets (as of 31 December 2010)	
	in thousands	%	in million PLN	%
AEGON	834.4	5.59	9,034.8	4.0
Allianz Polska	448.5	3.0	6,530.3	2.9
Amplico	1,135.7	7.6	17,118.1	7.8
Aviva	2,786.2	18.7	52,726.1	23.9
AXA	983.9	6.6	12,769.9	5.7
Generali	788.0	5.3	10,430.7	4.7
ING	2,929.8	19.6	53,780.2	24.3
Nordea	868.5	5.8	9,254.5	4.2
Pekao	349.5	2.3	3,388.9	1.6
PKO BP Bankowy	468.3	3.1	6,539.2	3.0
Pocztylion	518.1	3.5	4,240.9	1.9
POLSAT	311.1	2.1	2,039.5	0.9
PZU Złota Jesien	2,193.5	14.7	30,512.5	13.8
Warta	315.4	2.1	3,096.0	1.4
Total	14,930.9	100.0	221,461.6	100.0

Source: Annual KNF Bulletin, Pension Funds 4/2010.

Members can also opt to switch pension funds. In 2008, 362,000 people changed funds and 460 million PLN was transferred between funds.

The OPFs collect two types of fees: administrative fees charged on monthly contributions, and capital management fees charged on the accumulated capital. Both have been decreased in response to persistent criticism against pension funds and pension companies since the economic crisis of 2008. The maximum administrative fee rate was initially fixed at 10 percent, but on 1 January 2010 it was reduced to 3.5 percent. The capital management fee was initially 0.05 percent per month (0.6 percent annually) but is now applied according to the net value of one's assets, as indicated in Table 6.13.

Table 6.13
Monthly capital management fees since 1 January 2010

Net value of assets (in million PLN)		Monthly fee
More than	Up to	
	8,000	0.045%
8,000	20,000	3.6 million PLN + 0.04% of the surplus above 8,000 million PLN
20,000	35,000	8.4 million PLN + 0.032% of the surplus above 20,000 million PLN
35,000	45,000	13.2 million PLN + 0.023% of the surplus above 35,000 million PLN
45,000		15.5 million PLN

Source: http://www.igte.com.pl.

There is also a performance-based fee. The fund achieving the highest rate of return in the previous year may charge 0.005 percent of the value of their assets per month. On the other hand, the fund yielding the lowest rate of return may not charge this fee. The remaining funds can charge fees in accordance with their investment performance.

Presently, the Open Pension Funds are supervised by the Polish Financial Supervision Authority (Komisja Nadzoru Finansowego, or KNF), which took over the supervisory responsibility of the Insurance and Pension Funds Supervisory Commission (Komisji Nadzoru Ubezpieczeń i Funduszy Emerytalnych). The KNF supervises the banks, the electronic money institutions, and the capital, insurance and pension markets. The supervision of the financial market, including the pension funds, is undertaken to ensure the stability, security, transparency and protection of market players' interests. The KNF's activities are supervised by the President of the Council of Ministers.

Pension funds are supervised by the Pension Investments Supervision Department (Departament Nadzoru Inwestycji Emerytalnych) in the Insurance and Pension Supervision Sector (Pion Nadzoru Ubezpieczeniowo-Emerytalnego) of the KNF. The tasks of the Department include, inter alia:

- monitoring the performance of the supervised entities for their public information and reporting obligations;
- monitoring the operations, financing and investment of the supervised entities, in particular assessing whether or not they observe investment limits and evaluating their financial instruments; and
- determining the weighted average and minimum required rate of return of the Open Pension Funds.

6.4.2. Investment performance

There are strict regulations pertaining to investment instruments and investment performance. The regulations are in place to protect the benefits of pension fund members.

There are no limitations placed on investments that are made in Treasury bonds and bills. An OPF can invest up to 40 percent of its assets in shares, and up to 20 percent in bank deposits in the Polish currency. OPFs may not invest more than 5 percent of the value of their assets in foreign markets. Also, OPFs may not invest in real estate, securities issued by pension companies, or derivatives.

The OPFs are obliged to yield at least the minimum rate of return. The minimum rate of return is set at either 50 percent of the average rate of return or 4 percent less than the average rate of return, whichever is lower.

Table 6.14 presents the total assets invested in the OPFs by investment instrument. A large part of the investment portfolio is composed of bonds. As the Table shows, there was significant growth in the number of shares held in 2009 in response to the financial market downturn of 2008, while there was a much smaller growth in bonds in the same year.

Table 6.14
Open Pension Fund investment portfolios, 2008–2009

Type of investment instrument	Value (in thousand PLN)		Increase (%)	Share (%)	
	31.12.2008	31.12.2009	2009/2008	31.12.2008	31.12.2009
Bonds	103,785,879	119,230,366	14.9	75.1	66.6
Company stocks listed on regular markets	29,636,191	54,305,506	83.2	21.4	30.3
Bank deposits and bank securities	3,047,466	3,849,236	26.3	2.2	2.2
Treasury bills	592,371	455,544	–23.1	0.4	0.3
NFI shares	238,895	325,866	36.4	0.2	0.2
Other investments	904,921	873,337	–3.5	0.7	0.5
Total investments portfolio	138,205,723	179,039,855	29.6	100.0	100.0

Source: FSA Bulletin, OPF market 2009.

The deregulation of investments has been discussed for many years, especially regarding the limits placed on investing in shares and foreign assets. Different proposals have been put forward in different economic climates. During periods of high rates of return in the stock market, it has been proposed that the limit on stock investments be eliminated; conversely, during the economic crisis, it was proposed that stock investments either be limited more stringently or prohibited entirely.

The OPFs have requested for several years that greater levels of foreign investment be permitted. In 2009, the Economic Chamber of Pension Societies, which represents the OPFs' interests, proposed a gradual increase in the limit on foreign investment from 5 percent to 10 percent in 2010, 15 percent in 2012, 20 percent in 2014 and 30 percent in 2015 and thereafter. It should be noted that the OPFs have never exceeded the 5 percent limit. In 2009, only 0.82 percent of the value of the OPFs' assets was invested abroad.

Table 6.15 compares the real rates of return of the first- and second-pillar pensions from 2000 to 2008. These data show more fluctuation in the real rate of return of the second pillar, particularly in the years affected by the global financial crisis.

Table 6.15
Real rates of return of the first- and second-pillar pension systems, 2000–2008 (in percentage)

Year	First pillar	Second pillar	Mixed system
2000	4.42	6.63	5.21
2001	3.07	1.96	2.67
2002	1.24	14.53	5.99
2003	0.34	9.11	3.48
2004	– 0.40	9.77	3.23
2005	4.87	14.25	8.22
2006	5.32	14.69	8.67
2007	8.46	2.16	6.21
2008	12.82	–16.72	2.27

Source: Otto W., Założenia reformy emerytalnej z 1999 roku (Assumption for the Pension reform). Report on OPF's market, September 2009, Table 1.

Under the current law, each OPF must calculate a three-year average rate of return every semester. Until 2004, a two-year average rate of return also had to be calculated quarterly. Table 6.16 compares the OPFs' three-year average rates of return for March 2006–March 2009 and September 2006–September 2009.

Table 6.16
Rates of return of the Open Pension Funds in different periods (%)

Open Pension Fund	From 31.03.2006 to 31.03.2009	From 29.09.2006 to 30.09.2009
AEGON	– 2.227	8.354
Allianz Polska	– 0.045	9.536
Amplico	–1.932	9.801
Aviva	– 4.766	6.075
AXA	– 1.060	10.025
Generali	– 0.245	10.385
ING	– 4.628	6.138
Nordea	– 2.202	6.766
Pekao	– 0.755	8.541
PKO BP Bankowy	– 4.257	6.680
Pocztylion	– 2.828	7.966
POLSAT	– 4.080	7.246
PZU Złota Jesien	– 2.911	8.489
WARTA	– 5.544	5.369
Weighted average	– 2.930	7.909
Minimum required rate of return	– 6.930	3.909

Source: Annual Bulletin. OPF's Market 2009, Part I, Table 2.

The comparison of the three-year average rates of return clearly illustrates the impact of the 2008 financial crisis on the pension funds' investment performance. Every pension fund had a negative rate of return until the beginning of 2009. The weighted average was negative, and the minimum required rate of return was negative 6.93 percent. However, due to the swift recovery from the crisis, the overall investment performance of the pension funds had turned positive by the end of 2009.

These developments gave rise to a discussion on the differentiation of pension fund portfolios for different age groups, with it being suggested that less risky portfolios be introduced for persons approaching retirement age.

Table 6.17
Profit and loss accounts of the Open Pension Funds, 2008–2009

Specification	Value (in thousand PLN)		Difference	Increase 2009/2008 (%)
	2008	2009		
Operating income	6,008,779	6,535,477	526,698	8.8
Operating costs	653,637	735,500	81,863	12.5
Result on investment	5,355,142	5,799,978	444,836	8.3
Realized and unrealized profit (loss)	– 25,881,508	14,859,947	40,741,455	
Result of operations	– 20,526,365	20,659,925	41,186,290	

Source: Annual Bulletin. OPF's Market 2009, Market Review, Table 5.

6.4.3. Macroeconomic impacts

So far there has been no in-depth research conducted on the real impact of the pension funds on the Polish economy. Many experts assert that the pension funds have had a positive impact on savings and, as a consequence, on economic growth. Admittedly, this relationship needs to be examined in more detail before one can draw any concrete conclusions.

The Open Pension Funds have been mobilizing a substantial amount of financial resources. The total assets invested in the OPFs were equal to 10.8 percent of GDP in 2008 and 13.4 percent of GDP in 2009[18]. In view of Poland's relatively low propensity to save in the past, the compulsory saving instigated by the OPFs helps increase savings in the economy. The OPFs also contributed to the development of the capital market. At the end of 2008, the OPFs' resources accounted for 11 percent of the capitalization of all Polish companies. It has also been argued that the OPFs act as a stabilizing agent in the capital market.

6.4.4. Issues in the payment phase

When the second-pillar pension system was introduced, the benefit payment method to be undertaken by the OPFs was not yet determined. According to the implementation plan (drafted on 14 September 2007), new private pension insurance companies were to be established to provide single-life annuities, joint-life annuities and life annuities with a guaranteed period. These companies were to be established

18 Central Statistical Office. "Statistical Yearbook of Poland, 2010", Tables 33 (p. 534) and 9 (p. 574).

before 2009, when the first payments of second-pillar old-age pensions were expected to be disbursed to the relatively small number of women born in 1949 who had joined the scheme.

However, the necessary action was not taken in time. This was for two reasons: first, because the establishment of pension insurance companies did not attract the urgent attention of the lawmakers (as the issue of payment was considered to be a minor technical matter), and second, because there were various institutions active in the marketplace attempting to take over the payment function of the Open Pension Funds and insurance societies, which added to the political complexity of the situation.

In the meantime, a special benefit called the periodic-funded pension was introduced in 2009 to provide pensions for women between 60 and 65 years of age. A periodic-funded pension is payable to women who are entitled to an old-age pension under the new rules.

The amount of the periodic-funded pension is calculated in a similar way as the first-pillar old-age pension. It is determined by dividing the balance accumulated in a member's Open Pension Fund account by the current life expectancy at retirement age. If the final balance in a member's individual Open Pension Fund account is more than 20 times the nursing allowance[19], then the OPF will pay the member pension benefits. If the amount is lower than the above-mentioned threshold, the OPF transfers the member's balance to the ZUS old-age pension fund and the ZUS will provide their pension. The right to a periodic-funded pension will expire when the pensioner reaches 65 years of age, or when the resources in their OPF account are exhausted.

The ZUS, therefore, already acts as the payment agency for periodic pensions. To that end, two remarks should be made. First, the ZUS does not charge any fees for disbursing periodic pensions. It is unlikely that the new benefit payment institution will not charge any fees on the financial resources accumulated in individual pension accounts. Second, the same indexation method used for other pension benefits is currently used for periodic pensions, even though it was previously determined that indexation in the second pillar should be linked to the capital market.

In August 2010, periodic pensions were disbursed to only 465 persons out of 4,995,000 total pensioners. The total amount of these payments was 36,000 PLN, and the average monthly benefit was 78 PLN.

The periodic pension, therefore, is clearly the result of important decisions being postponed regarding the implementation of the 1999 pension reform. Introducing the periodic pension at the last moment and in a transitory condition deteriorates the system's transparency and creates uncertainty for the parties concerned.

It is reported that the Government is now considering a creation of a central public institution that will administer the payment of second-pillar benefits at a reasonable operational cost. The payment arrangements must be decided by 2014, when the workers born in 1949 will reach 65 years of age and start receiving benefits from the funded pension pillar.

19 In March 2009, the amount of 20 times the nursing allowance was equal to 3,462 PLN.

6.4.5. Voluntary savings and occupational pensions

After the introduction of the third-pillar pension scheme, two types of supplementary pension programmes have been established with the involvement of the Government.

Occupational Pension Programmes (OPPs) are collectively funded pension plans that can take the form of pension funds, investment funds, group life insurance, or schemes managed by a foreign manager. They may be established on a voluntary basis by employers. Basic contributions are paid by employers, and additional contributions can be made by employees. The basic contributions may not exceed 7 percent of an employee's gross salary and are exempt from social insurance contribution payments. Any additional contributions are deducted from the employee's gross salary. Payments are made upon the request of the member after reaching 60 years of age and can be paid either in a lump-sum or in periodic instalments. The benefits are also tax-free.

By 2008, more than 1,100 employers had established OPPs. Currently, the OPPs have more than 300,000 members and are managing more than 5 billion PLN in assets. In 2009 alone, the total assets managed by OPPs increased by almost 40 percent due to the recovery of financial markets after the crisis in 2008. Recent projections show a more gradual increase in asset holdings in the long run.

Individual Retirement Accounts (IRAs) have also been established under the Law of 20 April 2004 regarding the establishment of such accounts. IRAs can be opened by an authorized financial institution and any income earned from these investments is exempt from personal income tax (the so-called "Belka's tax"). Annual payments into an IRA account may not exceed three times the average monthly earnings in that year, keeping in mind that before 2008 the maximum annual payment was set at 1.5 times the average monthly earnings. The accumulated balance can be withdrawn once the account holder reaches 60 years of age.

In 2010, there were 792,500 account holders, a number that had decreased by more than 2 percent from the previous year. The total value of the assets held in IRAs amounted to 2.7 billion PLN at the end of 2010, representing a 24 percent increase from the previous year[20]. Although members of OPPs have the option to transfer their resources into IRAs, recent trends show declining IRA membership.

So far, membership levels in both OPPs and IRAs have not been significant. The reasons for this are frequently debated. It appears that people are not fully aware of the declining value of the public pension that is projected to continue into the future. There is also a low propensity to save in Polish society that may be attributed to low incomes or myopic consumption decisions that place a higher preference on consumption today than on increased consumption in the future. Weak financial incentives also discourage people from saving.

20 Financial Supervision Commission Office. 2011. "Individual retirement accounts in 2010".

6.5. Expenditure and financing

6.5.1. Contribution rates

The contribution rate for old-age pensions is currently 19.52 percent, shared equally between employers and employees. The contribution base is subject to a ceiling of 2.5 times the average monthly income[21]. Of the total contributions, 12.22 percent is transferred to the social insurance fund administered by the ZUS (0.35 percent of which is allocated to Demographic Reserve Fund within the ZUS), and 7.3 percent is transferred to the second pillar[22]. The ZUS collects the total contributions from employers and then remits the second-pillar contributions to the respective Open Pension Funds chosen by insured persons.

The contribution rates of other social insurance schemes are 6 percent[23] for disability and survivors' insurance, 2.45 percent for sickness insurance, and between 0.67 and 3.33 percent (depending on the risk) for work accident insurance.

The Government does not pay statutory social insurance contributions. However, the Government is heavily involved in the financing of the pension system through subsidies. Government subsidies cover the deficit of the social insurance fund, pay for minimum pensions, and guarantee a minimum rate of return in the Open Pension Funds.

6.5.2. Fund operations

Table 6.18 compares the contribution income[24] with pension benefits and the administrative expenditure from 2000 to 2009. It can be seen that a large majority of the deficit is attributed to the old-age pensions, and that the magnitude of the overall deficit has been growing. The deficit has increased substantially since 2007 as a result of the decreased contribution rate for disability insurance. The subsidy resulting from transferring 7.3 percent of contributions to the OPFs is substantial, although its proportion of the total government subsidy is decreasing.

21 The ceiling placed on the contribution base equalled 7,865 PLN in 2010.

22 Pursuant to an amendment of 2011, a reduced contribution rate shall be applied in the second-pillar pension system from 2011 to 2017.

23 The contribution rate for disability and survivors' insurance has been 6 percent since 2008. It was 10 percent in 2007 and 13 percent previously.

24 Contribution income refers to the contributions transferred to the Social Insurance Fund, not including the contributions diverted to the Open Pension Funds.

Table 6.18
Contribution and expenditure of the Social Insurance Fund, 2000–2009 (in million PLN)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
(1) **Contributions**										
Old-age	28,862	33,823	31,604	34,515	34,705	35,937	39,032	45,064	47,019	46,897
Disability	29,376	28,571	28,859	28,273	30,040	32,161	31,929	32,871	22,044	22,403
Sickness	4,192	4,670	4,954	4,614	4,968	5,212	5,402	6,078	7,669	10,545
Work accident	2,622	2,592	2,334	2,324	3,679	4,116	4,185	4,386	4,915	5,456
Total	65,051	69,656	67,751	69,726	73,392	77,426	80,548	88,399	81,647	85,301
(2) **Expenditure**										
Old-age	40,338	46,142	48,979	52,942	58,007	61,017	69,162	73,698	84,121	95,343
Disability	33,454	37,149	37,319	37,970	37,416	37,265	37,231	34,115	35,992	37,780
Sickness	4,221	4,716	4,931	4,912	4,749	4,950	5,165	5,826	7,349	9,822
Work accident	3,765	4,101	4,189	4,250	4,209	4,166	4,352	4,375	4,718	4,951
Administration	2,734	2,835	2,785	1,850	2,844	3,326	3,016	3,138	3,349	
Other	1,173	1,208	632	283	343	352	309	223	119	
Total	85,684	96,151	98,834	102,207	107,568	111,076	119,235	121,375	135,648	147,896
(3) **Balance:** (1) – (2)										
Old-age	–11,475	–12,319	–17,375	–18,427	–23,302	–25,080	–30,130	–28,634	–37,102	–48,446
Disability	–4,078	–8,579	–8,460	–9,697	–7,376	–5,104	–5,302	–1,244	–13,948	–15,377
Sickness	–29	–46	23	–298	219	262	237	252	320	723
Work accident	–1,143	–1,509	–1,854	–1,926	–530	–50	–167	11	197	505
Total	–20,633	–26,495	–31,083	–32,481	–34,176	–33,650	–38,687	–32,976	–54,001	–62,595
(3) **Coverage:** (1)/(2)										
Old-age	71.6%	73.3%	64.5%	65.2%	59.8%	58.9%	56.4%	61.1%	55.9%	49.2%
Disability	87.8%	76.9%	77.3%	74.5%	80.3%	86.3%	85.8%	96.4%	61.2%	59.3%
Sickness	99.3%	99.0%	100.5%	93.9%	104.6%	105.3%	104.6%	104.3%	104.4%	107.4%
Work accident	69.6%	63.2%	55.7%	54.7%	87.4%	98.8%	96.2%	100.3%	104.2%	110.2%
Total (1) – (2)	75.9%	72.4%	68.6%	68.2%	68.2%	69.7%	67.6%	72.8%	60.2%	57.7%

Source: Statistical Yearbook of Social Insurance, Tables 3 (p. 13) and 1 (p. 11) of the 2007 edition, and Tables 2 (p. 12) and 1 (p. 11) of the 2009 edition.

6.5.3. Future projections

Table 6.19 presents the old-age dependency rate, defined as the ratio of the population aged 65 years and older to those between 19 and 64 years of age, based on the population projection from 2010 to 2035. The old-age dependency rate is expected to increase rapidly from 2015 to 2025, reaching 27.8 percent by 2035.

Table 6.19
Projected old-age dependency rates, 2010–2035

	2010	2015	2020	2025	2030	2035
Population aged 19–64 (1) (in thousands)	36,310	34,904	33,196	31,729	30,986	30,052
Population aged 65 and above (2) (in thousands)	5,153	5,929	6,954	7,844	8,195	8,358
Old-age dependency rate (2) / (1)	14.2%	16.9%	20.9%	24.7%	26.4%	27.8%

Source: Author's own calculations based on the Demographic Yearbook of Poland, Warsaw 2010, Table 34.

Table 6.20 presents the projected contribution and expenditure of the old-age pension funds from 2011 to 2035. In 2011, contributions are expected to cover 46 percent of the expenditure, but this coverage rate is expected to decrease between 2020 and 2025 before improving slightly by 2035.

Table 6.20
Projected contributions and expenditure of the old-age pension funds, 2011–2035

Indicators	2011	2015	2020	2025	2035
Contributions (1) (in million PLN)	48,284	57,587	67,380	78,103	106,153
Expenditure (2) (in million PLN)	104,952	124,499	173,728	216,256	264,266
Balance (1) – (2) (in million PLN)	–56,668	–66,157	–106,348	–138,153	–158,113
Ratio (1) / (2)	46.0%	46.2%	38.7%	36.1%	40.1%

Source: ZUS, 2010. "Projection of income and expenditure of the old-age pension fund up to 2060".

6.6. Social dialogue in the pension reform

6.6.1. Pension system governance

The Management Board is responsible for the financial and administrative management of the ZUS. The Management Board of the ZUS is composed of a President and two to four Board members, commonly called deputy presidents. The President of the ZUS is appointed by the Prime Minister following the proposal of the Minister of Labour and Social Policy, and the other members of the ZUS Management Board are appointed by the ZUS Supervisory Board at the request of the President.

The Supervisory Board members of the ZUS are appointed by the Prime Minister for five-year terms, and are chosen as to represent the social partners. The Board's composition is governed by the following rules:

- Four members (including the President) are appointed following the proposal of the Minister of Labour and Social Policy in agreement with the Ministry of Finance.
- One member is appointed for the employers' organizations and one for the employees' organizations following the proposal of their representatives pursuant to the Law of 6 July 2001 on the Tripartite Commission for Socio-Economic Issues and the Voivodship (provincial) Social Dialogue Commission.
- One member is appointed following the proposal of the pensioners' organization.

The law on the social insurance system has delegated the following tasks to the ZUS Supervisory Board:

- to appoint and dismiss ZUS Management Board members at the request of the ZUS President;
- to determine the remuneration for the members of the Board (excluding the ZUS President);
- to adopt the working regulations for the ZUS Management Board;
- to carry out the periodical appraisal of the ZUS Management Board;
- to approve the annual financial plan of the ZUS and its implementation report;
- to approve the annual activity report of the ZUS;
- to provide its opinion on the financial plan of the Demographic Reserve Fund and its implementation report;
- to provide its opinion on the drafting of legal acts within the field of social insurance and to make proposals in this regard; and
- to provide its opinion on the appointment and dismissal of the General Supervision Inspector of the ZUS.

6.6.2. Process of the 1999 pension reform

The success of the 1999 pension reform was due to economic, political and institutional factors.

The changes made to the pension system in the early 1990s led to an excessive level of pension expenditure. Politicians and experts sought pragmatic solutions to remedy this situation. There was a pressing need not only to curb expenditure on pensions, but also to develop the domestic capital market. In the period of economic transition, there was strong support for privatization and other changes that facilitated the country's transition towards a market economy. Thus the establishment of a separate plenipotentiary for pension reform was instrumental in advancing the pension reform agenda. The pension funds and pension societies also became new stakeholders, and they lobbied intensely for the reform.

The primary aim of the reform proposals was to reduce pension expenditure. However, additional economic issues, in particular the development of the capital market and the provision of better incentives for the labour market, were also taken into account. Many economists were of the view that a funded pension system would help achieve these goals.

Key stakeholders were well informed of the international experiences of the pension reform, particularly those of the Chilean pension system, at this time. Some international organizations, in particular the

World Bank, recommended the introduction of a funded pension pillar. The World Bank publication, "Averting the Old Age Crisis", served as an important reference for policy discussions concerning the introduction of a three-pillar pension system with a compulsorily funded pillar.

It is interesting to note that the pension reform in Poland was initiated by a left wing Government and was later continued and completed by a right wing Government. This reflects the national consensus, although not easily achieved, among various political groups on the necessity of clearly defining the future of the pension system.

Aside from the Government, the trade union "Solidarity" strongly supported the reform and even prepared its own project with a funded pillar.

The 1999 Polish pension reform was preceded by several earlier reform proposals that had also made provisions for a funded pillar and a defined-contribution formula, although in slightly different versions. These earlier proposals were never adopted, however, largely due to opposition by institutional and expert groups. These experiences convinced the Government that pension reform must be carried out prudently if it was to succeed. Hence, a Government Plenipotentiary on the Social Security Reform was appointed as an institution separate from other governmental departments. The Plenipotentiary was endowed with the special authority and mandate to focus on the pension reform. The work of the Plenipotentiary was accompanied by a campaign to support its planned reform.

A report entitled "Security through diversity", published in 1997, played a crucial role in informing and promoting the new pension scheme. It analyzes various risks attributable to the PAYG and funded pension systems, and describes the main elements of the structure and operation of the new scheme. It also conveys the message that pensioners' income security will improve with diversified funding methods.

The replacement rate, calculated under quite optimistic assumptions, initially was expected to exceed 50 percent. It was emphasized both in the aforementioned report and during the promotional campaign that the new pension formula would produce a significantly higher replacement rate with longer periods of economic activity and deferred retirement.

It was also argued that the actuarial pension formula would create strong incentives for workers to remain in the labour market longer in order to receive higher pensions. However, the formula only influences workers' behaviour; employers' decisions are influenced by other factors. The impact of the formula on the labour market is therefore limited, as employers play a decisive role in the labour market as well.

According to a public opinion poll conducted in 1997, the Polish people were critical of the current pension system because it was not transparent and did not provide pensioners with security, and they called for major changes. Public sentiment made it clear that the Polish people preferred funded pensions and individualized benefits with a smaller redistributive element. Reform planners responded that their proposal was targeted precisely at these issues: individualization, funding and providing security.

The establishment of the Open Pension Funds, which took place in 1997 before the acceptance of the new law, made the OPFs a *fait accompli* for the planned reform. Pension fund management companies organized a promotional campaign that emphasized an affluent vision of retirement life as a result of joining the Funds. In post-communist Poland, this campaign – advertising that the capital market yields much higher rates of return than a pay-as-you-go system – was very attractive because it fed into the popular conviction that the private accumulation of financial resources is inherently better than their public management. While the Government did not intervene in this campaign directly, it did not oppose it either.

The reform process in practice only concerned the accumulation phase. The benefit payment phase was to be determined later, along with the reform of disability pensions. This also helped facilitate and expedite the process.

6.7. Conclusion – recent reform

Since the economic crisis, widespread criticism has been levied on the funded pension systems, although the crisis had no persistent impact on the long-term solvency of the pension scheme. Many of the issues discussed in previous years returned to the forefront of public debate with increased intensity. Some of the critical remarks were aimed at modifying particular features of the system, whereas others sought for a more fundamental reform.

The modifications proposed included:

- a further decrease in management and administrative fees;
- the introduction of multiple pension funds according to the level of risk exposure, considered essential if the second pillar is to be maintained in its present form; and
- the inclusion of farmers and special groups of workers (miners, uniformed services, judges and public prosecutors) into the employee pension scheme, with a view to creating a unified pension scheme that could reduce total pension expenditure and create uniform incentives within the scheme.

The fundamental reform proposal included:

- optional participation in the second pillar; and
- the downsizing of the second pillar.

For some time, the Government did not express clear views as to the direction that the pension reform would take. At one stage the Prime Minister asserted that no substantial changes would be introduced. However, The Minister of Labour and Social Policy supported the introduction of fundamental changes out of a concern for the protection of pensioners. The Minister of Finance also supported the introduction of changes in order to reduce the public deficit.

As the Government's intention to introduce fundamental changes became clear in early 2011, a strong opposition formed against these proposed changes. Politicians who had been involved in the 1999 reform, certain economists, representatives of employers' and employees' organizations, and lawyers pointed out various deficiencies within the newly proposed reform.

After a long and intensive debate, the Parliament adopted a bill at the end of March 2011 that came into effect on 1 May 2011. The main features of the reform are as follows:

- Until 2012, the contribution rate of the second pillar shall be decreased from 7.3 percent to 2.3 percent. The 5 percent difference (equivalent to about 1 percent of GDP) will be transferred to the first pillar to finance the deficit of the State pension fund.
- The 5 percent contribution will be registered with separate special individual accounts in the ZUS. The balances of the special individual accounts will be adjusted in line with the growth of nominal GDP over the previous five-year period (granted that it cannot be negative).
- The contribution rate of the second pillar will be increased to 2.8 percent in 2013, 3.1 percent in 2014, 3.3 percent in 2015, and 3.5 percent in 2017. Accordingly, the additional contribution rate to the first pillar will decrease from 5 percent to 3.8 percent.
- The balances of the special individual accounts can be inherited the same way as those of the Open Pension Funds.
- Starting in 2012, the contributions paid to Individual Retirement Accounts (a voluntary supplementary savings programme) will be deducted from the tax base in amounts up to 4 percent of the tax base. However, payments from the account will be subject to taxes.
- As the second-pillar Open Pension Funds receive smaller contributions, the upper limit on their possible stock investments will be increased. The current ceiling of 40 percent of the fund's total assets will gradually be increased to 62 percent by 2020, eventually reaching 90 percent in the future.
- From 2012 onwards, acquisitions by pension funds will not be allowed.

The Polish pension system has undergone many changes during the last twenty years. Major reforms have been carried out in 1991, 1999 and 2011. In addition, the pension indexation method has been frequently changed during this period.

Every reform was introduced under a certain amount of external pressure: first in 1991, during a period of high unemployment as the economy struggled to transition to a market economy; second in 1999, under the burden of extremely high social expenditure; and finally in 2011, under the pressure of Government deficit and increasing public debt.

Enacted under these external pressures, the reforms were introduced in haste and proposals were not well prepared. In the wake of the recent reform of 2011, a substantial amount of work still remains to be done, such as the establishment of a payment institution and the reform of the disability pension system. Some privileged groups should also be included in the reformed system[25].

25 In his policy statement at the Parliament on 18 November 2011, the Prime Minister proposed to gradually increase the retirement age for both sexes to 67 years. According to the proposal, starting in 2013, the retirement age will be increased by one month for every four months until it reaches 67 years in 2020 for men and in 2040 for women.

7. Romania

Catalin Ghinararu

7.1. Overview

7.1.1. Development in the 1990s

At the beginning of the 1990s, the Romanian pension system was governed by the law enacted in 1977 (Law No. 3/1977). It was a defined-benefit system managed by the State under the State social insurance budget. Under this system, pensions were calculated based on the average of one's best five years' salary of the ten years before retirement. However, due to controlled prices (including salaries), the resulting pension amounts were, by default, flattened. Although the law did not provide any privileges for special groups of workers (e.g. high-ranking officials or military personnel), their contribution bases were much higher than the average salary.

The system was essentially financed by contributions levied on workers' gross salaries. During the 1980s, the system experienced a surplus due to a favourable ratio of contributors to beneficiaries. However, these numbers do not take into account the separate scheme that covered the members of agricultural production co-operatives (the Romanian version of the "*kolkhoz* farms"), which had totally collapsed by 1990. As a result, the pension system for agricultural co-operatives became insolvent and caused a massive deficit, although the problem was not widely acknowledged.

The process of economic transition in Romania that began in 1990 and lasted until 2005 heavily affected the pension system. High inflation in the 1990s broke down any correlation that had previously existed between pensions and salaries, and resulted in an even more flattened distribution of pensions.

Romania managed to avoid situations where pensions were unpaid or paid in kind. However, as industrial restructuring set in, the Government encouraged workers to retire at the lower threshold of the statutory retirement ages (60 years for men and 55 years for women, while the normal statutory ages were 62 years for men and 57 years for women). The Government also allowed early retirement for workers who had worked under arduous or very arduous working conditions (who enjoy a lower retirement age) and generously granted invalidity pensions. As a result, the estimated average effective retirement age went down to less than 55 years. These measures caused a deterioration of the balance between contributors and beneficiaries, leaving the State pension scheme in a state of full-blown deficit. The deficit of the State pension scheme was further aggravated by the fact that the State was compelled to take over the pension liability of the bankrupt pension system of the former agricultural co-operatives.

7.1.2. The first phase of the parametric reform (Law 19/2000)

The Public Pension Act (Law No.19/2000), which had been the subject of Parliamentary debate since 1998, was adopted in 2000 and came into force on 1 April 2001. This Act introduced a comprehensive parametric reform of the public pension scheme and also paved the way for the eventual introduction of the private pension pillars in 2007.

The main features of this Act are summarized as follows:

- The pension calculation is based on the number of one's individual pension points, taking into account the contributions made during the whole working life of the individual.
- The pension point was introduced as the basic unit for pension calculation. Its value was initially set in relation to the national average salary.
- The statutory retirement ages for men and women were gradually to be increased to 65 years for men and 60 years for women by 2015.
- Based on the principle of "equal pensions for equal contributions", the Act provided for the recalculation of all State pensions granted before 1 April of 2001 in accordance with the new Act.
- Initially, a ceiling was applied to the contribution base equalling three times the national average gross wage. However, this ceiling was gradually eliminated in subsequent years.

The National House for Pensions and Other Social Insurance Rights (Casa Nationala de Pensii si Alte Drepturi de Asigurari Sociale, CNPAS)[1] was established in 1999 as an autonomous pension administration agency operating under the supervision of the Ministry of Labour, Family and Social Protection.

Under the conditions of a stand-by agreement with the IMF in place from 2001 to 2005, the Government deferred both the recalculation of pensions and the introduction of the private pension pillar. The pension recalculation was deferred because it was believed to possibly disturb the balanced budget and thus the pace of inflation on which the macroeconomic approach rested. The introduction of the private pension pillar was likewise deferred, as the capital market in Romania was considered to be insufficiently developed for such a system. However, despite the tight fiscal conditions enforced during this period, the Government introduced separate special pension systems for the armed forces (military, gendarmerie, fire fighters and police[2]), for magistrates, and for parliamentarians.

7.1.3. The pension recalculation (2004–2010)

At the turn of the millennium, the Romanian economy recorded high growth for the period 2000–2008. Romania's accession to the European Union (effective as of 1 January 2007) also created a positive climate for further economic growth. Under these circumstances, the Government decided to effectuate the pension recalculation by issuing a Government Decision on 1 October 2004.

All pensions were subject to recalculation in accordance with the provisions of the Public Pension Act[3]. These provisions provided, first, that each person's individual pension points should be calculated according to their contribution base for the whole contribution period as recorded in their "workbook" (*carnet de munca*[4]), supplemented by other written or testimonial evidence[5]. This number of pension points is then multiplied by the value of a pension point at the time of the recalculation to establish the

1 Recently, this institution has been renamed the National House for Public Pensions (Casa Nationala de Pensii Publice, CNPP). See Law No.263/2010.

2 At the end of 2004, police officers were included in the State pension system.

3 Pensioners of the former agricultural co-operative pension scheme were excluded, as their pensions were not considered to be based on contributions. However, if a pensioner had a contribution period within the State public pension system, this part of their pension was subject to recalculation.

new pension amount. If the amount of the recalculated pension is lower than the pension currently being paid, then the amount of the pension remains unchanged and no indexation applies until the (indexed) recalculated pension exceeds that level.

While the recalculation did not significantly increase most pensions, it nevertheless managed to alleviate some of their inconsistencies that had accumulated during the 1990s. Some of the high pensions established by the legislation at the end of 1990s have been effectively barred from further increases.

Under the Law for the Statute of Judges and Public Prosecutors (Law No.303/2004), the Government established special pension schemes for employees of the Courts, civil servants working for the Parliament and other groups of workers. These schemes were subsidized by the State budget. However, since 2010 these special schemes have been reintegrated into the public system and these pensions have been recalculated according to the rules of the public pension system.

7.1.4. The paradigmatic reform – the introduction of the funded pension pillars (2007)

After the first phase of the parametric reform in 2000, the Government began to prepare for the introduction of the second and third pillars of the pension system that would supplement the public pension system through privately managed pension schemes based on individual savings accounts.

In 2007, the Government introduced the second and the third pillars of the pension system by adopting the Mandatory Private Pensions Act (Law No. 411/2004) and the Voluntary Private Pensions Act (Law No. 204/2006), and by establishing the Private Pension System Supervisory Commission (Comisia de Supraveghere a Sistemului de Pensii Private, CSSPP).

Enrolment in the second pillar system was mandatory for all contributors below 35 years of age, optional for those between 35 and 45 years of age, and not allowed for those above 45 years of age. The voluntary pension schemes are open to all persons who are willing to contribute in addition to the mandatory pension systems. Both mandatory and voluntary private pillars cover only old-age benefits, while invalidity and survivors' benefits are covered by the public system.

The private mandatory pension system is financed by contributions diverted from the contributions made to the public pension system. The second-pillar contribution rate was initially set at 2 percent in 2008 but was to be increased by 0.5 percentage-points every year until reaching 6 percent in 2016.

As it was cutting contribution rates, the Government also dramatically increased the value of the pension point, abolishing the variation band and setting its value in 2007 at 37.2 percent of the average salary. Subsequently the value of the pension point was increased to 45 percent in 2008.

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4 Until the introduction of an electronic system of contribution collection in 2001, the "*carnet de munca*" – a bound cardboard booklet – was the only form in which persons' contribution periods and bases were recorded. This meant that the recalculation process required thousands of operators throughout the country to enter all contribution periods and contribution bases for more than 5 million pensioners as of 1 April 2001 into the electronic database. The whole process took more than two years and was completed by 2006, two years after the payments of recalculated pensions began in mid-2004.

5 The pension point for periods of arduous work is increased by 25 percent, and by 50 percent for periods of very arduous work.

7.1.5. The impact of the crisis – the second phase of the parametric reform (2009–2011)

While the global crisis in 2009 was negatively impacting the Romanian economy, the Government's first move was to increase the contribution rate of the public pension system to curb the growing governmental deficit. At the same time, the Government froze the contribution rate of the mandatory private pension scheme, leaving it at its 2008 level of 2 percent. The Government also introduced a minimum pension financed by the State budget called the "social old-age benefit", worth RON 300, in March 2009 (the amount of which was increased to RON 350 in September 2009).

As the pension system's budget fell into deficit and the economy faltered under the recently enacted austerity measures, the Government was under increasing pressure to contain the pension expenditure. Under the framework of the new stand-by agreement concluded with the IMF in 2009, the Government initiated another round of pension reform.

After a yearlong discussion in Parliament a new pension law, known as the Unitary Pension Act (Law No. 263/2010), was adopted at the end of 2010 (Official Gazette No. 852 [20 December 2010]). The key elements of the Law are summarized as follows:

1. Currently, a transition measure is in place to gradually increase the normal retirement age to 65 years for men and 60 years for women by 2014. (In January 2011, the normal retirement age was 64 years for men and 59 years for women.) The new Law proposes to continue to increase the normal retirement age for women to 63 years by 2030. At the same time, the qualifying periods for full pensions and for the minimum pension will be increased accordingly.
2. The pension indexation method will be changed. First, pension indexation is frozen for the year 2011. From 2012 to 2020, pensions shall be indexed according to 100 percent of price increases plus 50 percent of the increase in the average gross salary. From 2021, the rate of increase in line with the average gross salary will be decreased by 5 percentage-points every year (e.g. 45 percent in 2021, 40 percent in 2022, 35 percent in 2023 and so on). From 2030 onwards, pensions will be indexed only in line with price increases.
3. For partial early retirement pensions, the reduction rate is increased to 0.75 percent per month of anticipation for up to 60 months. Consequently, the maximum reduction rate applied to early retirement pensions will be 45 percent, as compared to 30 percent under the current law. If workers receiving this benefit are employed, the employment period is not taken into account in the future pension calculation.
4. Various privileged pension rights for special groups of workers will be abolished. These include the following measures:
   - The special pension scheme for military, police, and national security officials will be integrated into the public pension system. After the integration, these workers will be subject to the same provisions as the members of the public pension system. In particular, the normal retirement age of these workers will be gradually increased to 60 years by 2030.
   - The current pensions regulated by special pension laws will be recalculated on the basis of an individual's average salary during their whole career and will be paid by the State Pension System.

- For judges, court staff, diplomats and members of Parliament, the retirement age is fixed at 64 years for men and 59 years for women. It should be noted that this actually decreases the retirement age for some groups.

5. The collection of contributions from self-employed persons, family workers and freelance workers, which relies on the database of non-salaried contributors administered by the National Agency for Fiscal Administration, will be improved.
6. Applications for invalidity pensions based on false medical certificates will be more strictly controlled for.
7. Financing for the caregivers of invalidity pensioners (first degree) will be provided from the State budget.

During the Parliamentary process, the following changes were made to the original draft Bill.

First, the President of Romania used his veto against the initial proposal that the statutory retirement age for women be raised to 65 years, asking for this age to be reduced by two years to 63. The Bill was sent back to the Chambers of the Parliament for approval of the amendment.

Second, a proposed 15-percent reduction of the value of the pension point for all pensioners was declared unconstitutional.

Third, the Constitutional Court rejected the integration of the special pension scheme for magistrates into the public pension system. It is now the only special scheme which provides pensions based on an individual's final salary.

7.2. Coverage, compliance and collection

7.2.1. Coverage

Under the current Public Pensions Act, all salaried employees (in private, public or mixed enterprises) are mandatorily covered by the public pension system. These employees should make contributions to the public pension system on a monthly basis, irrespective of the duration of their contract, their time worked (full time or part-time with at least two hours per day), or the nature of their position. The scope of the mandatory coverage also includes individuals working on management contracts, elected officials, judges, public prosecutors and members of cooperatives. The unemployed receiving unemployment benefits[6] are also covered by the public pension system. Their contributions are paid from the unemployment insurance fund.

6 In Romania, the unemployment benefit is a contributory social insurance benefit. Since the first quarter of 2009, the duration of the unemployment benefit has been extended by three months. Currently the maximum duration of the unemployment benefit varies from 9 to 15 months according to an individual's contribution period.

In addition, individuals who are registered as sole employers, members of family associations, self-employed persons (except farmers with individual farms) and independent professionals (except lawyers who are insured under their own scheme) are mandatorily covered under the public system. Members of the recognized churches are also insured by the public pension scheme, although they can be insured by independent church-administrated schemes instead.

In October of 2010, civil contracts (short-term contracts that do not fall under the labour law but are regulated by the *Code Civil*) and authorship contracts became subject to social security contributions. This makes it possible for an individual to make multiple contributions, although the sum of all contribution bases cannot exceed the equivalent of three times the national average salary.

Voluntary insurance in the public pension system is also possible. Individuals wishing to have voluntary insurance must declare an income to which the contribution rate (for normal working conditions) is applied accordingly.

There are 5.7 million insured persons, of which salaried employees account for around 5 million. This means that about half of Romania's economically active population is covered by the public pension system.

Currently, the only category of workers not mandatorily covered by any pension system in Romania is the own-account farmers (i.e. farmers working with their family on their own land). This is despite the fact that these workers make up almost a third of Romania's employed population (constantly 9.3 million). To date they have voluntary coverage only.

7.2.2. Special groups

In general, Romania has not provided privileges for special groups of workers. For instance, civil servants have always been covered by the public pension system and thus enjoyed no special privilege[7]. However, after the implementation of the Public Pension Act (Law 19/2000), several categories of workers were covered by their own special schemes (such as the armed forces, magistrates and Parliamentarians).

In 2001, a special Law on State Military Pensions (Law No. 164/2001) was implemented. It covered active military personnel, as well as retirees and personnel on reserve who were previously dealt with under different regulations[8]. The pensions were financed by the State budget. The Law provided for old-age pensions (called "service pensions"), invalidity and survivors' pensions. The amount of the military pension was set at 60 percent (62 percent for arduous working conditions and 64 percent for very arduous working conditions) of the individual's salary in their last month of service.

7 Civil servants working for the Parliament have had a special scheme since 2006 (Law No.7/2006 on the Statute of the Parliament's Civil Service). However, this scheme was also abolished and reintegrated into the public pension system in 2010.

8 Pensions for war veterans (i.e. retired military personnel who participated in World War II) are still paid under a separate system. Special pension rights are accorded to prisoners of war, former political prisoners of the communist regime, those conscripted in war and those who were severely wounded during the Romanian 1989 Anti-Communist revolution, and to their surviving relatives. Although these benefits are called pensions, they are in fact a special type of social benefit entirely financed by the State budget. Indexation of these benefits is done at the Government's discretion.

However, with the passage of the Unitary Pension Act (Law No.263/2010), the military pension system has been integrated into the public system and the military pensions have been recalculated in accordance with the public pension system. The same applies to the national police force, which previously also benefited from a separate pension system similar to the State military pension system. The Ministry of Defense, the Ministry of the Interior and the Romanian Intelligence Services will continue to administer the pensions for military personnel under newly established institutions called the "sector pension houses".

Magistrates, a category referring to judges and prosecutors at all levels, are covered by a final salary-based special pension system. The original Bill of the aforementioned 2010 Act intended to integrate this system into the public pension system. However, the Constitutional Court ruled that any changes made to their pensions system were unconstitutional.

7.2.3. The informal economy

As seen from Table 7.1, the size of the so-called informal economy (alternatively referred as undeclared work or the grey economy) is estimated to be between 15 and 30 percent of GDP, although estimates vary widely from year to year and according to the methods of estimation[9]. A large part of the informal economy consists of household production for self-consumption, mostly in agriculture.

In addition to undeclared work, under-declared work – in which only the minimum wage is recorded for taxation and contribution purposes, and additional payments are received in the form of "envelope payments" – is very common. However, its precise magnitude is unknown.

Table 7.1
The estimated share of the informal economy as a percentage of GDP, 2000–2009

Year	National Institute of Statistics	National Scientific Research Institute
2000	18.1	33.17
2001	17.9	31.20
2002	17.6	30.09
2003	15.4	29.06
2004	14.5	28.10
2005	16.6	27.10
2006	16.6	26.91
2007	20.0	26.69
2008	19.6	26.66
2009	19.8	27.85

Source: National Institute of Statistics (NIS) and author's calculations.

9 The National Institute of Statistics uses its own labour-input method. For details see www.insse.ro/metodologii. Further data and methodological details can be found at www.undeclaredwork.ro. For further analyses of the topic see also the EU-Commission, "Study on indirect measurement methods for undeclared work in the EU" (VC/2008/0305). For more information on agriculture and subsistence employment see also Ghinararu C.C.,"Employment in Agriculture in Romania: State of play (subsistence agriculture) and perspectives (green farming)" (2010), and "Employment and human resources development in Rural Areas of Romania" (2005). Both articles are available at http://www.eu-employment-observatory.net/en/documents/EE-Thematic-Reports.aspx.

To combat the pervasive form of undeclared work, a concerted action involving all actors – including the social partners – is needed. To that end, the Government has established the "National Integrated Mechanism to combat Undeclared Work". Under this mechanism, a National Register of Employees is being developed. It is an electronic database which maintains records of all labour contracts and is monitored by the Labour Inspectorate. There is a plan to connect the National Register of Employees with the national database on contribution periods accumulated in the public pension system, the national database on the unemployment fund, and the public health insurance fund database. It is hoped that by unifying these databases the Government can limit the scope of tax and contribution evasion.

Some evidence suggests that certain individuals and companies have resorted to the practice of improperly using civil contracts and authorship contracts to evade contributions. As mentioned earlier, civil contracts and authorship contracts became subject to social security contributions only in 2010. Yet in times of serious crisis this measure will have the adverse effects of discouraging formal payments and allowing some under-declared work to transform into undeclared work.

7.2.4. Collection of contributions and issues of compliance

Prior to the enactment of the Public Pension Act (Law No.19/2000), the collection of contributions had been done separately under each social security scheme. Its operation was greatly hampered by the enormous challenges associated with the process of economic transition. In the framework of the stand-by agreement for 2001-2005, the Government decided to unify the collection of taxes and contributions of State administered social security schemes (including pensions, health insurance and unemployment insurance). Therefore, since 2003 all State revenues have been collected by the National Fiscal Administration Agency (Agentia Nationala de Administrare Fiscala, ANAF) within the Ministry of Finance. However, contribution records are kept in the national database of the National House for Pensions and Other Social Insurance Rights (CNPAS)[10].

As seen in Table 7.2, while the amount of collected contributions increased markedly during the first few years, this can be ascribed to strong economic growth boosting revenues rather than to the new collection mechanism.

The contribution base for the pension system is individuals' gross incomes[11]. The minimum contribution base is set at the statutory minimum wage.

From 2001 to 2005, a ceiling for the contribution base was set at three times the national average gross wage. With the introduction of the flat rate income tax in 2005, the ceiling was increased to five times the national average gross wage. In 2007, this ceiling was removed so as to compensate for the reduction of the contribution rates.

10 For most insured persons (salaried employees), contributions are automatically deducted from their gross salaries and paid for by their employers. Although this collection method has proved to be very efficient, it tends to decrease these individual contributors' awareness of how much they contribute and how much is redirected to the private pension funds. In 2007, the CNPAS started to provide all contributors with a record of their accumulated contribution periods, their contributions paid and their accrued pension points to date on an annual basis, but has since stopped this service. It is suggested that the CNPAS resume this service to allow insured persons to verify their contribution payments and pension points.

11 For corporate entities this translates to their gross payroll (or the gross salary fund) for all employees. For voluntary contributors, their declared income is regarded as their contribution base.

Thus the contribution base has been widened, encompassing in principle all incomes. However, once the global crisis hit the Romanian economy in early 2009, this single measure did not manage to cover the deficit in the State pension system due to the reduction in contribution rates and the significant increase in the value of the pension point. As the individual incomes that were previously not liable for contributions – such as those from civil contracts (service provision contracts of individual professionals) or authorship contracts – became liable for social security contributions, a new ceiling of three times the national average gross salary was reintroduced in 2010.

Table 7.2
The contribution base, 2000–2009

Year	Contribution base (million RON)	GDP (million RON)	Contributory base as a % of GDP
2000	19,321	80,377	24.0
2001	28,659	116,769	24.5
2002	36,514	151,475	24.1
2003	40,917	197,565	20.7
2004	58,773	246,469	23.8
2005	67,711	288,048	23.5
2006	81,862	344,651	23.7
2007	98,628	416,007	23.7
2008	123,827	514,654	24.0
2009	133,685	491,274	27.2

Source: National House of Pensions and Other Social Insurance Rights (CNPAS).

7.3. Benefits

7.3.1. State pension

7.3.1.1. Qualifying conditions and the retirement age

In order to qualify for an old-age pension under the Public Pension Act (Law No.19/2000), an individual must complete the minimum contribution period. The minimum contribution period is scheduled to increase from ten years in 2001 to 15 years by 2015. The minimum contribution period in 2011 was 13 years for both men and women.

The Public Pension Act (Law No.19/2000) stipulates that by the end of 2014 the statutory retirement age shall be gradually raised from 62 to 65 years for men, and from 57 to 60 years for women. According to the schedule, the statutory retirement age at the beginning of 2011 was 64 years for men and 59 years for women. The recently adopted Unitary Pension Act (Law No.263/2010) stipulates that the statutory retirement age for women shall be further increased to 63 years by 2030.

Table 7.3
Qualifying conditions for old-age pensions

Year	Men			Women		
	Age	Full contribution period (years)	Minimum contribution period (years)	Age	Full contribution period (years)	Minimum contribution period (years)
2001	62	30	10	57	25	10
2010	63 + 9m	32 + 6m	12 + 6m	58 + 9m	27 + 6m	12 + 6m
2011	64	33	13	59	28	13
2012	64 + 3m	33 + 6m	13 + 6m	59 + 3m	28 + 6m	13 + 6m
2013	64 + 6m	34	14	59 + 6m	29	14
2014	64 + 9m	34 + 6m	14 + 6m	59 + 9m	29 + 6m	14 + 6m
2015	65	35	15	60	30	15
2020	65	35	15	61 + 3m	31 + 3m	15
2025	65	35	15	62 + 4m	32 + 10m	15
2030	65	35	15	63	35	15

Source: National House of Pensions and Other Social Insurance Rights (CNPAS).

Under the current law, the full contribution period that qualifies a person for a full old-age pension is fixed at 35 years for men and 30 years for women, both to be reached by 2013. (In 2011, the full contribution period is 33 years for men and 28 years for women.) For women, as the statutory retirement age is further increased from 60 to 63 years of age, the full contribution period shall be extended to 35 years by 2030.

For workers in arduous and very arduous conditions, however, a lower statutory retirement age and a shorter full contribution period apply[12]. The reduction of the statutory retirement age and full contribution period may vary from one year to eight years depending on whether the individual worked in arduous or very arduous conditions for the minimum of six years up to 35 years[13]. Nevertheless, the retirement age cannot be lower than 55 years of age for men and 50 years of age for women.

Special provisions are applied to workers in very arduous conditions[14]. Workers having at least a twenty year contribution period in very arduous and/or special conditions (such as in mining, nuclear energy,

12 Workers in arduous or very arduous conditions are more prone to claim invalidity pensions due to work accidents and occupational diseases. It should also be noted that prior to 1989 Romania had a relatively large share of employment in industrial sectors, such as metallurgy and mining.

13 The reduction is one year if the contribution period under arduous and very arduous working conditions is six years. The reduction is extended by 0.5 years for every two additional years until it reaches the maximum eight years for a 35-year contribution period under these conditions.

14 The Baia Mare region in Maramures county and the Copsa Mica region in Sibiu county were severely affected by industrial pollution during the years of central planning. For a limited period of time after the implementation of the 2000 Public Pension Act, the inhabitants of these regions were entitled to early retirement without penalty given their lengthy exposure to hazardous conditions.

civil aviation and some artistic professions) can receive a full old-age pension payable at 45 years of age. Workers with at least 15 years of contributions in workplaces with high radiation exposure (Zone 1) or 17 years of contributions in workplaces with radiation exposure (Zone 2) can receive full old-age pensions irrespective of their age. Nonetheless, the difference between this and the statutory retirement age cannot exceed 12 years.

Non-contributory periods include periods of military service (conducted through 2007, when Romania switched to a voluntary military service), full-time university study, maternity leave and child care leave. The State budget covers the contributions for periods spent in military service and education[15].

7.3.1.2. Life expectancies at birth and at retirement

Over the last four decades, the life expectancy has continuously risen in Romania. The life expectancy at birth for both sexes increased by more than two years between 1970 (67.33 years) and 1989 (69.42 years). During the transitional period of the 1990s, the life expectancy at birth stagnated and reached only 69.74 years in 1999. In the 2000s the life expectancy at birth witnessed a steep surge. As presented in Table 7.4, the life expectancy at birth increased by 2.8 years, from 70.53 years in 2000 to 73.33 years in 2009 (69.68 years for men and 77.09 years for women) according to the data provided by the National Institute for Statistics.

Accordingly, the national statistics indicate that the increase in the life expectancy at age 65 between 2000 and 2008 was 0.8 years for men and 1.22 years for women. It is likely that the life expectancy at age 65 in Romania will approach the levels of industrialized countries and thus result in higher pension expenditure. This suggests the need to further increase the statutory retirement age to offset this increase in the life expectancy.

Table 7.4
Life expectancy at birth and at age 65, 2000–2009

Year	Life expectancy at birth (in years)			Life expectancy at age 65 (in years)	
	Both sexes	Men	Women	Men	Women
2000	70.53	67.03	74.20	13.01	15.54
2005	71.76	67.69	74.84	13.61	16.44
2008	73.03	69.49	76.88	13.81	16.76
2009	73.33	69.68	77.09	—	—

Source: National Institute of Statistics (NIS).

7.3.1.3. Pension formula

The formula for calculating the public pension is based on the “pension point”. The pension is determined as a product of an individual’s average number of pension points and the value of the pension point.

15 The average duration of military service has shrunk from one year at the beginning of the 1990s to six months in 2007.

The value of the pension point is set within the State social insurance budget on a yearly basis and is subject to regular indexation.

The average number of pension points depends on an individual's contribution base accumulated throughout their contribution period. It is calculated in the following steps.

- For each month of an insured person's contribution period, the pension point is determined as the ratio of their individual contribution base and the national average gross wage for that same month according to the National Institute for Statistics (NIS). The total number of pension points is determined by dividing the sum of their (monthly) pension points accumulated throughout the contribution period by 12.
- Then, the average number of pension points is determined by dividing the total number of pension points by the number of full statutory contribution years in accordance with the law, keeping in mind that a full contribution period is defined differently for persons in arduous and very arduous working conditions.

For periods of full-time university study, periods of conscription in the armed forces before 2007, or periods spent as prisoners of war, the pension point is 25 percent of the national average gross wage for the respective period. For periods of unemployment, the pension point is calculated based on the amount of the unemployment benefit[16].

For members of the mandatory private pension fund, the pension point is pro-rated by taking into account the deduction of the contribution for the mandatory private pension fund.

Table 7.5
Value of the pension point, 2001–2010

Year	Value of the pension point (RON) (Annual average)	Rate of increase (%)	Value of the pension point		As a percentage of the national average gross wage (%)
			US$	EUR	
2001	173		59.5	66.5	41.1
2002	212	22.5	64.1	67.8	39.8
2003	240	13.2	72.3	63.9	40.3
2004	274	14.1	83.8	67.5	33.2
2005	295	7.6	101.3	81.4	31.3
2006	325.8	19.5	125.6	100.1	28.3
2007	478.5	35.6	196.3	143.4	34.5
2008	639.4	33.6	254.1	173.6	36.7
2009	725.6	13.4	237.9	171.6	38.4
2010	732.8	0.9	252.6	178.7	38.5

Source: Private Pension System Supervisory Commission (CSSPP).

16 Currently, the unemployment benefit is calculated as a flat-rate amount equal to 75 percent of the national gross minimum salary plus an amount based on the contribution base and contribution period of the insured individual. From 2011, the flat-rate amount is calculated as 75 percent of the "national reference social indicator" currently set at RON 500.

Currently, pensions for the former members of agricultural cooperatives are covered by the public pension system. These pensions have not been recalculated, although for each pension a notional number of pension points has been calculated by dividing the pension amount by the value of the pension point. The pensions are indexed at the discretion of the Government.

7.3.1.4. The minimum and maximum pensions

Before 2009 there was no minimum pension in Romania. In April 2009, however, a type of minimum pension – called a "social old-age benefit" – was introduced. It was initially set at RON 300 (73 euro) and was subsequently increased to RON 350 (85 euro) on 1 September 2009. As of 2011, this amount has been not been increased pursuant to the national austerity measures. Any pensions below this minimum level will be increased to this amount.

The Romanian pension system does not set a maximum pension amount, strictly applying the contributory principle in the calculation of pensions. However, due to the ceiling applied to the contribution base, the number of pension points possible per year was capped at three between 2001 and 2005, at five between 2005 and 2007, and at three from 2010 onwards.

More than two thirds of pensions are currently between RON 700 and RON 900 (less than 50 percent of the national average gross wage). Yet marked differences remain, as there are pensions amounting to more than RON 20,000 (11 times the national average gross wage).

7.3.1.5. Invalidity and survivors' pensions

The contribution period required for an invalidity pension depends on the claimant's age at the time that the invalidity occurred. The required contribution period is five years if the claimant is less than 25 years of age, eight years if aged 25-31 years, 11 years if aged 31-37 years, 14 years if aged 37–43 years, 18 years if aged 43–49 years, 22 years if aged 49–55 years, and 25 years if aged 55 years or more[17]. In the case of very serious diseases, no minimum contribution period is required.

Invalidity pensions are divided into three categories according to the degree of the invalidity (or loss of the capacity to work). The first degree designates a full loss of working capacity. In this case, an indemnity is paid to the caregiver attending to the permanently disabled person[18]. The second and third degrees designate a partial loss of work capacity. Beneficiaries of second and third degree invalidity pensions can work using their residual working capacity and thus accumulate contribution periods and pension points.

Invalidity pensions are calculated using the same formula as for old-age pensions. However, for invalidity pensions, the pension points will take into account the actual contribution period accumulated by the insured person up to when the invalidity occurred and their "potential contribution period" (or the difference between the statutory retirement age and their age when the invalidity occurred, with the

17 In 2011, the required contribution periods were as follows: one year if the claimant is less than 20 years of age, two years if aged 20–23 years, three years if aged 23–25 years, six years if aged 25–29 years, nine years if aged 29–33 years, 11 years if aged 33–37 years, 14 years if aged 37–41, 17 years if aged 41–45, 20 years if aged 45–49, 23 years if aged 49–53, 25 years if aged 53–57, 26 years if aged 57–60, and 27 years if aged 60 years or more.

18 The amount of the indemnity is set yearly in the State budget law. Since 1 July 2010, the amount has been cut by 15 percent pursuant to the austerity measures. In 2011, the amount was set at 80 percent of the value of the pension point. Indemnities are financed by the State budget.

maximum of a full contribution period). For each year of the potential contribution period, the pension point is equal to 0.75 for first degree invalidity, 0.6 for second degree, and 0.5 for third degree. If an invalidity pensioner reaches the statutory retirement age and thus becomes eligible for an old-age pension, they take the higher of the two pensions. Invalidity pensions are subject to periodical revisions.

In cases of death due to work accidents or occupational diseases, the surviving spouse (i.e. widow/er) is entitled to a survivors' pension if their income is less than 35 percent of the gross national average salary. In other cases, survivors' pensions are granted to surviving spouses for up to six months following the death of the insured only if their income is less than 35 percent of the gross national average salary. Survivors' pensions for children are not subject to any income conditions.

Survivors' pensions are calculated on the basis of the pension points accumulated by the deceased worker or pensioner. The total amount of a survivors' pension is 50 percent of the base pension for one survivor, 75 percent for two survivors and 100 percent if there are three survivors or more. This total amount is shared equally among the eligible survivors.

7.3.1.6. Early retirement pensions

Full early retirement pensions are payable to individuals who have made contributions for at least eight years[19] more than the full contribution requirement and who are not younger than five years below the statutory retirement age. The pension is calculated according to the old-age pension formula without any reductions. However, periods during which contributions were paid from the State budget (such as periods of military service or university study) are not taken into account in the pension calculation.

Partial early retirement pensions are payable to individuals whose contribution periods exceed the full contribution period requirement by eight years and who are not younger than five years below the statutory retirement age. The pension is calculated similarly, but a reduction rate is applied to each month of anticipation from the statutory retirement age. The reduction rate is 0.5 percent per month of anticipation if the excess contribution period (i.e. the difference between the contribution period and the full contribution period) is less than one year. This rate is reduced by 0.05 percentage-points for every year of the excess contribution period until it reaches 0.05 percent per month between nine and ten years.

As noted earlier, the law provides a lower retirement age for workers in arduous or very arduous conditions.

The number of early retirement and invalidity pensioners increased dramatically during the period of large-scale industrial restructuring in the 1990s. Faced with massive unemployment and a lack of suitable jobs or programmes to retrain workers, early retirement and invalidity or disability pensions were often considered the only tangible solution. In order to make these workers eligible for full early retirement pensions with reduced contribution periods and at lower statutory retirement ages, several workplaces falsely reported arduous or very arduous working conditions[20].

19 Previously, the contribution period had to exceed the full contribution period by at least ten years.

20 Pensioners who qualified for early retirement with shorter contribution periods also created problems for the pension recalculation that started in 2004. In accordance with the provisions of the Public Pension Act (Law No.19/2000), pension points were recalculated by taking account of the contribution periods and contribution bases accumulated throughout one's working career. As a result, most of these pensioners did not benefit from the recalculation, given that their contribution periods were shorter than the full contribution period. However, the Government – acting under public pressure – reduced the full contribution period for these pensioners.

As seen above, the current law imposes quite strict conditions on early retirement pensions. During 2010, the Government suspended all early retirement pensions as part of its fiscal consolidation programme within the framework of the stand-by agreement with the IMF, which particularly focused on pension reform.

The new Unitary Pension Act (Law 263/2010) slightly loosened the requirements for full early retirement pensions, reducing the requirement to eight years beyond the full contribution period. However, it tightened the reduction rate of partial early retirement pensions to 0.75 percent per month of anticipation.

7.3.1.7. Indexation of pensions

In Romania, pension indexation is conducted through the adjustment of the value of the pension point set yearly in the State social insurance budget.

The Public Pension Act (Law No.19/2000) provided that the value of the pension point should be set at between 30 and 50 percent of the national average gross wage. As can be seen from Table 7.5, the value of the pension point has been indexed within this variation band. This way, pension levels have maintained a link with the average wage.

In 2008, under the influence of the upcoming general election, the Government approved a sudden increase in the value of the pension point to 37.2 percent of the national gross average salary, and subsequently to 45 percent of the national average salary. At the same time, the contribution rate was further reduced to 27.25 percent. As a result, the budget of the public pension system fell into deficit. In 2009, the newly appointed Government increased the contribution rate to 31.3 percent. This was still insufficient, however, and in 2009 the value of the pension point was indexed only in line with price increases. In 2010, as Romania's fiscal position continued to deteriorate, the value of the pension point was frozen at RON 732 (174 euro)[21].

According to the Unitary Pension Act (Law 263/2010), from 2011 onwards, indexation is undertaken as follows. The pension indexation is frozen for 2011. From 2012 to 2020, pensions will be indexed in line with price increases (measured by the Consumer Price Index) plus 50 percent of the real increase in the national average gross wage. From 2021, the rate of increase in line with average gross salary will be decreased by 5 percentage-points every year (e.g. 45 percent in 2021, 40 percent in 2022, 35 percent in 2023 and so on). From 2030 onwards, pensions will be indexed only in line with price increases.

Although pensions will be adjusted in line with prices, pensions will no longer be linked with wage increases. This raises a concern of an increasing poverty risk in old age, especially for workers with a low contribution base.

7.3.2. Mandatory funded pension

7.3.2.1. Basic structure

The key legislation regulating the privately managed mandatory pension pillar (also referred to as the second pillar) is the Mandatory Private Pensions Act (Law No. 411/2004).

21 As mentioned earlier, there was an attempt to cut the value of the pension point by 15 percent in 2010. This was found to be unconstitutional by the Constitutional Court.

At the date of implementation of the law on 1 January 2007, persons insured under the public pension system who were younger than 35 years of age were obliged to join the mandatory private pension system. They were automatically assigned to the existing pension funds if they failed to join one voluntarily. Insured persons between 35 and 45 years of age were given the option of joining the private pension system or remaining in the public system. Insured persons aged 45 years or more were not allowed to join the mandatory private pension system.

Each member of the scheme is assigned an individual account into which contributions are paid. The account accrues interest after the pension fund has received contributions for at least 24 months. The system provides old-age pensions only, and the public pension system remains responsible for the provision of invalidity and survivors' pensions. However, if a member permanently loses full capacity for work and their accumulated assets are too small to purchase private annuities, the accumulated assets are either paid in a lump sum or paid in instalments for up to five years, according to the beneficiary's request. In the case of a member's death, their accumulated assets may be inherited to their legal heirs through a transfer to the heirs' individual accounts or in the form of a fixed-term annuity for up to five years.

The mandatory private pension system is financed by contributions diverted from the contributions made to the public pension system. The total contributions collected by the National Fiscal Administration Agency are first transferred to the National House for Pensions and Other Social Insurance Rights (CNPAS), and the CNPAS then allocates the second-pillar contributions to the private pension funds chosen by the individual members.

After a one-year period of marketing, enrolment and registration in 2007, the deduction of second-pillar contributions began in May 2008. The second-pillar contribution rate was initially set at 2 percent, and it was to be increased by 0.5 percentage-points every year until reaching its ultimate level of 6 percent in 2016. However, due to the public pension fund's growing deficit, the second-pillar contribution rate was fixed at its 2008 level in 2009. The second-pillar contribution rate was increased to 2.5 percent in 2010 and will continue its scheduled increase of 0.5 percentage-points per year, meaning that the contribution rate will reach 6 percent in 2017 (one year later than was initially planned).

For the members of the mandatory private pension fund, their pension points under the public pension system are reduced according to the ratio of their total contribution rate and their contributions retained by the public pension system (after the deduction of their second-pillar contributions). Thus, contrary to the Mandatory Private Pensions Act – which states that the "private pension[s]…will supplement the public pension" – the mandatory private pension system in effect substitutes only part of the public pension system. To put it differently, the mandatory private pension system could produce higher pensions if the investment of diverted contributions could yield a sufficiently high return so that the annuitized amount exceeded the pension in respect of the proportionally suppressed pension points. Under the current system, the private pillar acts only as a partial substitution of the public system without sharing much of its risks, and thus fails to relieve the burden of the public system.

7.3.2.2. Membership and assets of the mandatory pension funds

Table 7.6 presents the membership and assets of the mandatory private pension funds. Currently there are nine authorized pension funds. Most of them belong to either large banks or insurance companies whose share exceeds 70 percent of the domestic financial market. Once an individual has enrolled in the private pension system, they cannot withdraw until reaching the statutory retirement age. However, participants have the option to change their pension fund if they provide prior notification of at least 30 days and present their new contract to the original pension fund.

Since the system was first implemented in May 2008, the value of the funds has continuously risen. In November 2010, the total value of the assets of the mandatory private pension funds is around RON 3.9 billion (approximately 925 million euro), equivalent of 0.84 percent of GDP.

Table 7.6
Data on the mandatory private pension funds, 1 November 2010

Pension Fund	Number of members	Share (%)	Net assets (in million RON)	Share (%)
ALICO	320,763	6.3	276	7.1
ARIPI	487,542	9.5	313	8.0
AZT	1,282,722	25.0	910	23.4
BCR	326,073	6.4	198	5.1
BRD	135,726	2.7	95	2.4
EUREKO	362,129	7.1	210	5.4
ING	1,656,674	32.3	1,522	39.1
VIVA	376,626	7.4	256	6.6
VITAL	170,565	3.3	102	2.6
Total	5,118,820	100.0	3,886	100.0

Source: Private Pension System Supervisory Commission (CSSPP).

Table 7.7 presents the membership of the private mandatory pension system by sex and age. Currently there are around 5.1 million members of the private pension system, representing 91 percent of the total number of insured persons in the public pension system. The number of men and women in the system is almost equal.

By age group, almost 70 percent of the members are younger than 35 years of age. This age group consists of insured persons for whom membership was mandatory. On the other hand, more than 30 percent of the members are persons aged 35–44 who voluntarily joined a private pension fund. This is due partly to the aggressive marketing campaign undertaken by private pension funds targeting these groups, as these workers are more advanced in their careers, receive higher salaries and are less likely to lose their jobs than younger workers.

Table 7.7
Membership of the private mandatory pension system by sex and age, 1 November 2010

Age	Men		Women		Total	
	Number of persons	Percentage (%)	Number of persons	Percentage (%)	Number of persons	Percentage (%)
15–24 years	745,652	28.3	622,211	25.2	1,376,863	26.9
25–34 years	1,085,451	41.2	1,049,384	42.4	2,134,835	41.7
35–44 years	805,657	30.6	801645	32.4	1,607,122	31.4
Total	2,636,760	100.0	2,473,240	100.0	5,118,820	100.0

Source: Private Pension System Supervisory Commission (CSSPP).

High levels of participation in the second-pillar system have resulted in a substantial decrease in the amount of contributions paid to the public pension system due to second-pillar deductions. The planned increase in the second-pillar contribution will further intensify this loss as a transition cost. As a result, the public pension fund has chronically experienced a deficit since 2008 and has had to rely increasingly on the State budget to cover its deficit.

The Private Pension System Supervisory Commission (Comisia pentru Supravegherea Sistemului de Pensii Private, CSSPP) was established by the Government's Emergency Order in Council (Ordonanta de urgenta) No.50/2005 as an autonomous administrative entity entrusted with the supervision of both the mandatory and voluntary private pension systems.

The Commission operates under the authority of the Romanian Parliament and is currently run by a Council consisting of five members, including one President and one Vice-President. The members, two of whom are proposed by the Social and Economic Committee, are appointed by the joint Parliamentary Commission on the Budget, Finances and Banks. The Commission is spearheaded by a Director General appointed by the Council and subordinate to the Council of the Supervisory Commission. The Commission is financed through licensing fees, monthly operating fees and income from other sources (such as donations and publications).

7.3.2.3. Investment performance

In accordance with legal provisions, the investment of the private pension funds is subject to the following strict criteria.

- The largest of share of a fund's assets must be invested in treasury bonds or other instruments bearing the State's guarantee. Thus up to 70 percent of a fund's total investment portfolio can be invested in treasury bonds issued by the Romanian Ministry of Finance or Member States of the EU or EEA.
- Up to 20 percent can be invested in the assets of the currency market, including bank deposits.
- Up to 30 percent can be invested in bonds issued by local authorities in Romania or other EU Member States.
- Up to 50 percent can be invested in equity that is traded on regulated markets (e.g., on the stock exchange) in Romania or in the Member States of the EU or EEA.

- Up to 15 percent can be invested in treasury bonds issued by countries outside the EU or EEA.
- Up to 10 percent can be invested in bonds issued by local authorities in countries outside the EU or EEA, provided that these are traded in regulated markets.
- Up to 5 percent can be invested in equity or bonds issued by non-governmental entities, provided that these are traded on regulated markets and are properly rated.

Table 7.8
Composition of the private pension funds' assets, December 2010

Placement	Value (in million RON)	Share (%)
Municipal bonds	55	1.37
Treasury bonds	2,876	66.35
Bank deposits	311	7.18
Corporate bonds	476	11.0
Equity	529	12.22
Hedging instruments	1.3	0.03
Bonds issued by non-governmental foreign entities	73.7	1.70
Participation	22.7	0.52
Amounts outstanding for purchases, payments, etc.	–11.8	–0.27
Total	4,334	100.00

Source: Private Pension System Supervisory Commission (CSSPP).

Currently, each pension fund offers only one investment portfolio plan for its members. Table 7.8 presents the composition of the assets by investment instrument. Currently more than 66 percent of the assets are invested in Romanian treasury bonds, which implies that the private pension funds are largely financing the public debt. Romania's governmental deficit exceeded 5 percent of GDP between 2008 and 2010, and the public debt reached more than 30 percent of GDP in 2010.

Table 7.9 compares the rates of return of the mandatory private pension funds during their first two years of operation. The minimum rate of return (announced monthly by the CSSPP) is set at 7.22 percent, which is higher than the interest rate of the National Bank of Romania (6.25 percent in the third quarter of 2010) but lower than the yield of Government bonds (around 10 percent). All of the funds have recorded higher returns than the minimum rate. The weighted average rate of return for the last 24 months (November 2008 to October 2010) was 14.74 percent. Yet the Romanian market remains small and highly volatile, as shown by data of the Supervisory Commission.

Given the legal limitations of the investment portfolio, Romanian treasury bonds and other State-backed financial assets make up the largest share in the assets of the mandatory private pension funds. However, the Romanian Government was not a large issuer of treasury bonds prior to 2009. After the crisis in 2009, the Government has been effectively precluded from issuing excessive debt to meet the budgetary targets set out in the stand-by agreement with the IMF.

The monthly management fee is 0.05 percent of an account's net assets, though auditing costs are variable. The cost of switching funds is 5 percent of an account's net assets. Management fees do not vary amongst the different pension fund administrators.

Table 7.9
Rates of return of the mandatory private pension funds, October 2010

Fund	Rates of return (%)	Risk class	Minimum rate of return according to class of risk (%)	Weighted return (for all funds for the last 24 months) (%)
ALICO	17.24	Medium	7.22	14.74
ARIPI	17.14	High	5.78	
AZT	17.30	Medium	7.22	
BCR	15.64	Medium	7.22	
BRD	14.30	Medium	7.22	
EUREKO	15.43	Medium	7.22	
ING	16.88	Medium	7.22	
VIVA	13.70	Medium	7.22	
VITAL	12.37	Medium	7.22	

Source: Private Pension System Supervisory Commission (CSSPP). Risk classifications are in accordance with the norms of the Private Pension System Supervisory Commission.

7.3.2.4. Payment phase

The second-pillar pensions are payable when a member reaches the statutory retirement age for a public pension[22]. The accumulated individual assets are in principle used to purchase life annuities, although no regulation of this has yet been developed. Those individuals with an insufficient amount of accumulated assets or the beneficiaries of invalidity or survivors' pensions in the public system can receive these assets in a lump sum or a fixed-tem annuity for up to five years. Programmed withdrawal is also allowed, but it is considered an exception to the general rule.

7.3.3. Voluntary pension funds

The key legislation regulating the privately managed voluntary pension pillar (also referred to as the third pillar) is the Voluntary Private Pensions Act (Law No. 204/2006).

Any person can join the voluntary pension system. Enrolment in the system is wholly voluntary and is not constrained by employment relations, union membership or any other workplace relationship. However, contributions may be shared between the members and their employer or between the contributor and their union on a case-by-case basis.

22 In cases of early retirement, the law states that no private pension entitlements accrue until the individual fulfils the criteria for an old-age pension (i.e. completes a full contribution period and reaches the statutory retirement age) (Art. 52, Law 263/2010).

Contributions to the voluntary pension funds cannot be higher than 15 percent of one's declared income, which is regarded as the contribution base. There is a tax incentive for individuals to join these pension funds, as contributions are tax deductible up to almost half of the national average gross salary (equivalent to 200 euro) annually. In cases where employers pay contributions, the same amount (equivalent to 200 euro) is deductible per employee.

Pensions are paid when a person reaches 60 years of age or after at least 90 monthly contributions have been paid to their pension fund. The same rules as for the mandatory scheme apply for invalidity and survivors' pensions. The same rules are also applied with regard to their investment portfolio.

Table 7.10
Membership of the voluntary pension funds by sex and age group, December 2010

Age group	Men	Women	Total	Percentage (%)
16–29 years	—	—	36,294	16.4
30–44 years	—	—	114,032	51.5
45 years and over	—	—	71,274	32.2
Total	109,518	112,082	221,600	100.0

Source: Private Pension System Supervisory Commission (CSSPP).

Currently there are 13 authorized private pension funds, most of which are also managing the mandatory pension funds. At the end of 2011, the membership of the voluntary pension funds stood at 211,800 persons, which represents only 3.78 percent of the total number of insured persons. The total assets of the voluntary private pension funds equalled RON 307 million, which is equivalent to 0.06 percent of Romania's GDP. The low participation in the voluntary pension system highlights the limited capacity of Romanian households to save. This low propensity to save also serves to justify their mandatory enrolment in the second-pillar pension system.

The current reliance of the public pension scheme on private pensions, as described above, serves to accentuate the imbalances of the system. Vulnerabilities will therefore accumulate, and the State budget, always in deficit due to the current liabilities of the public pension scheme, will fall into greater debt. This will mean an increase in taxes and contributions, which will make collection even more difficult and the resources available for private funds ever scarcer.

As the public debt mounts, the interest rate of the treasury bonds will increase as investors shy away from making further investments. This in turn will shrink the contribution base, making it more difficult for the pension funds to collect and act as purchasers of the public debt. This vicious circle will be most pronounced in periods of recession, only worsening Romania's already vulnerable state.

7.3.4. Adequacy of benefits

7.3.4.1. The number of pensioners and the average pension

Table 7.11 presents the number of pensioners and the average pension by type in 2009. The data for 2000–2008 are presented in Tables 7.A.2–7.A.4 in the Statistical Annex.

Table 7.11
Number of pensioners and the average pension by type, 2009

	Number of pensioners (in thousands)	Average monthly pension			
		RON	US$	EUR	As % of average gross wage
Total	5,689	686	224.9	162.2	36.3
Total social insurance pensions	5,676	711	233.2	168.1	37.7
Total State pensions	4,718	750	98.4	177.3	39.7
Old-age pensions	3,239	761	249.6	179.9	40.3
– with full cont. period	2,030	936	306.9	221.3	49.6
– with incomplete cont. period	1,209	531	174.1	125.5	28.1
Early retirement with full period	9	977	320.4	265.3	51.7
Early retirement with incomplete period	112	691	226.6	187.6	36.6
Invalidity pensions	909	550	180.4	130.0	29.1
– First degree	42	542	177.8	128.1	28.7
– Second degree	530	553	181.4	130.7	29.3
– Third degree	322	546	179.1	129.1	28.9
Survivors' pensions	608	336	110.2	79.4	17.8
Total farmers' pensions	799	300	245.9	70.9	15.9
Social old-age benefit pensions	2	192	62.9	45.4	10.2
War veterans and war invalids	11	245	80.4	57.9	13.0

Source: National House of Pensions and Other Social Insurance Rights (CNPAS).

Note: The total number of social insurance pensioners also includes pensioners from the pension systems of the Ministry of Defence, the Ministry of Interior, and the Romanian Intelligence Services, which are not shown in the table.

There were 5.67 million pensioners in 2009 and 5.52 million at the end of October 2010. After peaking at 6.3 million in 2003, the number of pensioners fell gradually due to the tightened eligibility conditions and the gradual increase in the retirement age.

Old-age pensioners are the most numerous, making up 3.1 million (55.2 percent) of the total number of pensioners, 2.26 million of whom (60 percent) have full contribution periods. In 2009, the average old-age pension was RON 761 (180 euro), and the average old-age pension with a full contribution period was RON 936 (221 euro). The number of early retirees is currently 119,000, making up 2.1 percent of the total number of pensioners. Only 9,000 have completed the full contribution period. Invalidity pensioners make up 910,000, or 16 percent, of the total number of pensioners. The average invalidity pension is RON 550 (130 euro). Survivors' pensioners total 570,000, or 10 percent, of the total number of pensioners. Their average pension is RON 336 (79 euro).

There are 790,000 pensioners who are former members of agricultural cooperatives. Their average pension, paid through transfers from the State budget, is equal to the minimum pension (currently set at RON 300 [70 euro]). It is estimated that 1.59 million (28 percent) of the State social insurance pensioners completed part of their contribution period in the agricultural cooperatives.

In addition, there are around 2,000 beneficiaries of social old-age benefits. War veterans, invalids and the infirm, as well as war widows, total around 13,000 persons. The veteran pensions are paid in addition to State or military pensions.

The average pension increased significantly during the last decade due to several measures undertaken in the public pension system. In real terms, according to the statistics of the National House of Pensions (CNPAS), the average pension decreased to 44.3 percent of its 1990-levels in 2000, and increased to 120 percent in December 2008 and 123 percent in December 2009.

Similarly, the average pension as a percentage of the national average gross salary (referred to as the average system replacement ratio) dropped dramatically during the 1990s, from 43.1 percent in 1990 to around 25 percent in 2000. Since then, however, it has been continuously on the rise, with the highest gains being made during the last years of strong economic growth leading up to the crisis of 2008. Replacement rates rose alongside the gross national average salary, with an impressive gain of around 6 percentage-points between 2004 and 2007. In 2007 replacement rates reached 30 percent, mainly due to pension recalculation. Increases in the value of the pension point measured against the national gross average did not bring as much as was initially expected, with the replacement rate at 33 percent in 2008. Due to the austerity measures that have led salaries to either stall at their 2008 levels or fall drastically, replacement rates went up to 40 percent in 2010.

7.3.4.2. Issues of poverty and the social inclusion of the elderly

The poverty incidence rate among pensioners was rather high during the transitional period of the 1990s. However, it dropped significantly during the strong economic growth period between 2000 and 2008. The absolute poverty rate, which takes account of the minimum basic needs of a household based on World Bank methodology, has fallen from 35.9 percent in 2000 to around 5 percent in 2008.

The income of a standard pensioner household (or two times the average pension) was below the absolute poverty line in the 1990s. The income of a standard pensioner household increased significantly from 57 percent of the absolute poverty line in 2000 to 159 percent in 2008, although it has now decreased to 134 percent due to the indexation measures implemented in 2009 and 2010.

Table 7.12 presents the effects of social transfers on the poverty incidence rate by age group for 2001-2008. It should be noted that the National Institute of Statistics defines the poverty line at 60 percent of the national median income.

Table 7.12
Effects of social transfers on the poverty incidence rate by age group, 2001–2008 (%)

	2001	2005	2006	2007	2008
Age 0–15					
before any social transfer	37.0	39.9	40.9	40.1	41.9
after pension transfers	30.8	33.8	35.2	34.6	34.5
after all social transfers	22.1	24.9	25.4	24.7	25.9
Age 16–24					
before any social transfer	35.8	36.0	34.3	33.6	34.5
after pension transfers	25.7	27.5	26.2	25.2	24.9
after all social transfers	19.9	22.2	21.2	20.5	20.9
Age 25–49					
before any social transfer	27.9	29.5	29.2	29.0	29.6
after pension transfers	20.1	21.8	21.7	21.6	21.3
after all social transfers	14.8	16.3	16.5	16.5	16.9
Age 50–64					
before any social transfer	53.8	49.2	48.8	48.9	48.4
after pension transfers	14.4	16.2	17.1	17.8	15.6
after all social transfers	11.8	13.2	14.5	14.9	13.5
Age 65 and over					
before any social transfer	74.2	76.6	77.1	79.1	80.7
after pension transfers	21.8	20.2	21.3	22.1	18.8
after all social transfers	18.8	17.2	18.7	19.4	16.2

Source: National Institute of Statistics (NIS).

In Romania, the pension system plays the single most important role in poverty reduction for the elderly. In 2008, the poverty incidence rate for persons aged 65 years and over before any transfers stood at 80.7 percent. However, income transfers from the pension system removed 61.9 percent of the elderly population out of poverty. Other social transfers further reduced the poverty incidence rate by 2.6 percentage-points. Similarly, for persons aged 50–64, pension transfers reduced the pre-transfer poverty incidence rate of 48.4 percent by 32.8 percentage points and other social transfers by 2.1 percentage points. This analysis suggests that making a substantial cut in pension transfers will significantly increase the poverty incidence rate amongst the elderly.

All pensions up to the threshold of RON 1,000 (245 euro) are subject to a 16 percent flat rate income tax. All pensions are subject to a health insurance contribution of 9.5 percent. No tax incentives are applied to the contributions diverted to the mandatory private pension system. There is a small income tax deduction applied to contributions paid into the voluntary private pension system.

7.4. Expenditure and financing

7.4.1. Contribution rates

The contribution rate, which was minimal at the beginning of the 1990s, was gradually increased to cope with the inflation induced by successive price-liberalizations, diminishing numbers of contributors, and their weakened capacity to pay contributions[23]. The contribution rate reached 35 percent by 2000.

Since the Public Pension Act entered into force in 2001, the contribution rate has been set annually by the Parliament within the State social insurance budget law. Table 7.13 presents the contribution rates for workers in normal, arduous, and very arduous conditions.

Table 7.13
Contribution rates, 2000–2009 (%)

Year	Contribution rate normal working conditions	Employer	Employee	Contribution rate (combined) arduous working conditions	Contribution rate (combined) very arduous working conditions
2000	30.00	—	—	35.00	40.00
2001	35.00	23.33	11.67	40.00	45.00
2002	35.00	23.33	9.50	40.00	45.00
2003	34.00	24.50	9.50	39.00	44.00
2004	31.50	22.00	9.50	36.50	41.50
2005	31.50	22.00	9.50	34.50	41.50
2006	29.25	19.75	9.50	34.25	39.25
2007	29.00	19.50	9.50	34.00	39.00
2008	27.25	18.00	9.50	32.50	37.50
2009	31.30	20.80	10.50	36.30	41.30

Note: As a general rule, the contribution rate is five percent higher for workers in arduous conditions and ten percent higher for workers in very arduous conditions. The additional contribution rate is paid by employers.

Source: National House of Pensions and Other Social Insurance Rights (CNPAS).

When the Romanian economy was on the upswing in the 2000s, the Government focused on cutting the contribution rate, as the high contribution rate was seen as hampering growth and job creation. Hence, the contribution rate was reduced gradually from 35 percent in 2002 to 27.25 percent in 2008. Nonetheless, thanks to a higher receipt of contributions, the social insurance schemes achieved their first balanced budgets in 2007.

The major factors that boosted growth and to a certain extent encouraged job creation include: (i) large amounts of capital inflow into the emerging markets of Central and Eastern Europe, (ii) the introduction

23 In the 1990s, a supplementary contribution of three to five percent was levied on employees' salaries.

of a flat-rate tax of 16 percent which eased the tax burden on both households and enterprises, and (iii) increased access to credit, with short term credit increasing from 1 percent of GDP in 2004 to 26 percent of GDP in 2007.

When the sharp cuts made to the contribution rate coincided with an increased value of the pension point and the deduction of two-percent contributions from the mandatory private pension pillar, the pension fund fell into deficit in 2008. In February 2009, in consideration of the growing shortage in the fund's revenue, the Government increased the contribution rate to 31.3 percent and placed a moratorium on the 0.5 percentage-point increase scheduled to be made to the mandatory private pension funds.

The Government does not make statutory contributions to the pension system (besides the employer contributions for civil servants). However, it covers the following items through transfers from the State budget:

- contributions for periods of military service and the university education;
- subsidies for special pension schemes[24];
- minimum pensions;
- pensions for former agricultural cooperative members[25]; and
- any deficits experienced by the public scheme.

7.4.2. Fund operations

Table 7.14 presents the revenue and expenditure of the public pension system for the period 2001-2010. The pension expenditure as a percentage of GDP increased from 6.3 percent in 1996 to around 6.6 percent between 1999 and 2001. In the following years it decreased gradually, reaching 5.1 percent in 2006. However, both the pension recalculation and the sharp increase in the value of the pension point returned it to 6.48 percent in 2008. Despite strict cost containment measures, the pension expenditure further increased to 8.25 percent in 2009 and 8.57 percent in 2010. This recent increase in the pension expenditure as a percentage of GDP is explained by the negative GDP growth during this period. This points to the fact that growth is crucial to measure the magnitude of costs in relative terms and to pay them from limited resources.

24 Until 2010, military pensions were paid from the State budget. With the implementation of the Unitary Pension Act, the payment of military pensions is now integrated into the public pension system. However, the Government pays employer contributions for current military personnel as it does for civil servants.

25 Out of the 1 million former members of agricultural cooperatives, around 850,000 are wholly subsidized by the State, with the remaining persons receiving pensions from their own contribution periods as salaried employees.

Table 7.14
Revenue and expenditure of the public pension system, 2001–2010 (in million RON)

Indicator	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Total revenue	7,623	9,724	12,528	16,167	17,624	20,277	24,632	32,833	40,639	42,873
Total contributions (1)	6,829	9,075	11,430	14,249	17,395	20,186	24,397	31,448	33,067	31,806
– mandatory contributions	6,780	8,977	11,315	13,909	17,232	19,995	23,950	31,116	32,672	31,369
– voluntary contributions	49	98	115	122	163	191	447	332	395	437
Transfers	794	649	1,098	1,918	229	91	235	1,385	7,572	11,067
Total expenditure (2)	8,344	10,720	12,378	16,167	17,745	18,494	23,094	33,705	40,391	42,640
– Old-age pensions	5,582	7,003	7,939	9,869	11,361	13,140	16,891	25,435	30,974	32,797
– Early ret. full cont. period	3	20	36	51	56	64	77	98	106	108
– Early ret. incomplete cont. period	14	109	193	277	330	410	532	759	898	1,032
– Invalidity pensions	859	1,154	1,370	1,736	2,052	2,569	3,326	4,863	5,847	5,869
– Survivors' pensions	474	611	719	871	974	1,125	1,411	2,059	2,430	2,490
– War veterans, invalids, widows	51	57	59	59	54	50	45	39	33	27
– Minimum pensions	—	—	—	—	—	—	—	—	234	456
Ratio between expenditure and contribution (1) / (2)	81.8%	84.7%	92.3%	88.1%	98.0%	109.1%	105.6%	93.3%	81.9%	74.6%
Expenditure as a percentage of GDP	7.15%	7.08%	6.27%	6.56%	6.16%	5.37%	5.36%	6.46%	8.25%	8.57%

Source: National House of Pensions and Other Social Insurance Rights (CNPAS).

Table 7.15
Deficit and dependency rate of the public pension fund, 2004–2010

Year	2004	2005	2006	2007	2008	2009	2010
Deficit (in million RON)	1,978	624	0	12	2,911	6,459	7,056
Deficit (as % of GDP)	0.83	0.22	0.0	0.0	0.58	1.31	1.34
Dependency rate (contributors/pensioners)	1.31	1.02	1.01	0.98	0.97	1.03	1.01

The public pension system recorded surpluses in the beginning of the 1990s, due to the fact that the nominal amount of contributions had increased because of inflation and the pension indexation failed to catch up with these price increases. From the mid-1990s to the early 2000s, the public pension system fell into deficit as large numbers of workers exited the labour market during the large scale restructuring of State-owned enterprises. In terms of GDP, the deficit of the public pension scheme went up from 0.45 percent in 1995 to 1.60 percent in 1998. Afterwards it gradually receded, practically reaching zero in 2006 and 2007.

For the combination of reasons mentioned above, the public pension system recorded a deficit of 0.58 percent of GDP in 2008. Although countermeasures were taken in 2009 to increase the contribution rate for the public pension fund, freeze the contribution rate for the mandatory private pension funds and index the value of the pension point strictly in line with price increases, the public pension fund's deficit widened to 1.31 percent of GDP. A slightly higher deficit of 1.34 percent of GDP was expected for 2010, due mainly to the decrease in contributions. This is despite the fact that the Government has frozen the value of the pension point and fully suspended early retirement and inspections of invalidity pensions.

7.4.3. Future projections

The population data of the National Institute of Statistics show a gradual increase in the old-age dependency ratio (the ratio of the population aged 65 years or over to the population aged between 20 and 64 years), from 17.9 percent in 1990 to 23.3 percent in 2009. Future projections by Eurostat show that the old age dependency rate will reach 32.9 percent by 2030 and eventually reach 71.0 percent in 2060.

The National Institute of Statistics has carried out projections of the economically active population and the employed population based on the Labour Force Survey. The projection results show that the economically active population is expected to decrease by 7 to 8 percent, from around 10 million to between 9.2 and 9.3 million persons, and that the employed population is expected to decrease by 6.5 to 7.5 percent, from 9.3 million to between 8.62 and 8.72 million, by 2025. By age, the reduction in the labour force participation rates is observed in those groups aged 15-24 years and 25-34 years. A modest gain in the labour force participation rate is expected in the groups aged 35-44 years and 45-54 years. No significant change in the labour force participation rates is foreseen in the older age groups.

The pension projections of the EC 2009 Ageing Report show a clear increase in pension expenditure, from 6.6 percent of GDP in 2007 to 17.7 percent of the GDP by 2060. The largest contributing factor for this increase is the rise in the demographic dependency rate as analysed above. It should be noted, however, that these projections are mechanical extrapolations based on data from the base year, 2007, failing to take into account potential future legislative changes (especially with regards to the indexation method and eligibility conditions for early retirement and invalidity pensions) or potential future gains in labour productivity. In addition, no projections are available on the revenue side.

7.5. Social dialogue in the pension reform

7.5.1. The role of social dialogue, the social partners' position, and institutional issues

Currently[26] the social partners are actively involved in the management and governance of all of Romania's three pension pillars. The Board of Administration of the National House of Public Pensions (CNPP)[27] has a tripartite structure, and the same exists at the local governmental level[28]. The Council of the Private Pension System Supervisory Commission (CSSPP) has at least two members appointed based on the proposals of the Social and Economic Council, Romania's main tripartite body with a consultative role in the legislative process.

Within this institutional framework, the social partners have been intimately involved in the major pension reforms. In the parametric reform of the public pension system, trade unions strongly advocated keeping a close link between pension benefits and salaries, and both trade unions and employers' organizations demanded a reduction in the social security contribution rate as a way to reduce the burdens of businesses and encourage job creation. The involvement of the social partners in the creation of the private pillars was less significant, reflecting the social partners' lack of expertise in the area and the fact that the system's creation overlapped with a period of strong growth.

In the most recent pension reform in 2010, trade unions advocated strongly against the proposed increase in the statutory retirement age. They argued that such an increase in the statutory retirement age should be made to reflect increases in the life expectancy in Romania and nothing more. Some trade union leaders also voiced concerns on how the mandatory private pension system was conceived, and proposed that the current mandatory pension scheme be turned into a voluntary one.

Parliamentary discussion remains, however, the most critical process for the adoption of legislation. Although past Governments were tempted to bypass the Parliament by issuing "Emergency Orders in Council" (Ordonante de Urgenta), recent developments have shown that the Parliament is reasserting

26 This section deals with social dialogue and its specific institutional arrangements as they existed in Romania at the end of 2010 and beginning of 2011. It therefore does not account for the changes initiated under the amended Labour Code (Law No.53/2003) which came into effect on 1 May 2011, nor the ones made to the Social Dialogue Code that affected the institutional arrangements of social dialogue (Law No.62/2011).

27 In terms of organizational structure, the National House for Pensions and Other Social Insurance Rights (CNPAS) and the pension houses for the Ministry of Defence, the Ministry of the Interior and the Romanian Intelligence Services are now all placed under the aegis of the newly established CNPP. See Law No.263/2010.

28 Administratively, Romania is divided into 41 counties ("judet" in Romanian) and the Municipality of Bucharest. Each "judet" has a "Judet Pension House" and the Municipality of Bucharest has a Municipal House, and some of these Houses have local branches in main cities.

its role. The judiciary has also recently asserted a more prominent role in the process. In 2010, the Constitutional Court ruled that the proposed 15 percent cut in the value of the pension point was unconstitutional on the grounds that it infringed on property rights. This proposal was subsequently repealed from the draft Bill of the Unitary Pension Act.

7.5.2. Attitudes toward pension reform

In Romania, pension reform has been a subject of wide public debate. While the Romanian population has been generally pro-reform with regards to the transformation of the pension system, there is evidence (from the results of opinion polls and the optional participation of persons 35 years and older in the mandatory private pension schemes) that the general public has not been properly informed of the changes in the system.

Studies and research conducted on youth have generally concentrated on the employment dimensions of their relationship with the labour market and not on pensions. For the current working-age generation, retirement is no longer the attraction it once was for older generations. This lack of interest does not mean, however, that the system is sustainable without any further reforms.

7.6. Conclusion

The Romanian pension system is a core social protection system ensuring the stability of the economy. From a labour market point of view, retirement should not be regarded as the end of one's active life. At the same time, the pension system should not be misused as a substitute for active employment policy measures in times of economic and social distress. Both the pension policy and the labour market policy are part of the overarching concept of "flexicurity", which lies at the core of the labour market approach of the EU-2020 strategic design. To achieve this goal, the pension systems should provide adequate pension benefits, strengthen their sustainability, and diversify without jeopardizing their capacity to withstand exogenous shocks.

The Romanian pension system has gone through a profound transformation in the past 20 years. Implementing the tri-pillar structure has been an important achievement. Recently, reforms have abolished the privileges of the special pension systems, raised the statutory retirement age of women, and aligned the pension indexation base with price increases. The National House of Public Pensions (CNPP) estimates that if the aforementioned measures are implemented, the public pension budget will gradually reduce its deficit and restore its financial balance by 2025 (although the impact analysis of the above-individual measures is not available). However, a longer-term projection indicates that the fund is expected to fall into deficit again around 2032, when large generations born during 1965-70 and 1980-90 will start to retire.

The public system's accumulated deficit is a result of the imbalance between contributions and benefits. Thus, the crisis has only contributed to the problem by exposing it earlier. Today, it is hard to foresee what the future will look like for Europe as a whole and for Romania, with its medium-sized open and emergent market economy. If the Romanian economy does not recover quickly from the current crisis, the country will not achieve the targets set for it by the EU-2020. This will also impact the pension system. If the recent pension reform fails to make a significant impact, more drastic reforms may be needed to further reduce the benefits or increase the contribution rate.

When agreeing on solutions to restore the financial equilibrium and maintain pensions that guarantee adequate income and living standards, priority should be given to the issues that are problematic for both the future and current generations. Delivering on commitments made to the current generations is what keeps the labour market functioning and allows for greater flexibility and greater leverage for individuals and businesses.

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Annex

Table 7.A.1
Key macroeconomic indicators

Indicator	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Real GDP growth (%)	2.1	5.7	5.1	4.7	7.4	4.7	7.7	6.0	7.4	–7.1
GDP (in million RON)	80,377	116,769	151,475	197,565	246,469	288,048	344,651	416,007	514,654	491,274
GDP (in million US$)	37,054	40,182	45,826	59,508	75,397	98,863	122,697	170,619	204,528	161,110
GDP (in million euro)	40,279	44,866	48,464	52,595	60,720	79,497	97,786	124,654	139,746	116,147
Population total (in millions)	22.4	22.4	21.8	21.7	21.7	21.6	21.6	21.5	21.5	21.5
Percentage of population over 65	13.3	—	—	—	—	14.7	—	—	—	14.9
CPI (%)	40.0	30.0	20.0	15.1	11.6	9.0	6.6	4.8	7.9	5.6
NBR interest rate			26.2	18.8	20.2	9.6	8.4	7.5	9.5	9.4
Economically active population (15 and over) (in millions)	11.2	11.1	10	9.9	9.9	9.9	10.0	9.9	9.9	9.9
Employed (15 and over) (in millions)	10.5	10.4	9.2	9.2	9.2	9.1	9.3	9.4	9.4	9.2
Employment rate (15–64) (%)	—	—	—	50.9	50.5	50.2	51.0	51.3	51.3	50.7
Economically active population rate (15–64) (%)	68.8	67.7	63.6	62.4	63.2	62.4	63.7	63.0	62.9	63.1
Unemployment rate* (%)	10.5	8.8	8.4	7.6	6.7	5.8	5.6	4.3	4.0	6.3
Unemployment rate (ILO)** (%)	6.9	6.4	8.4	7.0	8.1	7.1	7.3	6.4	5.8	6.9
Average gross wage (RON)	284.2	421.4	532.2	595.4	824.6	942.4	1,151.8	1,388.3	1,742.1	1,888.2
Average gross wage (US$)	131.0	145.0	161.0	179.3	252.9	323.5	411.3	571.7	694.9	620.8
Average gross wage (EUR)	142.4	161.9	170.3	158.6	203.3	260.2	327.0	416.0	472.9	446.4

Source: National Institute of Statistics of Romania, National Bank of Romania.
Note: NBR=National Bank of Romania; RON=Romanian New Leu.
Exchange rates are market ones, average of values communicated by the National Bank of Romania.
* According to the national definition.
** According to the ILO definition.

Table 7.A.2
Average number of pensioners (in thousands)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Total	6,110	6,310	6,340	6,300	6,220	6,060	5,800	5,740	5,700	5,689
Total social insurance pensions	6,100	6,300	6,200	6,270	6,200	6,040	5,780	5,720	5,680	5,676
Total State pensions	4,350	4,540	4,660	4,570	4,590	4,610	4,630	4,640	4,660	4,718
Old-age pensions	3,080	3,200	3,210	3,170	3,150	3,140	3,140	3,150	3,239	3,130
– with full cont. period	2,240	2,350	2,380	2,290	2,250	2,220	2,190	2,160	2,030	1,890
– with incomplete cont. period	840	850	830	880	900	920	940	990	1,209	1,240
Early retirement with full period		1	8	10	12	12	12	12	9	9
Early retirement with incomplete period		9	60	90	100	110	110	110	112	110
Invalidity pensions	600	660	700	750	790	820	860	880	909	900
– First degree	26	27	28	30	32	35	37	39	42	42
– Second degree	490	530	550	550	550	550	560	550	530	530
– Third degree	90	90	120	160	200	240	260	280	322	330
Survivors' pensions	660	660	670	670	660	650	640	630	608	570
Total farmers' pensions	1,750	1,760	1,670	1,570	1,470	1,290	1,000	930	860	799
Social old-age benefit pensions	8	7	6	5	4	4	3	3	2	2
War veterans and war invalids	35	33	30	27	24	21	18	16	14	11

Source: National Institute of Statistics (NIS).

Note: The total number of social insurance pensioners also includes pensioners from the pension systems of the Ministry of Defence, the Ministry of Interior and the Romanian Intelligence Services, which are not shown in the table.

Table 7.A.3
Average monthly pensions (in RON)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Total	72	104	133	156	204	246	298	389	573	686
Total social insurance pensions	91	131	163	187	232	267	311	399	593	711
Total State pensions	94	134	169	195	244	289	336	434	631	750
Old-age pensions	108	154	194	226	285	340	395	511	741	761
– with full cont. period	124	176	222	265	339	404	469	609	879	936
– with incomplete cont. period	66	93	116	126	151	184	223	298	475	531
Early retirement with full period		238	291	309	365	391	440	557	803	977
Early retirement with incomplete period		135	150	175	217	244	287	378	560	691
Invalidity pensions	73	109	138	154	186	210	251	319	460	550
– First degree	92	133	162	177	207	230	258	322	462	542
– Second degree	76	114	142	157	188	213	255	323	466	553
– Third degree	54	77	113	140	177	203	242	310	449	546
Survivors' pensions	46	63	81	97	123	147	171	221	320	336
Total farmers' pensions	19	27	34	38	74	88	117	159	253	300
Social old-age benefit pensions	33	44	54	59	69	77	87	111	161	192
War veterans and war invalids	120	131	157	181	205	216	226	236	245	245

Source: National Institute of Statistics (NIS).

Table 7.A.4
Average pensions as a percentage of the average gross wage

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Pension point value	—	41.1	39.8	40.3	33.2	31.3	30.6	34.5	36.7	38.4
Total	25.3	24.7	24.9	26.2	24.7	26.1	25.9	28.0	32.9	36.3
Total social insurance pensions	32.0	31.1	30.6	31.4	28.1	28.3	27.0	28.7	34.0	37.7
Total State pensions	33.1	31.8	31.8	32.8	29.6	30.7	29.2	31.3	36.2	39.7
Old-age pensions	38.0	36.5	36.5	37.9	34.6	36.1	34.3	36.8	42.5	40.3
– with full cont. period	43.6	41.8	41.7	44.5	41.1	42.9	40.7	43.9	50.5	49.6
– with incomplete cont. period	23.2	22.1	21.8	21.2	18.3	19.5	19.4	21.5	27.3	28.1
Early retirement with full period	—	56.5	54.7	51.9	44.3	41.5	38.2	40.1	46.1	51.7
Early retirement with incomplete period	—	32.0	28.2	29.4	26.3	25.9	24.9	27.2	32.2	36.6
Invalidity pensions	25.7	25.9	25.9	25.9	22.6	22.3	21.8	22.9	26.4	29.1
– First degree	32.4	31.6	30.4	29.7	25.1	24.4	22.4	23.2	26.5	28.7
– Second degree	26.7	27.1	26.7	26.4	22.8	22.6	22.1	23.3	26.6	29.3
– Third degree	19.0	18.3	21.2	23.5	21.5	21.5	21.0	22.3	25.8	28.9
Survivors' pensions	16.2	14.9	15.2	16.3	14.9	15.6	14.9	15.9	18.4	17.8
Total farmers' pensions	6.7	6.4	6.4	6.4	8.9	9.3	10.2	11.5	14.5	15.9
Social old-age benefit pensions	11.6	10.4	10.1	9.9	8.4	8.2	7.6	8.0	9.2	10.2
War veterans and war invalids	42.2	31.1	29.5	30.4	24.9	22.9	19.6	17.0	14.1	13.0

Source: Author's calculations based on NIS data.

8. The Slovak Republic

Miloslav Hetteš

8.1. Overview

8.1.1. Historical overview

After 1989, the transition from a centrally planned economy to a market economy generated a host of large-scale changes in the current Slovak Republic, including the liberalization of economic processes, the massive transfer of State ownership to private parties, and gradual denationalization, deregulation and decentralization. These political and economic transformations also necessitated the transformation of social systems, including the pension system.

At the beginning of the 1990s, the pension system in the then-Czechoslovakia consisted of a mandatory pay-as-you-go (PAYG) scheme as well as voluntary supplementary pension insurance (multi-employer funds). The PAYG scheme was characterized by (i) a low statutory retirement age (60 years for males and 53–57 years for females), (ii) preferential treatment for workers in hazardous and physically strenuous jobs (labour categories I and II), and (iii) strong redistributive elements, such as ceilings on pension benefits, discrepancies between the maximum bases for contributions and benefits, and limitations on the assessment base. A supplementary pension system was developed, but its membership was limited to 5 percent of the labour force.

After November 1989, several partial modifications were introduced to the pension system as an immediate response to the transformations occurring in the social sphere. These included a mechanism to allow for a regular increase in pensions based on the rise of average wages and the cost of living[1], the cancellation of personal pensions (old-age pensions granted for high-ranking officials in the former regime), and the inclusion of the self-employed in the mandatory pension system. However, important challenges emerged with regards to the financing and organization of the system.

The social security system has undergone a series of major organizational changes. On 1 January 1991, the Slovak Sickness Insurance Administration (Slovenská správa nemocenského poistenia), the local offices of the Social Affairs Department, and the Pension Security Office (Úrad dôchodkového zabezpečenia) were merged into the single Slovak Social Security Administration (Slovenská správa sociálneho zabezpečenia).

Following the dissolution of Czechoslovakia on 1 January 1993, a new public finance system was established in the Slovak Republic. Prior to that date, the pension system had been financed through the State budget. However, under the new system, the administration of pension system was separated from the

1 Act No. 46/1991 Coll. introduced a mechanism to allow for a regular increase in pensions to reduce the disparities between pensions granted during different periods. Pensions are increased if the cost of living has increased by 10 percent or if the average wage has increased by 5 percent three months after the last increase.

State budget and its resources came primarily from contributions collected from insured workers and employers and partly from State contributions. As a result of this change, a new public institution – the National Insurance Institution (Národná poisťovňa) – was established in 1993.

In the course of the National Insurance Institution's operations, efficiency problems emerged due to the fact that health insurance was jointly administered by the Institution, along with other social insurance schemes. This led to the establishment of several health insurance agencies separate from the National Insurance Institution in 1995. Consequently, a new public institution – the Social Insurance Agency – was established to administer pension insurance and sickness insurance and was given relative independence from the Government. On 1 April 2002 the Social Insurance Agency took over the Slovak Insurance Company (Slovenská poisťovňa), which administered the insurance for work accidents and occupational diseases.

The development of the pension system in the Slovak Republic in the 1990s was similar to that of many transitional countries in Central and Eastern Europe. It was characterized by low retirement ages combined with extensive early retirement privileges and worsening system dependency rates due to a decline in employment and an increase in pensioners. However, because of the relatively favourable demographic and financial conditions of its pension system, Slovakia did not implement structural pension reforms in the 1990s. The pension system that it inherited from the former Czechoslovakia was kept without significant changes being made to it.

Discussions on pension reform began in the early 2000s under the neo-liberal government. One of the main objectives of the reform proposed by the Government was to introduce a mandatorily funded pension pillar. The contribution rate for the second pillar was initially proposed to be 3 percent, with possible increases in the future. The collective management of pension funds (with the participation of clients) was also among the possible reform measures.

Slovakia reformed its national pension system in 2004 and 2005. The single-pillar, defined-benefit pay-as-you-go system was changed into a three-pillar system consisting of:

- the first pillar - a mandatory, pay-as-you-go defined-benefit State pension with defined benefits;
- the second pillar - a mandatory privately managed funded pension; and
- the third pillar - a voluntary supplementary pension scheme and other financial products.

In Slovakia, 50 percent of all pension contributions are diverted to the second pillar. This share is the largest of the transitional countries that introduced a second-pillar pension system. The first-pillar State pension system has retained only 50 per cent of the total old-age pension contributions.

All currently insured persons in 2005 were given the choice to remain in the State pension scheme or to enter the new two-pillar pension system. People newly entering the pension system after mid-2006 were automatically covered by the two-pillar statutory pension system. About 1.5 million of the 2.6 million currently insured persons transferred to the new system. Close to 25 per cent of the people who transferred to the new system were older than 40 years of age.

In 2008, with the aim of maintaining the stability of the State pension system, the Government amended the law on old-age pension savings and changed the participation in the second pillar from mandatory to optional. Thus persons newly entering the labour market after 31 December 2007 have a six-month period to decide whether or not to join the old-age pension savings system. In addition, in 2008 and 2009, the Government provided two opportunities for all insured persons to decide whether to stay, to leave or to join the second-pillar system.

8.1.2. The current system's structure

The social protection system in Slovakia has four branches. The two main branches are health care and social insurance; the others are State social support for families and social assistance.

The following are the main pieces of legislation regulating the pension system of Slovakia:

- Act No. 461/2003 Coll. on social insurance, as later amended (hereinafter referred to as the "Social Insurance Act"), effective as of 1 January 2004.
- Act No. 43/2004 Coll. on old-age pension savings and on the amendment and supplementation of certain acts, as later amended (hereinafter referred to as the "Old-Age Pension Savings Act"), effective as of 1 January 2005. The pension plan is based on savings invested in individual accounts, and – together with the old-age insurance provided by the Social Insurance Act – is intended to guarantee an income to the beneficiary in retirement, or to their descendants in case of death.
- Act No. 650/2004 Coll. on supplementary pension savings and on the amendment of certain acts, as later amended, with tax advantages, effective as of 1 January 2005, and Act No. 595/2003 Coll. on income tax, as later amended, with tax advantages, effective as of 1 January 2005[2].

The first pillar is a mandatory, pay-as-you-go, funded defined-benefit State pension system. The State social insurance is under the competence of the Ministry of Labour, Social Affairs and Family (Ministerstvo práce, sociálnych vecí a rodiny) acting through the Social Insurance Agency. The Social Insurance Agency provides old-age benefits, invalidity benefits, survivors' benefits, sick pay, maternity benefits, unemployment benefits and insurance against employment injuries and occupational diseases. The Social Insurance Agency had 37 regional branch offices in January 2011. There is currently a proposal to merge some of them as an austerity measure.

The second pillar is a fully-funded old-age pension insurance scheme called the "old-age pension savings". Currently, six private pension fund management companies (Dôchodková správcovská spoločnosť) administer the old-age pension savings scheme. These companies are wholly or jointly owned by large European insurance companies and banks, and their total annual income in 2007 equalled about 2.5 per cent of Slovakia's GDP. If an employee joins the old-age pension savings scheme, half of their pension contributions are deposited into an individual account administered by the pension fund management company of their choice.

This scheme is a basic statutory insurance scheme and therefore falls under the scope of the coordination of social security within the EU, EEA and Switzerland. However, problems arise with the aggregation of insurance periods under the system and the fact that participation in this scheme is now optional. This

2 Table 8.A.1 in the Annex summarizes the legislation relevant to the regulation of the second and third-pillar pension systems.

scheme may be more appropriately classified as a supplementary pension scheme akin to those that are widely adopted in the EU-15 countries.

The third pillar consists of a complementary pension savings scheme currently administered by five private pension supplementary companies (Doplnková dôchodková spolo nos). In late 2009 there were more than 780,000 members, which is slightly less than a third of the working age population. At the end of 2009, the assets in the third pillar equalled around 1 billion euro, equivalent to 1.6 percent of Slovakia's GDP. Private life insurance can also be included in the third pillar.

Employers can contribute to the complementary pension savings scheme on a voluntary basis. However, employers' participation is mandatory for those with employees in categories III and IV (in physically strenuous and hazardous work) or working in special occupations, such as dancers and windjammers. The purpose of the supplementary pension savings scheme is to allow employees to obtain supplementary pension income in old age or (for special categories of workers) in early retirement.

Contributions made to the complementary pension savings scheme less than or equal to 398 euro per year (equivalent to 12,000 Slovakian crowns) are exempt from income tax[3]. Employers can offset the costs of contributions for their employees with a ceiling on their employees' contributions at 6 percent of their gross wages. Since 2005, tax credits that were originally only for savings with supplementary pension companies have been extended to special purpose savings in banks and to life insurance. The conditions for tax relief are at least a ten-year qualifying period and the payment of benefits after 55 years of age.

In addition, national social assistance (the "zero non-contributory pillar") falls under the responsibility of the Ministry of Labour, Social Affairs and Family, providing death grants and family allowances. These benefits are governed by the following legislation:

- Act No. 238/1998 on the funeral allowance, as amended;
- Act No 235/1998 Coll. on the child birth allowance and on allowances for parents who have three or more children born at the same time or twins more than once in two years, as amended;
- Act No 280/2002 Coll. on the parental allowance, as amended;
- Act No 600/2003 Coll. on child benefits, as amended;
- Act No 627/2005 Coll. on allowances to support child custody, as amended.

Family benefits are administered by the regional branch offices of the Ministry of Labour, Social Affairs and Family (Ústredie práce, sociálnych vecí a rodiny). The dependent child tax credit is regulated by the Ministry of Finance and granted by the tax service. The social assistance scheme provides benefits in cash and in kind to persons with serious material difficulties and to those suffering from a physical handicap. It is administered by the regional branch offices of the Central Office of the Ministry of Labour, Social Affairs and Family, by local Government actors, and by certain non-governmental organizations.

3 This tax allowance for the complementary pension savings was abolished in early 2011.

8.2. Coverage, compliance and collection

8.2.1. Mandatory and voluntary coverage

In 2009 the number of insured persons was 2,227,076, representing 82.8 percent of the labour force. Table 8.1 presents the number of insured persons by group. It should be noted that the Social Insurance Agency does not collect information on the age and sex of contributors. Hence, sex and age disaggregated data are not available.

Table 8.1
Number of insured persons by group, 2009

Indicators		%
Employees	1,734,604	64.48
Self-employed	261,247	9.71
Voluntarily insured	17,844	0.66
Covered by State	213,381	7.93
Total insured persons	2,227,076	82.79
Labour force	2,690,000	100.00

Source: Social Insurance Agency.

The two main types of workers who are mandatorily covered by the pension system are:

- employees performing paid work either in Slovakia or abroad for a period determined by their employer (unless international treaties prevail over Slovakian law and impose another regime), and
- self-employed persons whose income[4] is more than 12 times the minimum monthly wage for a full-time job.

The State pays contributions when an employee or a self-employed person is receiving a parental allowance.

The State provides mandatory coverage with a full contribution subsidy for the following persons:

- persons caring full-time for a child under six years of age, or a child between six and 18 years of age with serious health problems, provided that they are not receiving early retirement or a disability pension and have not yet reached the legal retirement age;
- persons receiving cash allowances for care giving and persons providing personal assistance to heavily handicapped persons for a maximum of 12 years, provided that they are not receiving early retirement or a disability pension and have not yet reached the legal retirement age; and
- persons receiving disability or occupational injury pensions before the legal retirement age.

4 On July 1 of every year, self-employed persons declare their income for the previous year.

In addition, any person 16 years of age and older can voluntarily subscribe to the pension system. However, the number of voluntary members is less than one percent of the total insured population.

About 80 percent of the non-covered population are unemployed persons totalling 379,500 in December 2009, or 12.7% of the labour force. The remainder of the non-covered population includes self-employed persons in their first year of economic activity or persons not fulfilling income conditions for pensions, including entrepreneurs, students, homemakers and artists.

Since 1989, Slovakia has witnessed a growing number of non-covered persons due to decreasing labour market participation rates. As regular full-time employment declines, self-employment, part time work, shared work and other flexible forms of employment are emerging. This affects young people in particular.

8.2.2. Special groups

The Social Insurance Act does not cover special groups of workers. These special groups include members of the police corps, the Slovak Intelligence Service, the Bureau of National Security, the corps of the prison and judicial guards and the railway police; customs officials; professional service staff in the armed forces; and soldiers engaged in professional services in the armed forces. These groups of workers are covered by special insurance policies regulated by their respective ministries. For instance, police officers and soldiers are covered by Act No. 328/2002 (on the social protection of military and police personnel). This law provides for their service retirement pensions.

These schemes are contributory but receive significant subsidies from the State budget. The average pensions provided by these schemes are appreciably higher. For example, the average retirement pension for soldiers is about two times higher than the average pension of the Social Insurance Agency. The average retirement pension for police officers is approximately 1.5 times higher than the average pension. In particular, judges and prosecutors are entitled to receive significant special retirement allowances.

Moreover, some special occupational groups, such as professional dancers and those engaged in hazardous work, are mandatorily covered by the third pillar to supplement their early retirement.

8.2.3. The informal economy

A recent study on the shadow economy from 1991 to 2007 shows that the Slovak Republic had the smallest shadow economy of the 21 transition countries of Central and Eastern Europe, as shown in Table 8.2. The estimated size of the shadow economy in the Slovak Republic was 18.1 percent of GDP from 1999 to 2007, compared to the Czech Republic at 18.4 percent of GDP in the same period.

Table 8.2
Size of the shadow economy as percentage of GDP, 1999–2007

Year	1999	2000	2001	2002	2003	2004	2005	2006	2007
Slovakia	18.9	18.9	18.8	18.6	18.3	18.1	17.6	17.2	16.8
Average of 21 countries	36.9	36.3	36.1	35.8	35.3	34.8	34.3	33.7	32.6

Source: Friedrich Schneider, Andreas Buehn and Claudio E. Montenegro, "Shadow Economies All Over the World: New Estimates For 162 Countries From 1999 to 2007", July 2010.

National labour inspectorates, the local offices of the Ministry of Labour, Social Affairs and Family (local employment services), the Office of the Border and Foreigners' Police, the judicial and criminal police, and the tax authorities work closely to reveal undeclared or illegal work. The branch offices of the Central Office of Labour, Social Affairs and Family have the right to impose fines based on their audit findings. Despite the measures taken by the public administration in Slovakia, breaches of statutory provisions in the form of undeclared work and illegal employment continue to take place. Findings from controls conducted in 2008 reveal that 5.3 percent of employers hired workers illegally and employment agencies recruited 6.7 percent of workers illegally.

Undeclared workers are not eligible for any social insurance benefits, including old-age and disability pensions, sickness benefits, employment injury benefits and unemployment benefits. The Social Insurance Agency grants the labour inspectors free access to their registry of insured persons to achieve more effective control of undeclared work and labour inspection.

There are also reports of violations of the Labour Code (Act No. 311/2001 Coll. as amended). Employees have been denied wages, holidays, meals, personal protective equipment, and sickness benefits in times of illness or following a work injury.

Joining the EU has resulted in greater labour market openness in the Slovak Republic, and therefore greater numbers of migrant workers. Illegal migrant workers are an emerging issue in Slovakia. Although the number of reported cases is less than 100 per year, the actual number of illegal migrant workers is estimated to be several times higher.

8.2.4. Contribution collection and the underreporting of wages

In Slovakia, the collection of statutory pension contributions is the sole responsibility of the Social Insurance Agency. The Social Insurance Agency coordinates with the National Labour Inspectorate (Národný inšpektorát práce) and the Central Office of Labour, Social Affairs and Family to manage the non-payment of contributions.

Concerning first and second-pillar contributions, all of the social insurance contributions paid (currently 28.75 percent of wages) are given to the Social Security Agency through the State Treasury (Štátna pokladnica). The Social Insurance Agency transfers the second-pillar contributions to the individual accounts kept by pension funds.

Concerning third-pillar contributions, employees and employers pay contributions directly to their specific supplementary pension companies. For employees who are members of a particular scheme, their employers pay contributions unless their membership contracts stipulate otherwise.

One of the strategic objectives of the Social Insurance Agency is to successfully collect contributions. According to data provided by the Social Insurance Agency, the Agency collected 94.3 percent of the contributions due in 2009. The main challenge facing the Social Insurance Agency is the non-payment of contributions by insolvent employers, in particular healthcare providers and agricultural enterprises. The recent economic crisis also had a negative impact on the payment of contributions.

Table 8.3 compares the contributory base as a percentage of GDP for the period 1985-2009. The contributory base is estimated by multiplying the average assessment base[5] by the number of contributors. In 2009, the contributory base was estimated to equal 26.6 percent of GDP. The estimated share of the contributory base in GDP decreased significantly in the 1990s, although there was a slight increase from 2005 to 2009.

Table 8.3
Contributory base as percentage of GDP, 1985–2009

Year	1985	1990	1995	2000	2005	2009
Contributors	2,572,000*	2,562,000*	2,287,195	2,208,020	2,237,491	2,227,076
Average contributory wage (euro)**	94.37	108.81	238.83	379.41	467.57	630.00
GDP in nominal prices (mil. euro)	5,094.57	6,168.76	19,300.67	31,134.70	49,302.96	63,331.60
Contributory base as percentage of GDP	57.2	54.2	34.0	32.3	25.5	26.6

* Employees covered by a pension security scheme (1985, 1990).

** Assessment base data exists from 2004 onwards. Data before 2004 are determined according to the provisions in Act No. 461/2003 Coll. on Social Insurance.

Figure 8.1 shows the distribution of the monthly gross wages of employees in 2009. The average gross wage was 744.5 euro for both sexes; hence, the average assessment base in 2009 was 84.6 percent of the average gross wage of employees. As can be seen below, 64.3 percent of employees receive wages lower than the average salary. Figure 8.1 also depicts the wage distribution for men and women. Generally, women receive a lower wage than men; in particular, a large proportion of women are concentrated in the wage bracket between 300 and 700 euro. This may have an impact on old-age income security, as women – who have a longer life expectancy – are expected to receive lower pensions than men on average.

Self-employed persons are mainly contributing at the minimum contributory base, which was 295.5 euro in 2009. Self-employed persons are obligated to contribute within the statutorily determined minimum and maximum contribution amounts. Their exact contribution amount is derived from their declared income tax. In fact, 83.9 percent of self-employed persons contribute at the minimum base, while only 11.4 percent of employees contribute at this rate. This results in low pensions for the self-employed.

5 As noted earlier, there was no social insurance contribution before 1992. The assessment base is available only from 2004 onwards. Data on the assessment base before 2004 are determined according to Annex 3 of Act No. 461/2003 Coll. on Social Insurance.

Figure 8.1
Distribution of monthly gross wages by sex, 2009

8.3. Benefits

8.3.1. State pension

8.3.1.1. Qualifying conditions

An insured person is entitled to an old-age pension if they have completed at least a 15-year pension insurance period and have attained the retirement age. The minimum qualifying period was originally ten years but was changed to 15 years by the law amendment in 2008.

The pension insurance period is the period of compulsory and voluntary pension insurance for which the pension insurance contributions are paid.

The following non-contributory periods are also regarded as part of the pension insurance period:

- periods where service is provided as a police officer, as a professional soldier, or as a soldier preparing for service, so long as no service retirement pensions, disability retirement pensions, disability pensions or partial disability pensions are received for this period;
- periods where disability pensions are received, up to the retirement age or to the time when an early retirement pension entitlement is received; and
- periods of care for a child under six years of age or with long-term health problems under 18 years of age, so long as only one person is entitled to this benefit per child.

8.3.1.2. Retirement age

The Social Insurance Act of 2004 stipulates that a gradual increase in the normal retirement age of nine months per year in will change the retirement age from 60 to 62 years for men by 2006, and from 53–57 years (depending on one's number of children) to 62 years for women by 2014.

A worker can retire up to two years earlier than the normal retirement age if their combined benefits from the first and second pillar exceed 60 percent of the minimum living standard as determined by the Government. In this case, their pension is reduced by 6 percent per year in anticipation of early retirement, while a bonus of 6 percent per year of deferral is introduced for those postponing their retirement. It is also possible to receive pensions while working. In this case, the amount of an old-age pension is recalculated once a year by taking into account half of the newly acquired period.

The following table presents the life expectancy by sex at ages 62 and 65 in 2009.

Table 8.4
Life expectancy at ages 62 and 65 by sex, 2009 (in years)

	Life expectancy at age 62	Life expectancy at age 65
Males	15.8	14.0
Females	20.0	17.7
Both sexes	18.2	16.1

8.3.1.3. Old-age pension formula

The amount of an old-age pension is a product of (i) the average personal wage point, (ii) the pension insurance period, and (iii) the current pension value. The definition of the pension insurance period is given above. The remaining factors are explained as follows:

- The personal wage point in a year is determined by dividing the personal assessment base by the general assessment base. The personal assessment base is the sum of an individual's assessment bases for a calendar year, out of which pension insurance contributions have been paid. The general assessment base is 12 times the average monthly wage in the Slovak Republic, as established by the Statistical Office of the Slovak Republic (Štatistický úrad Slovenskej republiky). For example, an employee whose annual gross wage is equal to the national average wage will earn one personal wage point for the calendar year. The personal wage point in any given year should not be greater than three[6].
- The average personal wage point is determined by dividing the sum of the personal wage points earned by the individual throughout their career by their pension insurance period. For the purpose of determining the pension insurance period, the acquired days of pension insurance are converted into years.
- The pension value is set by the Social Security Act. The pension value for 2010 is 9.2246 euro, which is 1.03 percent of the general assessment base. The pension value is adjusted every year on 1 January and is valid for that calendar year.

For members of the second pillar, the same conditions and formulas will apply as above except that each year of membership in the second pillar counts as a half year of pension insurance period (since

6 For contribution purposes, the maximum monthly assessment base for the pension and unemployment insurance and the reserve fund is equal to four times the national average monthly wage.

only 50 percent of pension contributions were paid to the State pension system during that period). In addition to a proportionally reduced old-age pension, funded pensions in the second pillar provide life annuities equal to at least 60 percent of the subsistence minimum (111 euro per month in 2010). Any additional amount remaining on one's balance may be withdrawn either as a lump sum or in the form of programmed withdrawals.

There is no direct provision on the minimum amount of pension benefits. However, the law guarantees minimum pension benefits through its definition of the minimum assessment base for paid contributions. Since the minimum assessment base is equal to the minimum wage, which is approximately 40 percent of the average wage, an individual can generally earn no less than 0.4 points per year of contributions. Thus, if a worker contributed at the minimum wage for 40 years, their pension would be half of the minimum wage. A retired pensioner whose income is less than the subsistence minimum (which is fixed at about 60 percent of the minimum wage) can receive assistance in material need depending on their individual situation.

The highest personal wage point is three, and this implicitly determines the maximum pension benefit.

8.3.1.4. Disability pensions

A disability pension is payable if an insured person becomes disabled (i.e. loses more than 40 percent of their ability to perform gainful activity)[7], provided that they have completed a minimum five-year pension insurance period and at the time of their disability they failed to meet the conditions required to claim an old-age or early retirement pension.

For persons younger than 28 years of age, the insurance period required for a disability pension is reduced according to age, as follows:

- one year for persons younger than or equal to 22 years of age,
- two years for persons between 22 and 24 years of age,
- three years for persons between 24 and 26 years of age, and
- four years for persons between 26 and 28 years of age.

If dependent children who are permanent residents became invalid, they are entitled to a disability pension starting at 18 years of age. Similarly, students who became invalid during their doctoral full-time studies who have not yet reached 26 years of age and are permanent residents qualify for disability pensions as well.

For persons who have lost more than 70 percent of their ability to perform gainful activity, the amount of their disability pension is determined as a product of (i) the average personal wage point, (ii) the period of pension insurance already acquired, added to the period from the start of the disability until the retirement age, and (iii) the current pension value.

7 Musculoskeletal diseases, mental disorders and diseases of the circulatory system are the three most common reasons for disability in Slovakia.

If the loss of one's ability to perform gainful activity is less than 70 percent, the amount of their disability pension will also take into account the percentage decrease in their ability to perform gainful activity.

8.3.1.5. Survivors' pensions

A widow(er)s' pension is payable:

- if the deceased spouse was a beneficiary of an old-age pension, an early retirement pension or a disability pension;
- if the deceased spouse met the qualifying conditions for an old-age pension or disability pension; or
- if the spouse died due to a work accident or occupational disease.

After one year of payment, the widow(er)s' pension shall be continued to be paid if the widow(er):

- is taking care of a dependent child;
- is disabled and has lost more than 70 percent of their ability to perform gainful activity;
- has raised at least three children;
- has reached 52 years of age and has raised two children; or
- has attained the retirement age.

The amount of a widow(er)s' pension is 60 percent of the old-age pension, early retirement pension or disability pension to which the deceased spouse was or could be entitled to as of their day of death. If the conditions for two pensions are met, the higher pension amount will be applied.

A dependent child may claim an orphans' pension if the parent or adoptive parent meets the same conditions as for the widow(er)'s pension.

The amount of an orphans' pension is 40 percent of the retirement pension, early retirement pension or disability pension to which the deceased parent or adoptive parent was or would be entitled to as of their day of death.

8.3.1.6. Early retirement and disability pensions

Recently there have been a growing number of individuals applying for early retirement and disability pensions in the context of the global crisis in Slovakia. Although the eligibility criteria for these pensions have been considerably tightened (for instance, men cannot retire before 60 years of age and a regular review of disability pensions has been introduced), early retirement pensions continue to be an option for unemployed workers close to retirement age but unable to find a suitable job.

As explained earlier, workers in police and military service are covered by special schemes. The main benefit of these special schemes is the service retirement pension, which is payable after 15 years of membership. After leaving the service, these workers can (and usually do) continue to work while receiving the full amount of their service retirement benefits.

Table 8.5
Data on service pensions, 2008–2009

Year	Insured persons	Service pensions	Average (euro)
2008	15,731	13,529	684.92
2009	14,955	13,697	745.60

Source: Military Social Security Office.

In addition, workers in special conditions (workers in categories III and IV, along with dancers and wind-jammers) can receive supplementary pension incomes upon the termination of their work.

8.3.1.7. Indexation of pensions

Pension benefits are indexed on 1 January of each calendar year by adjusting the pension value by a percentage determined as the sum of 50 percent of the annual growth in consumer prices and 50 percent of the annual growth of the average wage in Slovakia. The rate of increase in pension benefits is established by Regulation of the Ministry of Labour, Social Affairs and Family based on data provided by the Statistical Office. This rate of adjustment is published in the Official Gazette (Zbierka zákonov) no later than 31 October of the year prior to the relevant calendar year.

Before 2004, the Parliament determined the amount of pension indexation. The Social Insurance Act (Act No. 461 of 2003 Coll.) does not specify the method to be used to determine the rate of increase.

8.3.2. Mandatory funded pension

8.3.2.1. Membership

Table 8.6 presents the number of members in the second pillar (called the old-age pension savers). The number stood at 1,438,000 (65.8% of the employed population) as of 31 July 2010. It should be noted, however, that approximately 200,000 of them do not pay contributions due to unemployment. Table 8.7 provides the age composition of the second pillar.

Table 8.6
Membership in the second-pillar pension scheme, 2005–2010

Date	Members	Increase	Rate of increase (%)
31.12.2005	1,090,125		
31.12.2006	1,537,793	447,668	41.07
31.12.2007	1,563,044	25,251	1.64
31.12.2008	1,484,394	– 78,650	–5.03
31.12.2009	1,434,870	– 49,524	–3.34
31.07.2010	1,438,084	3,214	0.22

Source: Social Insurance Agency.

Table 8.7
Age distribution of the members of the second-pillar pension scheme, 31 December 2007

Age	Composition (%)	As a percentage of the employed population of the same age group (%)
Less than 30	38	24
30-39	37	79
40-49	23	16
50 or more	2	1
Total	100	66

Source: National Bank of Slovakia.

The Old-Age Pension Savings Act (No. 43/2004 Coll.) came into effect on 1 January 2005. From 1 January 2005 to 30 June 2006, all of the currently insured persons could choose either to remain in the State pension scheme or to enter the new two-pillar pension system. No age limits were applied. Persons newly entering the pension system after 30 June 2006 were automatically covered by the two-pillar statutory pension system.

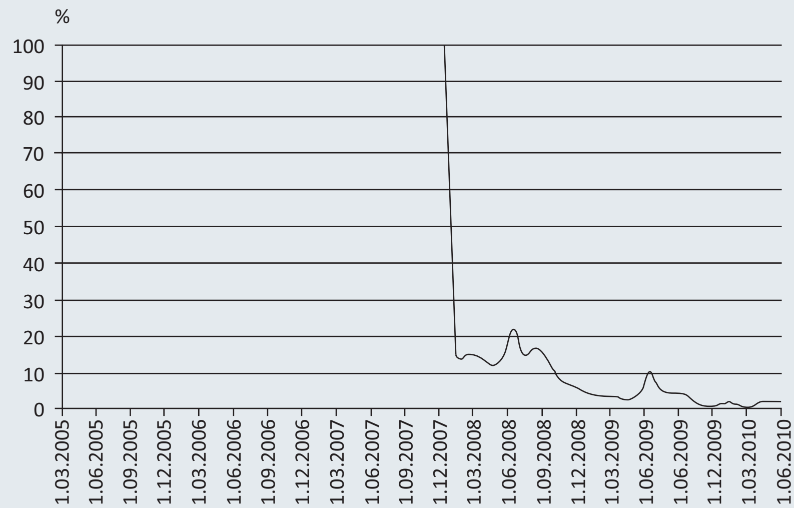
Contrary to the expectations of the Government (which estimated that between 300,000 and 800,000 persons would transfer to the new system), about 1.5 million of the 2.6 million insured persons transferred by the end of 2006. However, about 25 percent of the people who transferred were older than 40 years of age and their remaining savings periods before retirement were too short to accumulate a reasonable amount of assets.

In 2008, participation in the second pillar became optional. Persons newly entering the pension system after 31 December 2007 can decide within six months of registration whether they want to join the multi-pillar system or contribute exclusively to the State pension system[8]. Because it is optional, the rate of new labour market entrants' participation in the second-pillar pension system has decreased by almost one-tenth, as can be seen in Figure 8.2.

Persons who choose to join the second pillar cannot switch to the first pillar except during specified open periods. The Government provided two such periods in 2008 and in 2009 for all insured persons to leave or join the second-pillar system. If an individual leaves the second pillar and returns to the first pillar, their accumulated savings are transferred to the first pillar, and their fully accrued State pension rights are recovered (i.e. their accrued rights are the same as if they had never switched to the mixed pension system). In the first period (from January to June 2008), 107,000 individuals left and 23,000 joined the second pillar. In the second period (from 15 November 2008 to 30 June 2009), 66,000 left and 14,600 joined the second pillar.

8 Mandatory participation in the second pillar was simultaneously eliminated for persons not performing gainful activity or whose contributions are paid by the State due to childcare responsibilities or severe disability.

Figure 8.2
Second-pillar entry rates of newly registered persons, 2005–2010



Source: Institute of Finance Policy, Ministry of Finance, October 2010.

8.3.2.2. Pension fund management

Pension fund management companies are joint-stock companies that manage the second-pillar pension system. A pension fund does not have legal personality. It is a pool of the accumulated contributions of members deposited in the fund's account with a depository bank. Therefore the assets of a pension fund management company are separate from the assets of its members. Pension fund management companies act as the agents of their members when managing their pension funds.

All pension fund management companies must be licensed and are supervised by the National Bank of Slovakia. Secondary regulations on pension fund management are issued by the Ministry of Finance and the Ministry of Labour, Social Affairs and Family. The National Bank of Slovakia is also the supervisory body for the supplementary pension savings companies and the supplementary pension scheme. Table 8.8 provides basic information on the pension fund management companies. In January 2010, the pension fund management company ČSOB was sold to another company, "Poštová banka a.s.".

The law requires that pension fund management companies offer three types of funds. According to the maximum percentage of the portfolio that can be invested in stocks, they are called (i) growth pension funds, (ii) balanced pension funds, and (iii) conservative pension funds.

- A conservative pension fund cannot be invested in stocks; therefore, its assets consist only of bonds and financial investments and transactions. Moreover, the assets of a conservative pension fund may not be exposed to the foreign exchange risk. In terms of risk, a conservative pension fund may have bonds with a maximum "average modified duration" of two. Average modified duration refers to the change in the value of a pension fund's assets with respect to the unit percentage change in the interest rate.
- A balanced pension fund may be invested in stocks, and these investments may be up to 50 percent of the fund's net asset value. At the same time, bonds and financial investments must total at

least 50 percent of the net asset value of the balanced pension fund. The assets that are not hedged against the foreign exchange risk must not represent more than 50 percent of the net asset value of the balanced pension fund.

- A growth pension fund may be invested in stocks, and these investments may be up to 80 percent of the fund's net asset value. Moreover, the assets that are not hedged against the foreign exchange risk must not constitute more than 80 percent of the net asset value of the growth pension fund.

To avoid the risk of the depreciation of investment as members approach retirement, the law restricts the usage of the type of funds by age group. These restrictions are:

- an old-age pension saver older than 47 years of age (i.e. five years before the retirement age of 62) can have only conservative or balanced pension funds; and
- an old-age pension saver older than 55 years of age (i.e. seven years before the retirement age of 62) can only have a conservative pension fund.

According to information provided by the Association of Pension Fund Management Companies, out of 1.4 million savers, 68.6 percent are in growth funds, 27 percent in balanced funds and 4.2 percent in conservative funds in July 2007.

Table 8.8
Data on the pension fund management companies

Pension fund management company	Date of licensing	Net asset value (30 July 2010) (in thousand euro)	Share %	Members (30 July 2010)	Share %
Allianz-Slovenská d.s.s[9]., a.s	23.9.2004	1,045,018	31.5	439,629	30.7
AXA d.s.s., a.s.	8.10.2004	896,624	27.1	372,242	26.0
VÚB Generali d.s.s., a.s.	24.9.2004	479,717	14.5	194,420	13.6
ING d.s.s., a.s.	23.9.2004	366,807	11.1	147,238	10.3
AEGON d.s.s., a.s.	1.10.2004	339,500	10.2	184,975	12.9
ČSOB d.s.s., a.s.	7.10.2004	185,135	5.6	93,750	6.5
Total		3,312,801	100.0	1,432,254	100.0

Source: National Bank of Slovakia.

The distribution of the net assets of funds by type follows this trend, as can be seen in Table 8.9.

9 Dôchodková správcovská spoločnosť, a.s.

Table 8.9
Net asset values of second-pillar pension funds by type, 30 July 2010

Type of fund	Percentage of members	Net asset value (in thousand euro)	Percentage (%)
Conservative	4.2	147,551	4.5
Balanced	27.0	968,183	29.2
Growth	68.6	2,197,066	66.3
Total	100.0	3,312,801	100.0

Source: National Bank of Slovakia.

8.3.2.3. Investment performance

The total assets of the second-pillar pension system amounted to 3.55 billion euro in 22 October 2010, which is slightly more than five percent of GDP. In the long run, however, the level of accumulated assets is projected to increase to 60 percent of GDP by 2060.

Table 8.10 presents the total assets of the pension funds by investment instruments. In past years, pension fund management companies never reached their maximum limit on stocks. In early 2008, the percentage of stocks was highest at 15 to 20 percent in growth funds and at 10 to 15 percent in balanced funds. In response to the market downturn during the financial crisis, pension fund management companies reduced their proportion of shares in early 2009 by about half. By mid-2009, the proportion of stocks fell to almost zero.

Table 8.10
The assets of the second-pillar pension funds by investment instruments, 30 July 2010

Placement	Value (in thousand euro)	Share (%)
Bank deposits	1,126,108	34.0
Bonds	1,032,187	31.2
Treasuries	1,185,296	35.8
Shares and allotment certificates	1,302	0.0
Other claims	17,179	0.5
Liabilities	– 49,271	–1.5
Total	3,312,801	100.0

Source: National Bank of Slovakia.

Table 8.11 presents the gross nominal rates of return for the second-pillar pension funds for different periods. Figure 8.3 presents the trends in the actual values of pensions[10] since the implementation of

10 The initial value of a pension when a management company starts its operation is fixed at 0.033194 euro (equal to one Slovakian crown). Thereafter the actual value of the pension unit shall be determined as the net asset value of the pension fund divided by the total number of pension units recorded in the individual accounts of all members.

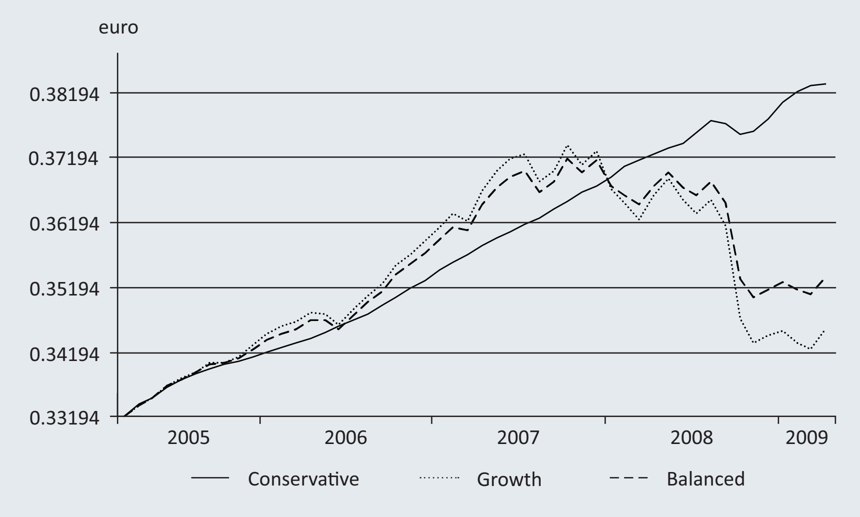
the second-pillar pension system. From its implementation in 2005 to 19 March 2010, the average gross nominal rate of return was 5.12 percent per annum for growth funds, 7.37 percent per annum for balanced funds and 16.16 percent per annum for conservative funds (contrary to their names). As can be observed in Figure 8.3, the investment performance of the pension funds was significantly affected by the global financial crisis. Since the beginning of 2008, there has been a substantial loss in the actual value of pension units due to a decline in share prices in the global markets. Although all three types of funds have recently recorded positive returns, the actual values of pensions with growth funds and balanced funds have not recovered to their pre-2008 levels.

Table 8.11
Gross nominal returns of the second-pillar funds (weighted averages), 2005–2010

Type of pension fund	23.3.2005–19.3.2010	1.1. 2008–19.3.2010	1.1.2009–19.3.2010	1.7.2009–19.3.2010
Growth	5.12	–6.43	1.07	1.13
Balanced	7.35	–4.10	1.18	1.25
Conservative	16.16	4.80	1.93	1.28

Source: Association of Pension Fund Management Companies.

Figure 8.3
The actual value of pension units of the old-age pension savers by type, 2005–2009



Source: National Bank of Slovakia.

Slovakia has introduced a market benchmark to regulate rates of return. However, this regulation may lead fund managers to direct all funds towards similar portfolios close to the benchmark.

One of the macroeconomic arguments for the introduction of the old-age savings pension was to improve the development of the domestic financial market. There was initially, therefore, a limit on foreign investments. However, it soon became clear that such a limit was not in line with EU legislation on the free movement of capital and had to be abandoned. Despite the accumulation of assets in private pension funds, there is no evidence of financial market development following the introduction of the second pillar.

8.3.2.4. Administrative efficiency

The administrative fees of the second pillar are as follows:

- 0.5 percent of monthly contributions are retained by the Social Insurance Agency to provide for the management of the central register of savers and the money transfers to pension fund management companies.
- 1 percent of monthly contributions are retained by the pension fund management companies for maintaining savers' personal accounts.
- A maximum of 0.025 percent per month (0.3 percent per annum) of the net asset value of the pension fund is retained by the pension fund management company for asset management. The fee was reduced on 1 July 2009 from its initial level of 0.065 percent per month (0.78 percent per annum).
- A maximum of 5.6 percent of the revenue raised every six months is retained by the pension fund management company for its evaluation of the assets in the pension fund. This fee was introduced on 1 July 2009. It is funded through the Guarantee Fund account, which was established by law to increase the value of the pension units.
- If a pension fund yields a negative amount, pension fund management companies must cover that loss, either from a special account[11] or from the company's own resources, up to the total amount paid by the savers.
- A 16 euro fee is applied if a member transfers to another pension fund management company within one year of signing a contract. This fee is retained by the Social Insurance Agency. Transfer after one year is free.

8.3.2.5. Payment phase

Old-age, early retirement and survivors' pensions are paid from a member's old-age savings account. Any commercial insurance company chosen by the saver can provide their pension. Upon the request of the saver, the pension fund management company will transfer the final balance in the saver's pension fund account to the insurance company that is contracted to provide annuities.

In principle, old-age and early retirement pensions should be paid in the form of life annuities. If the saver meets the qualifying conditions for an old-age or early retirement pension and has participated in the scheme for at least 15 years, the portion of the balance in excess of the reserve to provide life annuities – at least 60 percent of the subsistence minimum – may be withdrawn, either as a lump sum or in the form of programmed withdrawals.

When a saver qualifies for their pension, the pension fund management company transfers the amount required to pay their life annuity (not lower than 60 percent of the subsistence minimum for one adult) from the pension fund to the insurance company. The insurance company will then conclude an annuity

11 Slovakia has set up a guarantee fund with payments made by the pension fund management companies. The guarantee fund is used if the need arises to cover the losses of the customers of pension funds.

contract with the saver. The pension fund management company pays the remaining balance (surplus) into the saver's account over the withdrawal period determined by the saver that is at least one month.

The maturation of funded tiers is expected to provide an increasing share of pensioners' incomes in the coming decades, reaching half of the total replacement rates. The first beneficiaries of the second-pillar scheme are expected to appear in 2020 after fulfilling the minimum contribution period of 15 years. As more people with longer savings periods retire, the expenditure of the second-pillar pension system is expected to increase rapidly.

In Slovakia, the Old-Age Pension Savings Act calls for the use of unisex life tables for calculating life annuities. The use of unisex life tables effectively narrows the gender pension gap stemming from the existing differences in the life expectancies of women and men at retirement age (currently a difference of six to eight years in Slovakia).

As in the State pension system, the amount of a widow(er)s' pension from the second pillar amounts to 60 percent of the benefits of the deceased, and the orphans' pension amounts to 30 percent of the benefits of the deceased. If the deceased was a recipient of programmed withdrawals, the pension fund management company pays the remaining balance as a lump sum.

It is possible to donate a part of old-age savings in the second and third pillars, as these savings are regarded as the savers' personal property. After reaching retirement age, a saver in the second pillar can donate the remaining balance in their savings account after purchasing a life annuity from an insurance company (which must be at least 60 percent of the subsistence minimum).

8.3.3. Adequacy of benefits

Table 8.12 presents the number of pensioners[12] by type and their respective average pensions in 2009.

Table 8.12
Number of pensioners and the average pensions by type, 2009

Indicators	Number of pensions	Average (in euro)
Old-age	931,795	339.73
Early retirement	56,352	350.61
Invalidity	204,378	249.43
Widows' and widowers'	337,505	204.33
Orphans' (children)	28,978	122.58
Other (paid by State)	8,875	
Total	1,567,883	

Source: Social Insurance Agency.

12 The total number of pensioners is 1,275,932. Some pensioners are entitled to receive more than one pension.

In 2009, the average monthly old-age pension was 339.73 euro. Almost 30 percent of pensioners receive pensions between 350 and 465 euro. The second largest group are people with pensions below 350 euro. There are 1,260 pensioners (0.1 percent) who receive pensions of more than 1,000 euro.

Table 8.13 compares the average gross pension with the average gross wage for the period 2004-2009. The average gross system replacement rate (the ratio of the above two indicators) attained its lowest level of 43.3 percent in 2008, but increased to 45.3 percent in 2009. This was due to slow wage growth as a result of the crisis (about 3 percent in 2009), in combination with the indexation of pensions (6.95 percent in 2009). It should be noted that since 2009 the date of indexation has been changed from 1 July to 1 January. Furthermore, if special Christmas allowances are included, the average gross system replacement rate for 2009 increases by 0.6 percentage points to 45.9 percent.

Table 8.13
Average gross system replacement rates, 2004–2009

Year	2004	2005	2006	2007	2008	2009
Average pension (in euro)	234	256	273	295	313	337
Average wage (in euro)	525	573	623	669	723	744
Replacement rate	44.5%	44.7%	43.8%	44.1%	43.3%	45.3%

Source: Statistical Office of the Slovak Republic.

Due to their incapacity to ensure income through their own work or because of poor health, elderly people constitute a vulnerable group at the risk of poverty. According to data provided by the Statistical Office presented in Table 8.14 below, 10.8 percent of the population aged 65 or more were below the poverty line in 2008, a number that had increased by 3.7 percentage points from 2004. The poverty incidence rate among pensioners is slightly less than that of the elderly. A decline in the poverty incidence rate among pensioners (of 0.8 percent) was observed in 2008.

Table 8.14
Poverty incidence rates for the elderly and pensioners, 2004–2008 (%)

Year	2004	2005	2006	2007	2008
Population aged 65 or more	7.1	8.5	8.3	9.9	10.8
Pensioners	6.9	8.1	7.9	9.7	8.9

Source: Statistical Office of the Slovak Republic.

The current pension system can generate a risk of poverty for the elderly by providing low pensions. This applies in particular to workers who contribute at the minimum base level (which is typically the case for self-employed persons), and to those who have short insurance periods due to unemployment and other factors.

Under the current system, there is no guarantee of a minimum pension. People with little to no income are entitled only to benefits in material need. If an increasing number of persons fall into poverty, this may create future social problems as well as fiscal pressure to provide social protection for the elderly.

Both contributions and pensions in the State pillar are exempt from income tax. Contributions made to the second pillar are exempt from income tax. Contributions to the voluntary third pillar are exempt from income tax up to a certain limit. Employers can include part of the contributions paid for their employees in their costs. Tax reductions have been extended to life insurance contributions since 2005.

8.4. Expenditure and financing

8.4.1. Contribution rates

Table 8.15 summarizes the contribution rates of the social insurance schemes. The total contribution rate of the pension scheme is 28.75 percent, which consists of:

- 18 percent for old-age pensions (employer 14 percent, employee 4 percent), with members of the second-pillar system contributing 9 percent (employer 5 percent, employee 4 percent) to the pay-as-you-go State pension and the other 9 percent (by employer) to their personal savings accounts in private pension funds; and
- 6 percent for disability pensions (employer 3 percent, employee 3 percent), as well as a 4.75 percent contribution to a reserve fund (paid by the employer only).

The self-employed or voluntarily insured workers will pay both employers' and employees' contributions.

Employees are also covered by sickness benefits, employment injury insurance, unemployment insurance, health insurance and guarantee insurance (which protects employees by covering their contributions in the case of the insolvency of their employer). The total social insurance contribution is 48.6 percent of the contribution base.

On 1 July 2010, the maximum assessment base for the payment of contributions to the first and second pillars was increased from three to four times the average gross wage. Currently the maximum assessment base is 2,978 euro.

In 2010, the minimum assessment base for mandatorily insured self-employed persons and voluntarily insured persons was 44.2 percent of the monthly general assessment base of 2008, equalling 141.25 euro (44.2 percent of 319.58 euro).

The minimum assessment base for employees was not defined in 2010 but employers were still obligated to comply with the Employment Act, which includes a minimum wage provision. In 2010, the minimum wage for an employee was 307.70 euro per month and 1.768 euro per hour.

Table 8.15
Rates of contribution of the social insurance system by branch (%)

	State pension only (non-members of Pillar II)		Members of the pension savings system (Pillar II)	
	Employee	Employer	Employee	Employer
Old-age	4.00	14.00	4.00	5.00
Old-age savings	—	—	—	9.00
Disability	3.00	3.00	3.00	3.00
Reserve solidarity fund	—	4.75	—	4.75
Total pension contributions	7.00	21.75	7.00	21.75
	28.75		28.75	
Sickness	1.40	1.40	1.40	1.40
Employment injury	—	0.80	—	0.80
Guarantee insurance	—	0.25	—	0.25
Unemployment	1.00	1.00	1.00	1.00
Health	4.00	10.00	4.0	10.00
Total contributions of social insurance other than pensions	6.40	13.45	6.40	13.45
	19.85		19.85	
Total	48.60		48.60	

8.4.2. Fund operations

Table 8.16 presents the revenue and expenditure of the State pension fund for the period 2004–2009. Table 8.17 presents the revenue and expenditure of the all branches of benefits of the Social Insurance Agency for the period 2002–2009. Since the introduction of the second-pillar system in 2005, some contributions have been diverted into second-pillar private pension funds. Thus the expenditure of pension benefits has exceeded the contribution level. The pension fund deficit each year is roughly 1.2 percent of GDP. To cover the deficit, the State has been transferring subsidies from its financial assets, created through privatization, to the Social Insurance Agency since 2006. However, the sources of the State's financial assets (proceeds from privatization) were exhausted by 2010; therefore, the Government must subsidize the State pension fund directly from the State budget from 2011 onwards.

Table 8.16
Revenue and expenditure of the State pension fund, 2004–2009 (in million euro)

	2004	2005	2006	2007	2008	2009
Total revenue	2,246.08	1,962.33	2,526.32	2,810.46	3,018.29	3,234.13
Contributions:	2,276.82	1,950.54	1,843.06	1,994.85	2,199.36	2,123.74
– Employees	358.30	391.08	433.24	484.96	542.73	517.79
– Employers	1,415.44	1,092.96	958.68	1,048.99	1,325.05	1,259.60
– Self-employed	93.32	98.90	93.05	98.81	111.84	120.31
– Voluntarily insured	13.83	13.40	12.04	7.57	7.73	7.87
– Debts, penalties	125.91	118.72	86.97	95.37	127.95	118.83
– State	117.74	79.74	71.75	73.93	83.38	97.99
– Social Insurance Agency	152.28	155.74	160.33	185.22	0.68	1.35
Others (incl. State's financial assets)	3.11	1.92	637.96	671.62	570.11	877.09
Transfer from the previous year	29.85	65.10	93.08	196.35	325.03	306.99
Total expenditure	3,313.35	3,627.6	3,981.87	4,386.37	4,532.32	5,035.17
– Old-age pension	2,116.53	2,586.04	2,790.57	3,029.75	3,222.66	3,595.38
– Early retirement pension	17.42	46.27	119.93	161.77	218.70	240.23
– Invalidity pension	644.00	421.84	460.51	510.52	560.35	622.26
– Partial invalidity pension	—	—	—	—	—	—
– Widows' pension	352.10	381.96	406.92	432.88	458.46	496.81
– Widowers' pension	3.74	6.80	10.84	23.96	30.19	35.57
– Orphans' pension	27.28	29.20	32.96	10.84	41.58	44.49
– Social insurance for invalidity pensioners	152.28	155.75	159.48	184.33	—	—
Others	—	—	—	0.13	0.38	0.43
– Second-pillar contributions for invalidity pensioners	—	—	0.66	2.24	—	—
Transfer to the next year	114.54	146.11	242.94	365.97	415.87	251.90

Source: Social Insurance Agency.

Table 8.17
Revenue and expenditure of the Social Insurance Agency (in million euro)

	2002	2003	2004	2005	2006	2007	2008	2009
Total revenue	**3,215.06**	**3,482.51**	**4,362.52**	**4,407,78**	**4,874.17**	**5,387.59**	**5,848.22**	**6,178.08**
1. Sickness	481.56	517.25	390.25	451.71	365.83	407.55	431.28	453.93
2. Old-age	2,511.43	2,726.53	2,246.08	1,962.33	2,526.32	2,810.46	3,018.29	3,234.13
3. Invalidity	—	—	634.11	710.94	770.28	845.48	934.08	968.94
4. Accident	40.26	67.26	134.44	214.52	144.43	152.63	151.30	230.60
5. Guarantee insurance	—	—	101.86	128.23	73.81	71.22	71.89	89.38
6. Unemployment	—	—	445.44	266.82	260.49	296.49	306.43	324.99
7. Reserve fund	84.87	76.63	302.11	561.60	614.90	674.64	757.01	693.78
8. Administrative fund	96.94	94.84	108.23	111.63	118.11	129.12	177.94	182.33
Total expenditure	**3,032.43**	**3,257.60**	**3,714.11**	**4,015.04**	**4,387.84**	**4,832.66**	**5,071.81**	**5,758.23**
1. Sickness	287.56	307.87	158.17	157.36	176.69	200.25	246.40	316.67
2. Old-age	2,643.08	2,840.42	2,385.53	2,958.68	3,258.17	3,568.21	3,839.90	4,265.78
3. Invalidity	—	—	927.82	669.19	723.69	818.15	692.42	769.39
4. Accident	9.88	15.73	16.42	23.46	30.90	35.60	36.06	40.13
5. Guarantee insurance	—	—	2.86	23.12	24.35	30.81	33.38	46.95
6. Unemployment	—	—	132.24	82.08	63.98	59.62	66.12	172.43
7. Administrative fund	91.91	93.58	90.96	101.15	110.06	120.02	157.53	146.68
Balance	**182.63**	**224.91**	**648.41**	**392.74**	**486.33**	**554.93**	**776.41**	**419.85**
1. Sickness	49.27	63.99	184.94	59.33	72.97	48.63	85.29	32.26
2. Old-age	42.95	39.80	65.10	93.08	196.34	325.03	306.98	152.35
3. Invalidity	—	—	49.44	53.08	46.95	40.94	108.89	99.55
4. Accident	30.38	51.52	118.03	41.69	40.17	27.41	115.24	40.47
5. Guarantee insurance	—	—	98.98	38.73	22.01	20.50	38.51	18.43
6. Unemployment	—	—	64.15	45.33	57.09	37.71	74.34	32.56
7. Reserve fund	55.00	68.33	50.50	51.07	42.21	45.61	26.75	8.78
8. Administrative fund	5.03	1.27	17.27	10.48	8.05	9.10	20.41	35.45

Source: Social Insurance Agency.

As can be seen from Table 8.18, the amount of State subsidies has been in the same order of the contributions transferred from the Social Insurance Agency to the pension funds. In other words, had it not been for the second pillar, the Social Insurance Agency would had been able to cover its expenditure through its own contributions without requiring State subsidies.

Table 8.18
Transfers between the State, the Social Insurance Agency and the pension funds, 2005–2009
(in miilion euro)

Year	2005	2006	2007	2008	2009
Transfers from the SIA to the pension funds	305	606	750	815	744
Transfers from State to the SIA	0	637	671	568	875

Source: Social Insurance Agency.

During the recent period of global economic crisis in 2009–2010, rising unemployment and slowing wage growth directly influenced the stagnation in the contributions paid to the Social Insurance Agency.

8.4.3. Effects on public finance

The transition costs associated with the introduction of the second-pillar private pension system negatively impacted the financing of the State pension system. In this regard, Slovakia and other new EU member States with comparable pension systems have similar difficulties in fulfilling the EU public debt criteria.

On 17 August 2010, nine EU member States – including Bulgaria, the Czech Republic, Hungary, Lithuania, Latvia, Poland, Romania, Slovakia and Sweden – sent a letter to the European Commissioner for Economic and Monetary Policy, requesting that the EU allow for the payments made to mandatory private pension funds (costs of transitioning from pay-as-you-go to fully funded pension) to be deducted from their budget deficits.

The European Commissioner for Economic and Monetary Policy reaffirmed the position of the EU in a statement from 29 September 2010, stating that the problems associated with pension reform costs should be solved within the framework of the Stability and Growth Pact. In October 2010, the Commissioner acknowledged the legitimacy of the initiative made by the nine member States, including Slovakia, to deduct the transition costs of pension reform from their deficits, but said that the EU's current accounting system does not allow such an arrangement. The Commissioner called for pension reformers to consider not only the sustainability of their systems, but also their impact on public finances in terms of the public deficit and debt.

8.4.4. Demographic ageing and the number of pensioners

As Table 8.19 shows, the number of pensioners and their share in the total population is increasing steadily. As shown in Table 8.20, the life expectancy has likewise increased in the EU and in Slovakia. Comparing 1990 and 2005, however, one can observe that the gap in the life expectancies of the EU-25 and Slovakia has widened. According to the estimates of the EU Economic Policy Committee, the projected life expectancy increase at age 65 is 6.8 years for both sexes between 2008 and 2060 in Slovakia (which is above the EU-27 average of 5.3 years).

Table 8.19
The number of pensioners and their share in the total population, 1995–2009

	1995	2000	2005	2009
Pensioners	1,168,127	1,197,363	1,216,253	1,275,932
% of the total population	21.8%	22.2%	22.6%	23.5%

Source: Social Insurance Agency.

Table 8.20
Life expectancies at selected ages by sex, 1990 and 2005 (in years)

	1990			2005		
	EU-25	Slovakia	Difference	EU-25	Slovakia	Difference
Women at 65	18.2	16.0	2.8	20.0	17.1	2.9
Men at 65	14.5	12.3	2.2	16.6	13.3	3.3
Women at 75	10.9	9.5	1.4	12.2	9.9	2.3
Men at 75	8.7	7.7	1.0	10.1	8.0	2.1
Women at 85	5.8	5.4	0.4	6.2	4.9	1.3
Men at 85	4.7	4.7	0.0	5.5	4.5	1.0

Source: Eurostat, Demographic statistics.

8.4.5. Future projections

Public pension (or first-pillar) expenditure in Slovakia is projected to rise from 6.8 percent of GDP in 2007 to 10.2 percent of GDP in 2060 (3.4 percentage-points). This relatively modest increase is mainly due to the pension reforms adopted in 2004, which increased the statutory retirement age to 62 years for both sexes and introduced the so-called Swiss indexation formula.

The pension-to-GDP ratio in Slovakia is projected to decrease from 2007 to 2020, and then increase and peak at the end of the projection period. The main factor behind the projected long-term increase in pension expenditure is the ageing of the population.

Table 8.21
Projected gross pension spending and contributions (as percentage of GDP)

	2007	2020	2030	2040	2050	2060
Social security pensions:	6.8	6.3	7.3	8.3	9.4	10.2
– Old-age and early retirement	4.3	3.6	4.1	4.8	5.6	6.2
– Other pensions	2.5	2.7	3.2	3.5	3.8	4.1
Private pensions	0.0	0.1	0.5	1.0	1.7	2.2
Total pension expenditure	6.8	6.5	7.8	9.3	11.1	12.4
Social security revenue decrease	1.0	1.4	1.6	1.7	1.7	1.8

Source: Pension schemes and pension projections in the EU-27 Member States, 2008–2060.

Revenue declines are due to the introduction of the second pillar, which directs part of the social security revenue to the fully funded pension schemes.

8.5. Social dialogue in the pension reform

8.5.1. Governance structure

The Director General of the Social Insurance Agency is appointed by the Government of the Slovak Republic. The Social Insurance Agency Supervisory Board has been established as a supervisory and controlling body. It consists of 11 members: one Chair who is *ex officio* the Minister of Labour, Social Affairs and Family, three representatives nominated by the trade unions, three representatives nominated by the employers' associations, three representatives nominated by the Government and one member representing the pension beneficiaries. The Supervisory Board members, excluding the Chair, are elected by the National Council. They serve five-year terms.

In Slovakia, the National Council (Parliament) and the Government introduce legislative initiatives for the adoption of new laws or amendments to existing laws. Pension legislation is usually prepared by the Ministry of Labour, Social Affairs and Family[13].

Draft proposals are subject to an internal and external review procedure. Internal consultation takes place within the Ministry and its organizations. For external review, a list of compulsory reviewers, the relevant authorities and institutions, representatives of employers and employees, and the general public are asked to provide their comments. Legislation related to social security is discussed in the Economic and Social Council, which is a consultative and negotiation forum for the Government and social partners at the national level.

The draft legislative proposals are then submitted to the National Council, where they are subject to three readings. In the first reading, the National Council either rejects the draft bill or transmits the bill for a second reading. No amendment is made at this stage. In the second reading (which is the critical stage), the National Council discusses the proposed bill after 48 hours upon receipt of the joint committee reports or from information provided by a joint rapporteur. Submission of an amendment requires the approval of at least 15 members of Parliament. In the third reading, members may only propose minor technical or linguistic corrections. At the end of the third reading, the National Council approves the bill.

As a member of the EU, European *acquis communautaire* is an integral part of Slovakian law. A growing share of Slovakian legislation is prepared at the European level. In July 2010, the EU issued a Green paper on pensions and launched a European-wide discussion on the future of pension systems.

13 This is not always the case, however. For the reform that introduced old-age savings in 2005, a substantial portion of the draft proposal was prepared by a private agency with the technical support of experts from Chile and other countries who were financed by the World Bank.

8.5.2. Lessons learned from the pension reform in 2004 and 2005

8.5.2.1. Pension reform process

The pension reform of 2004 and 2005 was a major reform in the Slovak Republic. However, the reform was carried out without real tripartite or societal consultation, and without consideration of a wide range of alternative reform options. The whole pension reform process, from preparation to implementation, was completed within 30 months, and the legislation on the old-age savings system was prepared by a private consulting firm without society-wide consensus or information being made available to the public. One of the arguments in favour of reform was that it would spread market-related risks among several parties, thereby extending those risks to private individuals. Because of this lack of preliminary consensus by the wider political spectrum, the current pension system has been challenged by several experts[14].

8.5.2.2. Informational disclosure

The new pension system was mainly publicized to a large majority of Slovakians through a massive promotional campaign. The marketing campaign of the private pension fund management companies to promote the pension savings system has significantly influenced people's behaviour. Advertisements describing "your own money in your savings account", the "possibility of inheritance", and one's "own pension without obligations" to one's children or parents were very attractive. Market advertising emphasized the positive aspects of the savings system, even though the law requires the advertisements to warn that investing in the financial markets is associated with risk, and that the amount of one's pension therefore cannot be guaranteed.

Consequently, about 1.5 million out of 2.6 million insured persons opted for the new system, as opposed to the Government's estimate of between 300,000 and 800,000. About a quarter of those who joined the system were over 40 years of age, despite the fact that their savings period before retirement would be too short to make that switch financially worthwhile. This may be evidence that many people made their decision without being fully aware of the expected benefits and risks associated with the system. Such naïveté associated with inadequately informed decision-making is ascribed to the low financial literacy and knowledge of capital markets among the general public. The financial crisis may have provided a costly lesson for a large numbers of low- and middle-income workers.

In April 2008, the Government distributed an informational leaflet to all workers that explained the new pension system and the open period for reconsideration, and clarified some common misconceptions about the new system. It also contained a table comparing the expected benefits under the two systems by age, indicating that under certain circumstances workers older than 35 years of age would be better off in the State pension system. The dissemination of the leaflet stimulated discussion within the general public and the media about the advantages and disadvantages of first and second-pillar pensions.

14 As one critic writes, "the social security system reform in the Slovak Republic was not motivated by the unsustainability of the previous ways of financing the pension system, as the approved reform measures generally do not solve the indicated problems. The officially stated reasoning for the need to reform the pension system is intended to detract attention from the real reasons, thereby legitimising the reform in the eyes of the public. The real reasons are as follows: institutional investors' efforts to expand financial markets through the inflow of previously public financial resources; pressure from the international financial institutions, particularly the World Bank; political efforts to implement the neo-liberal notion of merit in the pension scheme; and the State's effort to shift the risk of unfavourable developments onto individuals." (Ivan Lesay, 2006).

Before the introduction of the savings pension system, it was necessary to assess transitional costs as they affect the sustainability of the pay-as-you-go first pillar. Long-term projections of the pension fund system indicated that the pay-as-you-go system should be sustainable for the period 2005-2085 through the parametric reform of the retirement age and the indexation method. The State originally intended to cover the deficit of the first pillar during the transitional period primarily by non-budgetary resources (such as the sale of State assets). However, due to the unexpectedly large transitional costs, the privatization revenue allocated for financing this reform was exhausted by 2010 and budgetary resources, such as taxes, are now necessary to cover the recurring deficit.

8.5.2.3. Social dialogue in the pension reform

In discussions on the proposed pension reform, trade unions stated their disagreement with the proposed reforms on 27 March 2003. On 29 September 2003, the Government announced that the draft law was already with Parliament and that it was too late to stop the process. Employers also objected to the reform due to the poor performance of the Government institutions. However, tripartism became dysfunctional in the second half of 2003, which allowed the ruling administration to disregard the views of the social partners and expedite the process. Tripartism was restored in a weakened form in December 2004.

In February 2009, the trade unions proposed that the contributions to the second-pillar pension system be reduced to 3 percent - as the reform originally envisaged - in order to direct more contributions to the State pension system. This could alleviate the rising deficit of the State pension system, which is imposing a fiscal burden on both the current taxpayers and future generations.

8.6. Conclusion – recent developments

The pension system is a priority on the social policy agenda due to the value of its assets and the number of citizens affected by it.

In 2010 there were proposals for a new pension reform. The results of the AXA Retirement Scope survey (23 January 2009) showed that almost 90 percent of respondents think that the pension system is in crisis and thus expect further reforms. The survey also showed that nearly half of respondents would like to work while receiving pensions.

The members of the INESS Discussion Forum, which met on 13 November 2010 and included members of the private sphere, neo-liberal think tanks, and the Ministry of Finance's Financial Policy Institute, proposed reforms to (i) gradually extend the retirement age to between 65 and 70 years, (ii) replace the Swiss indexation with price indexation, and (iii) limit the first-pillar pension to the minimum pension.

In May 2010, trade unions demanded that the State (i) bring greater solidarity to the system, so that the pension system is more equitable and sustainable in the face of changing economic conditions and demographic trends; (ii) require the minimum pension to be at least at the subsistence level; (iii) adjust the old-age pension formula to narrow the gap between the highest and lowest pensions; and (iv) not increase the retirement age until life expectancies in Slovakia reach EU levels.

The Government also proposed austerity measures aiming to reduce the burden of the pension system on public expenditure. These measures include (i) reductions in the levels of second-pillar contributions, (ii) reductions in the voluntary third-pillar (through abolishing tax incentives), and (iii) reductions in service retirement and family benefits. Facing strong opposition, these proposals were quickly withdrawn. Recent discussions on pension reform lack consistent concepts and adequate analyses of the impacts of reform. Possible future changes include a cut in indexation to relieve the State budget and further cuts to some of the more generous provisions.

Early retirement pensions for employees with regular job contracts have not been allowed since early 2011. However, early retirement is still possible for individuals with other forms of employment.

The National Reform Programme of the Slovak Republic for 2011–2014 contains many proposals related to the pension system.

With respect to the pay-as-you-go pillar, the National Reform Programme aims to enhance the solidarity element and put in place an automatic stabilisation mechanism in response to the expected future demographic changes. Specific measures include the following:

- The retirement age will be increased in line with the increase in the life expectancy. This measure will be implemented only after the ongoing increases being made to the retirement age are complete.
- The rate of pension indexation will be linked to changes in the ratio of contributors to pensioners. The Swiss pension indexation method will be replaced with this price indexation method.
- Changes will also be made to the first pillar with respect to merit-based pension claims.
- A minimum pension will be introduced to reduce poverty among pensioners.
- The maximum pension will be set at 100 percent of the national average wage.
- The revenue side of the pension insurance system will be enhanced through the reduction of the administrative burden and the introduction of a unified tax and contribution collection system.

With respect to the fully funded pillar, the National Reform Programme discusses the compulsory participation of new labour market entrants and changes being made to the investment rules. More specifically,

- Participation in the second pillar will be mandatory, with the possibility to leave the system within one year of entry.
- Further measures will be implemented to maximize the long-term returns of pension savings at an acceptable risk rate, while all changes made to the second pillar will take citizens' rights into account. Guarantees will only remain for conservative funds (invested entirely in bonds), and a hold-to-maturity valuation will also be allowed for clearly defined credit risks.
- The index funds will be introduced whose performance should replicate the movements in global stock market indices and, at the same time, offer a competitive advantage in the form of low fees. Benchmarks will be defined for different investment strategies. In addition, investment performance-based fees will be introduced.
- A mechanism allowing savers to automatically switch to conservative funds prior to attaining the retirement age will also be introduced (with a ten-year transition period).

Along with these proposals, the Ministry of Labour, Social Affairs, and Family submitted a proposal in February 2011 to reintroduce mandatory second-pillar membership for labour market newcomers, starting in September 2011. It is also currently suggested that guarantees for profits, fees, charges, investment limits and membership in several funds be made available.

With respect to the pension system of the armed forces, the National Reform Programme proposes to limit the number of eligible recipients by further shifting part of these pensioners to the civil sector. The Ministry of the Interior published an analysis in March 2011 of the armed forces' social security scheme. It intends to introduce stricter measures on pension rights, and on the length of payments and waiting periods.

To discuss the influence of the global financial crisis on the pension system, the Ministry of Labour, Social Affairs, and Family organized an international conference in Bratislava on 4 May 2009 entitled "Pension systems during the global financial crisis". The conclusions of the conference are summarized as follows:

- The global financial crisis has affected everyone. No country or pension system is immune.
- It is important to re-evaluate the methods used to keep pension systems sustainable while focusing on investment risks and their influence on the pension systems.
- The global and financial crisis worsened the problems of the pension systems. The challenge is to make pension systems financially sustainable and trustworthy for future generations in the long term.
- The introduction of funded systems is directly connected to a shortage of public finances. Transitional costs have increased the financial pressure on the public sector, and these costs must be tightened in this post-crisis period of austerity.
- The pension systems must be strengthened to regain citizens' confidence.
- The compulsory pillar must meet a certain minimum standard. As has recently become clear, the funded system is inadequate for low- and middle-income workers.
- There is no ideal pension system. The current pay-as-you-go system, without further adjustments, is insufficient for the ageing population. However, the present focus on the funded pension systems could leave many people living on the edge of poverty.
- Because of the general lack of information about pension systems, citizens behave irrationally. The overemphasis placed on the benefits of the private savings pensions in advertisements created misconceptions amongst people.
- Social dialogue and participatory reform processes are the basis for democratic decision-making and help lawmakers make rational decisions based on nation-wide consensus.
- Citizens' access to valid information helps to make the pension systems sustainable.
- Pension systems in the hands of private companies should not focus on commercial goals, but on solidarity. They should be completely transparent when providing information to the public. They should apply investment strategies trusted by experts and maintain fees at the lowest possible levels.
- Financial market reform cannot prevent another crisis. Crises are cyclical in nature and may recur.
- Experts suggested that early retirement options be limited, and that conditions for employment for older persons be created.

- The global financial crisis has shown the weaknesses of funded pension systems in a volatile and declining capital market. The crisis has revealed the importance of effective pension systems informed by solidarity and promulgated through proper regulation.

A sound pension system that ensures decent old-age income security can be sustained by raising employment rates, in particular for older people and women (through the creation of adequate jobs), thereby raising the effective retirement age (through the extension of the retirement age and further restricting early retirement). The challenge facing Slovakia is in establishing a pension system and the social systems that can provide adequate income protection for the population, and which could be sufficiently flexible and motivating for those who want to stay active in the labour market.

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Annex

Table 8.A.1
Legislation relevant to the regulation of the second and third-pillar pension systems

Acts	
	• National Bank of Slovakia Act No 566/1992 Coll., status as of 1 January 2009.
	• Act No. 747/2004 Coll. on the supervision of the financial market, status as of 1 January 2009.
Decrees	
	• Decree of the National Bank of Slovakia of 4 November 2008 No. 21/2008 on the submission of reports by pension fund management companies and supplementary pension companies for statistical purposes.
Regulations	
2009	• Regulation/Decree of the National Bank of Slovakia of 23 June 2009 No. 267/2009 Coll. concerning the reference value of a conservative pension fund and the composition of the reference value of a balanced pension fund and a growth pension fund.
	• Regulation/Decree of the National Bank of Slovakia of 16 June 2009 No. 270/2009 Coll. concerning the provision of information regarding the balance of assets in supplementary pension funds.
	• Regulation/Decree of the National Bank of Slovakia of 16 June 2009 No. 246/2009 Coll. concerning the methods of establishing the value of assets in a pension fund and a supplementary pension fund and on the amendment to the Decree of the Ministry of Finance of the Slovak Republic No. 217/2005 Coll. concerning the own resources of a supplementary pension asset management company and the methods and procedures to be followed in determining the value of assets in supplementary pension funds, as amended.
	• Regulation/Decree of the National Bank of Slovakia of 24 February 2009 No. 75/2009 Coll. on the submission of information about the net asset value of supplementary pension funds.
	• Regulation/Decree of the National Bank of Slovakia of 24 February 2009 No. 74/2009 Coll. on the submission of reports on exceeding of and compliance with limits concerning assets of a pension fund or a supplementary pension fund.
2008	• Full text of Regulation/Decree of the National Bank of Slovakia of 18 March 2008 No. 101/2008 Coll. on own funds of a pension fund management company, as amended by the Decree No. 523/2008 Coll.
2006	• Regulation/Decree of the National Bank of Slovakia of 5 September 2006 No. 568/2006 Coll., specifying the contents of annual and semi-annual reports on the management of assets in a supplementary pension fund and the contents of annual and semi-annual reports on the management own funds in a supplementary pension management company.
	• Regulation/Decree of the National Bank of Slovakia of 5 September 2006 No. 567/2006 Coll., laying down the content of reports on the management of a pension fund's assets, reports on the management of the own assets of a pension fund management company, the method and scope of their publication, and the content of daily information on each transaction in a pension fund's assets.

2005	• Regulation/Decree of the Ministry of Labour, Social Affairs and the Family of the Slovak Republic of 12 December 2005 No. 600/2005 Coll., stipulating the due form of an application for prior approval under Act No. 650/2004 Coll. on supplementary pension saving and on amendments to certain laws.
	• Regulation/Decree of the Ministry of Finance of the Slovak Republic of 4 May 2005 No. 217/2005 Coll., concerning the own resources of a supplementary pension management company and the methods and procedures to be followed in assessing the value of assets in supplementary pension funds.
	• Regulation/Decree of the Ministry of Labour, Social Affairs and the Family of the Slovak Republic of 3 March 2005 No. 87/2005 Coll., setting out a procedure for calculating and clearing the fee for the management of a pension fund and the fee for the administration of a personal pension account.
2004	• Regulation/Decree of the Ministry of Labour, Social Affairs and the Family of the Slovak Republic of 21 December 2004 No. 773/2004 Coll., stipulating the way of documenting compliance with the conditions for the issue of a licence for the foundation and operation of a supplementary pension management company 595/2004.
	• Regulation/Decree of the Ministry of Labour, Social Affairs and the Family of the Slovak Republic of 16 July 2004 No. 440/2004 Coll., defining the meaning of incorrect or misleading information, service or performance that are not related to retirement pension saving, amended by Decree No. 774/2004 Coll.
	• Regulation/Decree of the Ministry of Labour, Social Affairs and the Family of the Slovak Republic of 29 March 2004 No. 183/2004 Coll., stipulating the way of documenting compliance with the conditions for the issue of a licence for the foundation and operation of a pension management company.

In addition, the National Bank of Slovakia has issued several methodological guides, mainly for supervisory purposes

Table 8.A.2
Distribution of gross monthly salaries by sex, 2009 (%)

EUR	Total	Men	Women
up to 200	1.87	1.35	2.45
200–250	1.00	0.61	1.43
250–300	3.82	3.54	4.13
300–350	5.35	4.08	6.74
350–400	6.68	4.64	8.93
400–450	6.77	5.13	8.58
450–500	7.07	5.91	8.34
500–550	6.83	6.09	7.65
550–600	6.69	6.46	6.96
600–650	6.64	6.60	6.69
650–700	6.24	6.50	5.95
700–750	5.33	5.67	4.95
750–800	4.76	5.02	4.48
800–850	4.05	4.34	3.73
850–900	3.35	3.76	2.91
900–950	2.80	3.24	2.33
950–1,000	2.48	3.03	1.89
1,000–1,100	3.77	4.70	2.75
1,100–1,200	2.84	3.61	2.00
1,200–1,300	2.21	2.83	1.53
1,300–1,400	1.68	2.21	1.10
1,400–1,500	1.27	1.68	0.83
1,500–1,600	0.98	1.29	0.64
1,600–1,700	0.77	1.03	0.49
1,700–1,800	0.61	0.82	0.37
1,800–1,900	0.48	0.64	0.30
1,900–2,000	0.43	0.60	0.23
2,000–2,100	0.34	0.47	0.21
2,100–2,200	0.30	0.41	0.18
2,200–2,300	0.25	0.35	0.14
2,300 and over	2.31	3.41	1.10

Note: Average salary = 744.5 euro.
Source: Statistical Office of the Slovak Republic.

9. Slovenia

Tine Stanovnik[1]

9.1. Overview

9.1.1. The public pension system

9.1.1.1. Developments from 1990 to 2000

Following the disintegration of Yugoslavia and Slovenia's declaration of independence in June 1991, new legislation was enacted in all major legal areas. Thus, a new Pension and Disability Insurance (PDI) Act was passed by the Parliament (*Državni zbor*) in March 1992 (Official Gazette 12/92). In the highly turbulent period prior to independence, the Government had implemented emergency measures to contain pension expenditure[2]. The new Act did not represent a radical departure from the previous law, but was aimed at stabilizing the pension system.

The 1992 PDI Act tightened the eligibility conditions for pensions. As a result, to be eligible for an old-age pension one had to fulfil a pension qualifying period (or insurance period) and satisfy the age requirement. The conditions for early retirement were also tightened.

However, by the time the 1992 PDI Act came into force, massive enterprise restructuring and downsizing had been undertaken and a large number of workers of pre-retirement age had already been absorbed into the pension system. It was only after the enactment of the 1992 PDI Act that the actual retirement age began to increase (see Table 9.A.2). This happened despite the favourable conditions for early retirement and the possibility to purchase insurance years ex post, at a relatively low price.

The 1992 PDI Act introduced two new categories of insured persons: voluntarily insured persons and unemployed persons receiving unemployment benefits. The contributions of the latter were paid by the National Employment Office. The Act also stipulated that the Institute for Pension and Disability Insurance, hereinafter referred to as the ZPIZ (*Zavod za pokojninsko in invalidsko zavarovanje*), was to pay health insurance contributions for pensioners.

Until 1996, any increase in the pension expenditure had been met by an increase in the contribution rate, which was shared equally between employees and employers. The contribution rate increased from 22.55 percent in 1989 to 31 percent in 1995. However, in 1996 the Government decreased the employers'

1 The author gratefully acknowledges the invaluable help of Helena Bešter, Jože Kuhelj and Nataša Trček. He is also grateful to Katja Mlinar Gerbec and Ana Nikšič Pentek for their research assistance and help in providing data necessary to the report. Needless to say, all errors and omissions are the sole responsibility of the author.

2 The average net old-age pension was not to exceed 85 percent of the current average net wage. No pension indexation would be made until this percentage was reached. Similar measures regarding pension indexation were enacted by other transitional countries in Central and Eastern Europe. For more details, see Stanovnik, 2002, p.25.

contribution rate, first from 15.5 percent to 12.85 percent and then to 8.85 percent, with the aim of improving Slovenia's competitiveness and preventing a decline in the country's labour-intensive industries. As a result, from 1996 onwards, the ZPIZ became increasingly dependent on transfers from the State budget. Various laws had previously stipulated that the Government was obliged to finance specific expenditures, such as pension entitlements for the police, the armed forces and members of Parliament. However, transfers from the Government after 1996 were now intended to overcome the deficit of the ZPIZ.

The 1992 PDI Act has been amended several times. In 1995, the option for "reduced pension rights"[3] was significantly reduced and made available only to a limited number of insured persons.

Another round of pension reform began in 1996 and was completed in December 1999 with the passage of the new PDI Act (OG 106/99). Table 9.1 compares the main features of the 1992 PDI Act to the 1999 PDI Act.

Table 9.1
Main characteristics of the 1992 PDI Act and the 1999 PDI Act

1992 PDI Act	1999 PDI Act
Qualifying conditions for retirement with a full pension	
Men: 58 years of age with a 40-year p. q. p. 63 years of age with a 20-year p. q. p. 65 years of age with a 15-year ins. p. Women: 53 years of age with a 35-year p. q. p. 58 years of age with a 20-year p. q. p. 60 years of age with a 15-year ins. p.	Men: 58 years of age with a 40-year s. p. 63 years of age with a 20-year p. q. p. 65 years of age with a 15-year ins. p. Women: 58 years of age with a 38-year s. p. 61 years of age with a 20-year p. q. p. 63 years of age with a 15-year ins. p.
Minimum insurance period	
15 years	15 years
Pension assessment base	
Best 10-year average of the revalued net wage	Best 18-year average of the revalued net wage
Accrual rates	
Men: 35% plus 2% for each year in excess of 15 years (up to 40 years) of p. q. p. Women: 40% plus 3% for each year in excess of 15 years (up to 20 years) of p. q. p., and 2% for each year in excess of 20 years (up to 35 years) of p. q. p.	Men: 35% plus 1.5% for each year in excess of 15 years of p. q. p.(1) Women: 38% plus 1.5% for each year in excess of 15 years of p. q. p.(1)

3 "Reduced pension rights" are the rights provided to persons to whom lower contribution rates are applied. These persons are not entitled to some of the benefits offered by the pension and disability insurance system, such as pension income supplements, disability supplements, the possibility of early retirement, aid at home and pension calculation from the minimum pension assessment base.

1992 PDI Act *(continued)*	1999 PDI Act *(continued)*
Pension indexation	
In line with increases in the average net wage	In line with increases in the average net wage
Minimum pension assessment base	
64% of the national average net wage	Set nominally
Maximum pension assessment base	
310% of the national average net wage	4 times the minimum pension assessment base
Qualifying conditions for early retirement	
Men: 55 years of age with a 35-year p. q. p. Women: 50 years of age with a 30-year p. q. p. and other conditions(2)	Men: 58 years of age with a 40-year p. q. p. Women: 58 years of age with a 38-year p. q. p.(3)
Reductions for early retirement	
1% per year. Reductions are lifted when the age criteria is fulfilled.	Between 1.2% and 3.6% per year. Reductions are applied for life.
Purchase of insurance periods	
Employers can purchase insurance periods (for employees) for up to 5 years, under certain conditions.(4) Employees can purchase years of university study and military service.	Employers can purchase insurance periods (for employees) for up to 5 years, under certain conditions.(5) Employees can purchase years of university study and military service.

Abbreviations: p. q. p. = pension qualifying period; ins. p. = insurance period; s. p. = service period.

Notes: (1) Article 151 of the 1999 PDI Act.
(2) "Other conditions" include bankruptcy, disability and long-term unemployment.
(3) Article 55 of the 1999 PDI Act.
(4) Article 214 of the 1992 PDI Act.
(5) Articles 195–199 of the 1999 PDI Act.

Source: Kuhelj (2000) and the 1992 and 1999 PDI Acts.

The values presented in Table 9.1 refer to the final values attained after the transitional period. Some of the major transitional features were:

- Under the 1992 PDI Act, the pensionable age for men (with a 40-year pension qualifying period) was gradually increased from 55 years in 1992 to 58 years in 1998. The pensionable age for women (with a 35-year pension qualifying period) was gradually increased from 50 years in 1992 to 53 years in 1998.
- Under the 1999 PDI Act, the increase in the pensionable age and the pension qualifying period for women was very gradual. In some cases the final values were to be achieved over twenty years.
- Under the 1999 PDI Act, the number of years for the calculation of the pension assessment base was increased by one year every year starting in 2001.
- Under the 1999 PDI Act, the full retirement age (retirement age without penalties) was to be increased from 58 years to 63 years in 2009 for men (with an increase of six months every year) and from 53 years to 61 years in 2023 for women (with an increase of four months every year).

After several amendments, the pension system has become exceedingly complex. For instance, the following terms are used to define various qualifying conditions for pensions:

- *Service period* refers to a period when a person is actually insured (and contributions are paid);
- *Purchased period* refers to an insurance period that was purchased *ex post*, either by the employer or the employee[4];
- *Special qualifying period* refers to years which are credited without the payment of contributions;
- *Insurance period* refers to the sum of the service period and the purchased period;
- *Pension qualifying period* refers to the sum of the insurance period and the special qualifying period;
- *Added qualifying period* refers to years of university study and military service for which contributions are not paid. This period is taken into account only for ascertaining the minimum qualifying conditions for pensions (and is therefore added to the pension qualifying period), but is not reflected in the pension amount.

The entry pension is calculated by multiplying the total accrual rate by the pension assessment base. This is expressed as:

$$P = \left(\sum ar\right) \cdot \frac{1}{N} \sum (W_t Vk_t),$$

where:
P = pension amount,
$\sum ar$ = sum of accrual rates[5],
N = number of years relevant for the computation of the pension assessment base,
W_t = insured person's wage in year t, and
Vk_t = valorization coefficient for the period from year t to the year of retirement.

In the calculation of the pension assessment base, past wages are revalued according to "valorization coefficients" that range between 77 and 79 percent of the nominal rate of the increase in wages.

What is the logic underlying these valorization coefficients? As already mentioned, pensions were *de facto* frozen during the early 1990s, and even in later years the indexation of pensions did not catch up with the increase in the nominal wage.

From the point of view of horizontal equity, one can argue that the newly retiring pensioners should not be in a more favourable position than the preceding pensioners who have experienced pension indexation that is less favourable than nominal wage growth[6]. In other words, valorization coefficients equalize pensions for persons with similar wage profiles. The 1999 PDI Act introduced lower pension accrual rates

4 This means that contributions must be paid based on one's current salary.

5 For example, under the 1999 PDI Act, the total accrual rate for a male retiree with a 35-year pension qualifying period equals 65 percent (i.e. 35 percent for the first 15 years and 1.5 percent for each additional year – see Table 9.1).

6 Similar problems resulted in judgments by the Constitutional Courts of several Central and Eastern European countries. In Croatia, a special law on eliminating differences in pension levels acquired in different periods was passed in the year 2000 (see Anušič et al., 2003, p.14 and Guardiancich, 2009).

for pensioners retiring after the date of implementation. As seen in Table 9.1, the incremental accrual rate applied to years in excess of 15 decreased from 2 percent to 1.5 percent. Furthermore, although pensions were to be indexed according to wage growth, this rate of increase was reduced by 0.6 percentage points to take account of the new pensioners' lower accrual rates.

The 1999 PDI Act increased the full retirement age (i.e. retirement without penalties) to 63 years for men and 61 years for women. Retirement prior to the full retirement age entails progressive penalties (maluses), meaning that a higher deduction rate is applied if an insured person retires earlier. Unlike the 1992 PDI Act, these reductions are applied for life. The 1999 PDI Act also introduced incentives for deferred retirement with degressive rates, which means that a higher increase rate will be applied for periods closer to the full retirement age[7]. Penalties do not apply when insured persons retire at 58 years of age with 40 years of service for men or 38 years of service for women[8]. This effectively confers special treatment on blue-collar workers, enabling them to retire without penalties if they have worked for a sufficient period of time.

The retirement age can be lowered for child-rearing, by eight months for one child, 20 months for two children, 36 months for three children and 56 months for four or more children[9]. This deduction can be claimed by either parent.

The 1999 PDI Act introduced a new social assistance benefit called the "State pension", payable to persons who are not entitled to a social insurance pension, who have low incomes (below a fixed threshold), are at least 65 years old, and were residents of Slovenia for at least 30 years (between 15 and 65 years of age). The 1999 PDI Act also preserved the pension income supplement, a form of social assistance benefit payable to pensioners with low pensions and who fulfil certain requirements.

9.1.1.2. Developments since 2000

Following the passage of the 1999 PDI Act, several Articles were contested before the Constitutional Court. In particular, the Court was asked to establish whether the following Articles are in conformity with the Constitution:

- Article 49, which sets a lower level for the maximum pension (the 1999 PDI Act stipulates that the maximum pension assessment base is equal to four times the minimum pension assessment base, whereas the 1992 PDI Act set this ratio at 4.8 times[10]);
- Article 151, which cuts the pension increase for current pensioners, taking into account the less favourable pension formula for newly retired pensioners; and
- Article 150, which establishes the rule for pension indexation.

7 The 1999 PDI Act uses the term "full retirement age" instead of "normal retirement age". Interestingly, it does not use the term "early retirement".

8 In fact, these insured persons could also claim higher accrual rates for extended years of service up to the full retirement age.

9 These values are to be reached gradually between 2000 and 2014. Despite these deductions, men cannot retire before 58 years and women cannot retire before 56 years.

10 See Table 9.1.

The Constitutional Court upheld the validity of all of these Articles. In its decision the Court stated that

> "lower nominal increases of pensions than those expected according to the previous legislation do infringe on the principles of legal security and trust in law; however, this infringement was necessary with a view to the principles of equity between the already retired and newly retired pensioners, and equity between different generations. The burden on the active generation with regard to contribution payments should not be so heavy as to hinder economic growth or worsen the social conditions of the active population and the pensioner population" (OG 133/2003).

After the parliamentary elections in October 2004, the new center-right Government prepared amendments to the 1999 PDI Act. These amendments were passed in July 2005 (OJ 72/2005). One major change called for the indexation of pensions in line with the increase in the average wage twice a year[11]. The amendments also changed the insurance bases for some categories of insured persons.

The Government originally planned to enact a more comprehensive pension reform as part of the "grandiose" economic and social reforms proposed by the Government's team of neo-liberal economists. One of the main aims of this reform was to adopt a flat personal income tax. However, the Government faced massive demonstrations by the trade unions in November 2005 and eventually withdrew its proposed reform.

9.1.2. Supplementary pension schemes

A supplementary pension scheme was first introduced by the 1992 PDI Act. The scheme was created by the ZPIZ but was managed through an account separate from the other assets of the ZPIZ. Due to a lack of tax incentives, this scheme attracted only 739 individuals by the end of 2000 and was then taken over by a new scheme.

The 1999 PDI Act paved the way for further development of supplementary pension schemes. These schemes can more appropriately be called complementary schemes, as they are intended to complement the decreasing level of pensions disbursed by the public pension system. The law envisaged collective schemes, although the possibility of individual membership also existed. Employers' contributions (premia) to these pension schemes are exempt from corporate income tax, social security contributions and personal income tax. This exemption is subject to a cap, fixed at 24 percent of the contributions for pension and disability insurance[12]. If an individual enrols in a second-pillar pension scheme, the premia paid by the individual are exempt from personal income tax.

The 1999 PDI Act and its preceding legislation delegated a distinct role to the Pension Management Fund, hereafter referred to as the KAD (*Kapitalska družba*). This State-owned institution was given both a specific role in the second pillar and a strong supportive role in the first pillar. It is responsible for the following:

11 This new indexation rule was demanded by the Pensioners' Party (Desus) as a condition for participating in the coalition Government.

12 There is also a fixed ceiling on premia that are subject to the tax exemption. In 2009, this amount was 2,605 euro.

- managing the Capital Mutual Pension Fund (CMPF), the successor of the supplementary pension scheme introduced in 1992;
- managing the Mandatory Supplementary Pension Fund (MSPF), introduced in the 1999 PDI Act[13]. Legislation prior to the 1999 PDI Act required the employer to pay higher contribution rates for employees in certain occupations (i.e. police, customs officers, firemen, and miners) to compensate for their retirement under special conditions. According to the 1999 PDI Act, contributions above the normal contribution rate are to be channelled to this mandatory pension scheme. The funds accumulated in these individual accounts will be used for the payment of occupational pensions[14];
- managing the First Pension Fund (FPF), created to absorb the ownership certificates given to individuals in anticipation of privatization[15]. Unlike the other pension funds managed by the KAD, the FPF can be regarded as a third-pillar pension fund, whose function is completely unrelated to the public pension system or the second-pillar pension funds;
- managing the Closed Mutual Pension Fund for Public Sector Employees (CMPFPE). This fund is based on the Law on Collective, Supplementary Pension Insurance for Government Employees, which was passed in November 2003 (OG 126/2003). Unlike the other three funds, the KAD's management of this fund is not stipulated by law but through a collective agreement signed in January 2004;
- providing financial support to the public pension system. By virtue of the Privatization Act of 1992, the KAD owns 10 percent of the social property that was to be privatized. The income from this capital is used to provide financial support to the public pension system. In reality, the KAD is financing the deficit of the ZPIZ not only from its income but also from the sale of its assets.

In addition to the KAD, there are currently (as of 2010) three pension management companies, three banks and four insurance companies that offer collective and individual pension schemes. All pension schemes must be approved by the Ministry of Labour, Family and Social Affairs. Some consolidation of these schemes took place following the passage of the 1999 PDI Act, which required that pension management companies have at least 15,000 members and mutual pension funds at least 1,000 members by the end of 2002.

9.2. Coverage, compliance and collection

9.2.1. Coverage

In 2009, the number of insured persons was 895,000. Table 9.2 presents the number of insured persons by category over the last 20 years. Table 9.A.1 presents the sex and age structure of insured persons in 2009.

13 Only men with less than 25 years of insurance and women with less than 23 years of insurance were permitted to join the mandatory pension scheme.

14 Article 283 of the 1999 PDI Act stipulates that a person in one of these occupations is entitled to receive a full occupational pension until the fulfillment of normal retirement conditions. They are then entitled to a reduced occupational pension, in addition to the pension from the public pension system.

15 For a more detailed description see Stanovnik, 2002.

The 1999 PDI Act provides a list of workers who are mandatorily covered by pension and disability insurance. Mandatorily insured persons include employees, the self-employed, farmers, unemployed persons receiving unemployment insurance benefits[16], parents receiving a parental allowance[17] and other categories of persons (such as prisoners, apprentices and athletes). However, farmers are required to be insured only if their cadastral income per household member exceeds the minimum wage. Membership in the mandatorily insured categories is based on data from the appropriate registries (of employees and the self-employed), which are regularly updated.

The 1999 PDI Act introduced the possibility of voluntary pension and disability insurance coverage. The main groups eligible for this option include farmers (whose income is below the threshold income), unemployed persons registered with the Employment Offices (and not receiving unemployment insurance benefits), persons caring for a child less than seven years old, part-time employees[18] and university students.

The major groups of the active population who are not covered by pension and disability insurance are:

- persons who perform occassional (contractual) work and are not regularly employed;
- unemployed persons who are registered with the Employment Offices but do not receive unemployment insurance benefits and choose not to be voluntarily insured; and
- low-income farmers who choose not to be voluntarily insured.

There is a considerable overlap between the first two groups. Many unemployed persons in fact perform contractual work to supplement their meager social assistance benefits.

16 However, unemployed persons receiving social assistance benefits are not mandatorily insured.

17 Parents receiving a parental allowance, which is a type of social assistance benefit, are insured through the child's first year, and the Government pays their contributions. If the parent was employed before taking parental leave, they are insured as an employee and receive parental leave benefits.

18 Part-time workers can be voluntarily insured for the difference in work time between full- and part-time employment.

Table 9.2
Number of insured persons by category, 1990–2009

Year	Employees employed by legal persons	Employees employed by natural persons	Self-employed	Farmers	Voluntarily insured persons	Unem-ployed	Other	Total
1990	782,222	31,890	38,435	32,068	—	—	—	884,615
1991	709,595	33,154	42,032	32,151	—	—	—	816,902
1992	656,966	33,283	43,963	30,690	—	—	—	764,902
1993	626,806	37,003	47,120	28,251	7,500	35,569	321	782,570
1994	605,326	41,196	48,801	27,129	13,672	36,103	322	772,549
1995	593,848	48,709	52,168	26,827	17,243	29,883	283	768,961
1996	581,651	53,835	54,108	25,285	19,164	31,430	258	765,731
1997	593,086	58,364	54,000	21,799	20,892	34,586	469	783,196
1998	591,653	61,087	53,456	19,602	20,956	36,380	1,059	784,193
1999	606,927	63,793	52,465	18,789	20,221	36,429	1,843	800,467
2000	647,861	67,073	52,118	17,206	20,550	31,074	3,499	839,381
2001	653,752	67,844	52,062	16,506	21,021	25,902	4,391	841,478
2002	654,599	65,941	51,876	14,849	22,161	22,587	4,531	836,544
2003	655,977	65,033	51,196	11,919	23,297	20,355	6,272	834,049
2004	658,745	65,286	51,232	13,852	23,957	15,426	8,171	836,669
2005	666,175	65,074	51,741	11,460	24,026	15,997	8,778	843,251
2006	675,060	66,309	53,072	10,536	23,643	16,600	9,386	854,606
2007	696,116	69,933	53,303	9,848	22,678	15,252	11,960	879,090
2008	717,564	72,300	55,442	9,279	21,595	14,351	13,553	904,084
2009	699,436	67,937	58,508	8,731	21,114	23,755	15,405	894,886

Source: Annual reports of the ZPIZ for 2002, 2006 and 2009.

Note: "Other" mostly includes parents who are not provided with mandatory insurance through their employer, meaning they were not employed prior to taking parental leave. Their inclusion is mandatory during their child's first year.

Table 9.3 compares the number of insured persons according to the ZPIZ statistics with the number of insured persons according to the Labour Force Surveys (LFS).

Table 9.3
Comparison of employed persons to insured persons, 1993–2009

Year	Employees			Self-employed		
	Labour Force Survey (in thousands) (1)	Registered with the ZPIZ (in thousands) (2)	Percentage (%) (2) / (1)	Labour Force Survey (in thousands) (3)	Registered with the ZPIZ (in thousands) (4)	Percentage (%) (4) / (3)
1993	715	664	92.8	103	75	72.8
1994	701	647	92.2	104	76	73.0
1995	733	643	87.7	108	79	73.1
1996	730	635	86.9	110	79	71.8
1997	730	651	89.1	107	76	71.0
1998	734	653	88.9	113	73	64.6
1999	728	671	92.1	112	71	63.3
2000	750	715	95.3	100	69	69.0
2001	758	722	95.2	108	69	63.8
2002	773	721	93.2	108	67	62.0
2003	771	720	93.3	88	63	71.5
2004	798	724	90.7	96	65	67.7
2005	808	731	90.4	95	63	66.3
2006	810	741	91.4	110	64	58.1
2007	831	776	93.3	114	63	55.2
2008	847	790	93.2	100	65	65.0
2009	815	767	94.1	111	67	60.3

Source: Statistical Yearbooks of the Republic of Slovenia and Statistical Information 40/2009; Annual Report of the ZPIZ, 2002, 2006 and 2009.

Notes:
1. The LFS data refer to the second quarter of a given year.
2. Employed persons in the LFS consist of (i) persons in paid employment, (ii) self-employed persons, and (iii) unpaid family workers. Column (1) refers to "persons in paid employment", which includes employees and occasionally-employed persons. Unpaid family workers are not included in the Table. There are between 40,000 and 50,000 unpaid family workers according to recent data.
3. The ZPIZ uses the registries of employees and self-employed persons provided by the Statistical Office of the Republic of Slovenia (SORS). According to the SORS data, "employees" include persons employed by legal and natural persons; "self-employed" persons include self-employed workers and farmers.
4. The large increase in employees registered with the ZPIZ in 2000 is due to the improved registry of the SORS. Similarly, the decrease in the number of self-employed persons with the ZPIZ in 2006 is due to improvements made to the farmers' registry.

The difference between the number of employed persons based on the LFS data and the number of insured persons is due to persons with precarious links to the labour market, persons who are registered neither as employees nor as self-employed persons. They frequently move in and out of pension insurance and will therefore have short contribution records and low pension entitlements. A similar problem faces insured persons who pay contributions from the lowest contribution base. These persons are also expected to receive low pensions in the future.

As noted above, the social insurance system also covers farmers and other groups of active persons[19]. However, these workers will generally have less contributory capacity than regular employees. As Table 9.4 shows, the average contributions paid by persons employed by natural persons amounts to some 50–55 percent of the average contributions paid by employees employed with legal persons. Further, the average contributions paid by self-employed persons are less than 70 percent of the average contributions paid by employees employed with legal persons.

Table 9.4
Comparison of the annual average pension contributions paid by employees and the self-employed, 2000–2009

Year	Employees employed by legal persons (1)	Employees employed by natural persons (2)	Ratio (%) (2) / (1)	Self-employed (3)	Ratio (%) (3) / (1)
2000	540.4	280.3	51.9	381.8	70.7
2001	597.9	296.3	49.6	418.7	70.0
2002	656.7	336.7	51.3	451.1	68.7
2003	712.4	372.1	52.2	476.6	66.9
2004	762.4	410.5	53.8	519.2	68.1
2005	801.9	438.0	54.6	550.8	68.7
2006	838.4	463.0	55.2	563.4	67.2
2007	3,691.0	2,039.0	55.2	2,505.0	67.9
2008	3,963.0	2,214.0	55.9	2,644.0	66.7
2009	4,094.0	2,239.0	54.7	2,689.0	65.7

Source: Annual reports of the ZPIZ.
Note: The amounts from 2000 to 2006 are expressed in thousands SIT. The amounts are in euros from 2007 onwards.

9.2.2. Compliance

Table 9.5 presents the insurance bases for the major categories of insured persons. Not all labour income is subject to social contribution taxation. In Slovenia, two major elements of labour income not subject to social contributions are vacation allowances (which amount to some 5 percent of the average annual wage) and income from contractual work.

19 It should be noted that voluntarily insured farmers, unemployed persons registered with the Employment Offices and part-time employees can opt for "reduced" pension insurance entitlements (see footnote 3). In this case, the insurance base is the guaranteed wage, which amounted to some 40 percent of the minimum wage in 2010.

Table 9.5
Contribution bases for different categories of insured persons

Type of insured person	Contribution base	Minimum contribution base
Employees	Wage	Minimum wage
Self-employed persons	Insurance base	Minimum wage
Farmers and members of farmer households	Insurance base	Minimum wage
Voluntarily insured persons	—	60 percent of the average wage

Source: For employees, the self-employed, farmers and members of farmer households: 1999 PDI Act (OJ 106/99). For voluntarily insured persons: Amendments to the PDI Act (OG 72/2005).

Note: The minimum contribution base is set at 30 percent of the average wage for voluntarily included farmers, unemployed persons registered with the Employment Offices and part-time employees (OG 72/2005).

As a measure of contribution compliance at the macroeconomic level, Table 9.6 estimates the covered wage bill. The covered wage bill is calculated based on the actual collected contribution revenues from employees and the contribution rate.

As seen from Table 9.6, the covered wage bill amounts to some 75 percent of the total amount of gross wages and salaries, without any clear increasing or decreasing trend. The covered wage bill's low values do not necessarily imply an overall low level of compliance, but can be attributed to a relatively high share of self-employment as well as a weak formal sector. In a developed market economy with a dominant formal employment sector, the covered wage bill can generally be expected to be high and stable.

Table 9.6
Comparison of the covered wage bill with gross wages and salaries, 2000–2009

Year	Covered wage bill (% of GDP) (1)	Gross wages and salaries (% of GDP) (2)	Ratio (%) (1) / (2)
2000	35.9	47.8	75
2001	35.4	48.2	73
2002	34.9	47.4	74
2003	34.1	44.6	76
2004	34.0	44.5	76
2005	34.1	44.4	77
2006	33.6	44.1	76
2007	32.2	42.8	75
2008	33.1	43.7	76
2009	35.0	45.6	77

Source: For GDP and gross wages and salaries: Statistical Yearbooks of the Republic of Slovenia and Statistical Information 22/2010. For data on contributions: the ZPIZ.

9.2.3. Collection of contributions

Most Central and Eastern European countries experienced large-scale economic, political and societal transformation in the early 1990s, simultaneously resulting in institutional reorganization. In Slovenia, while the social insurance institutions did not undergo significant change, the tax administration was radically altered when two agencies merged in 1996: the APPNI (*Agencija za plačilni promet, nadzor in informiranje* – Agency for Payments, Control and Information)[20] and the RUJP (*Republiška uprava za javne prihodke* – Department for Public Revenues).

The APPNI was a centralized payment agency through which legal persons paid wages and other payments to other legal entities and natural persons. The APPNI also collected tax and social security contributions from legal persons[21], and every legal person was required to have an account with the APPNI. The APPNI performed its collection duties quite efficiently, since the non-payment of taxes and contributions of an enterprise would result in a block being placed on the enterprise's account with APPNI.

In 1996, the departments of the APPNI responsible for taxes and contributions were merged with the RUJP to form a unified tax administration, the DURS (*Davčna uprava Republike Slovenije*). The other departments of the APPNI were transformed into an agency in charge of payments relating to the public sector. Since 1996, the DURS has been responsible for contribution collection[22].

Premia of the supplementary pension schemes are collected directly by the relevant institutions, including the KAD, pension management companies, banks and insurance companies.

9.3. Benefits

9.3.1. Public pensions (first pillar)

This section will describe the benefit levels of pensions, the qualifying conditions for normal retirement, the qualifying conditions for other forms of retirement (early retirement, old-age retirement for special groups, and disability retirement), and the indexation of pensions.

9.3.1.1. Normal old-age pensions

The pension formula for old-age pensions and the qualifying conditions for normal retirement have already been presented in Section 1. According to the 1999 PDI Act, the minimum (social insurance) pension is set by the ZPIZ and is equal to 35 percent of the minimum pension assessment base. The rate of 35 percent corresponds to the minimum required insurance period for men (15 years). Apart from the minimum (social insurance) pension, there is the State pension, which is a social assistance benefit. The minimum pension assessment base is set by the ZPIZ to prevent excessively low pensions. Thus, if an insured person's computed pension assessment base is less than the minimum pension assessment base,

20 The APPNI was the successor of the SDK (*Služba družbenega knjigovodstva* – Central Payment Agency), which existed in the pre-transition period.

21 Social contributions paid by the self-employed were collected by the RUJP.

22 For further discussion on the contribution collection system, see Stanovnik and Vezjak, 2004 and Stanovnik, 2010.

their pension will be computed based on this minimum pension base[23]. The value is set in nominal terms, the current value of which (in 2010) is about 57 percent of the average net wage. Concerning the maximum pension, the 1999 PDI Act sets the maximum pension assessment base at four times the minimum pension assessment base.

The State currently pays social security contributions (the shares of both employers and employees) for persons receiving parental allowances during their child's first year, as well as for unemployed persons receiving unemployment insurance benefits. In addition, the State pays the employer's part of social security contributions for farmers (both mandatorily and voluntarily insured), and for parents raising a child under three years of age or with a serious handicap under 18 years of age.

However, as observed in Section 1, the practice of crediting non-contributory periods as insurance periods is quite restricted. Periods of military service and university study can be purchased *ex post*, in which case they are included in the insurance period. Otherwise, non-contributory periods are treated as *added qualifying periods*. These periods apply to military service and university study and are relevant only as qualifying conditions for pension rights. They are not included in the calculation of pension accrual rates.

9.3.1.2. Early retirement and retirement for special groups

There are two types of early retirement. First, there is normal early retirement as stipulated in the 1999 PDI Act. For instance, this allows a male insured person to retire at age 58 with a 40-year pension qualifying period. The computed pension for this insured person would be subject to a reduction, as specified in Table 9.1. However, if the total 40 years comprise a service period, i.e. years of work, his pension will not be reduced. This special provision was included pursuant to the demands of trade unions with bule-collar workers who generally start working at a younger age.

Second, separate laws (such as the Police Law) regulate early retirement for special groups of insured persons. The 1999 PDI Act sets only broad conditions for these schemes, such as the absolute minimum age of retirement. Prior to the 1999 PDI Act, employers paid extra contribution rates so that 12 months of an insurance period would count as 14, 15, 16, 17 or 18 months of insurance[24]. With the enactment of the 1999 PDI Act, only special groups of workers with at least 25 years of insurance (for men) or 23 years of insurance (for women) remain in the public pension system. For other workers and new entrants in these work categories, the extra contribution rate paid by their employers is transferred to the Mandatory Supplementary Pension Fund (MSPF), managed by the KAD.

9.3.1.3. Disability and survivors' pensions

The pension assessment base for disability pensions is computed similarly to that of old-age pensions. If there is not sufficient insurance years to compute the 18-year average of wages, the average is taken using the total number of insurance years.

In cases of severe disability (category I) resulting from work injuries or occupational diseases, the disability pension is computed on the basis of a full service period (40 years for men and 38 years for women). If the disability resulted from injuries or illness acquired outside the workplace, the cumulative accrual rates are

23 It should be noted that the minimum pension assessment base is applied mostly to women.

24 For example, an extra contribution rate of 12.5 percent was needed to count 12 months as 18 months.

computed by adding the years of actual insurance to an assumed period, based on the age of the insured person at time of their disability. The minimum disability pension is computed using the cumulative accrual rates of 45 percent for men and 48 percent for women.

With regard to widow(er)s' pensions, the base is the pension that the deceased spouse received. If the spouse was an active insured person, then the base would be the computed old-age or disability pension, whichever is more favourable. The widow(er)s' pension is computed as 70 percent of this base. The minimum age for granting a widow(er)s' pension is 53 years. In case a widow(er) receives their own old-age pension, they can still receive a certain percentage of the widow(er)s' pension.

The base for orphans' benefits is the same as for widow(er)s' pensions. However, the percentage of this base depends on the number of children: the rate is 70 percent for one child, 80 percent for two children, 90 percent for three children and 100 for four or more children. An orphan can receive this benefit up until 15 years of age; in case the child continues schooling, the age limit is 26 years, conditional on the annual attestation of school enrolment.

9.3.1.4. Pension indexation

In principle, pensions have been adjusted in line with wage growth except for the early years of transition (1990 and 1991). In reality, however, the actual application of the indexation rules has been complicated by a number of factors. First, in the years following the passage of the 1992 PDI Act, pensions could not be adjusted if the average old-age pension exceeded 85 per cent of the average wage[25]. Second, since pensions are indexed twice a year, they have temporarily lost their value relative to wages during high inflationary periods because of a time lag between wage growth and the pension indexation. The 1992 PDI Act compensated for this through backloading. This means that when the new (higher) value of a pension was set, the pensioner also received a lump-sum additional payment, making up for the fact that wage growth and pension indexation were not in agreement. The 1999 PDI Act repealed this form of compensation. However, due to strong pressure from the Pensioners' Party (Desus), backloading was reintroduced in July 2005.

Under the current indexation rule (OG 72/2005), pension indexation is undertaken in February and in November. The February adjustment is based on the actual wage growth of the previous year, whereas the November adjustment is based on the estimated annual growth of wages provided by the government Institute for Macroeconomic Analyses and Development. The 2005 indexation rule changed the basis of indexation from the growth of net wages to the growth of gross wages.

It should also be noted that the pension indexation in February takes account of a negative adjustment of 0.6 percentage-points for those pensioners who started receiving pensions prior to the 1999 PDI Act ("old pensioners"). This adjustment was introduced to maintain equity between "old pensioners" and the newly retiring pensioners with lower pension accrual rates[26]. This means that if the rate of indexation is 9 percent, the pensions of "old pensioners" will be indexed by 8.4 percent.

25 The rate of 85 percent corresponds to old-age pensions based on full working periods (40 years for men and 35 years for women).

26 Formally this could be described as the principle of horizontal equity, meaning that pensioners retiring in different years but with the same retirement age and wage profile ought to receive equal pensions.

9.3.2. The second pension pillar

The second pension pillar is regulated by the same law that regulates the public pension system. A unified law is necessary because the new pension system depends on both pillars, although the second pillar remains voluntary[27]. The logic underlying this interrelationship is that the decreasing pension levels in the first pillar should be complemented by second-pillar pensions, mainly through employer-funded collective pension schemes. As an incentive to employers, tax deductions are given to the employers' contributions. The Government's more direct involvement in the second pillar is observed in the following ways:

- The KAD[28] has been given a stronger role through the management of four pension funds.
- Occupational pensions for workers in hazardous occupations have been transferred to the newly formed MSPF, managed by the KAD[29].
- The registration of pension funds is now strictly regulated, with additional requirements in (i) the minimum guaranteed rate of return (40 percent of the average interest rate of long-term Government bonds[30]) and (ii) the minimum percentage of employees in a collective pension scheme (66 percent of employees in an establishment, later decreased to 51 percent).

The 1999 PDI Act contains the provisions regulating pension management companies and mutual pension funds operated by banks and insurance companies. The Insurance Supervision Agency is tasked with supervising insurance companies, whereas the Securities Market Agency is tasked with supervising pension funds operated by pension management companies and banks.

9.3.2.1. Membership and assets of the supplementary pension funds

Table 9.7 summarizes the basic data on the Closed Mutual Pension Fund for Public Employees (CMPFPE), the Mandatory Supplementary Pension Fund (MSPF), and other institutions offering voluntary supplementary pension schemes.

Although the coverage of second-pillar pension schemes is high mainly due to the mandatory inclusion of public employees, the amount of pension assets per insured person is low[31], equalling between three and six months of the average net wage. A detailed analysis shows that mutual pension funds organized by banks have relatively larger amounts of assets per insured person compared to other voluntary pension schemes.

27 Strictly speaking, it is mandatory only for (i) workers in hazardous and arduous occupations and (ii) public sector employees.

28 The KAD is a joint stock company, whose founder and sole stockholder is the Republic of Slovenia.

29 This policy measure was subsequently adopted by Bulgaria.

30 In fact, most pension schemes set a higher threshold, at 50 or 60 percent of the interest rate of Government bonds.

31 These values can be compared to the value of the average net wage in 2009, equal to 930 euro.

Table 9.7
Data on mandatory and voluntary supplementary pension schemes, 31 December 2009

	Number of insured persons	Assets (in million euro)	Share (%)	Assets per insured person (in euro)
CMPFPE	193,235	385.8	21.67	1,996
MSPF	40,750	259.9	14.60	6,378
Voluntary supplementary pension schemes	334,327	1,134.3	63.72 (100.00)	3,392
Pension management companies	154,779	551.0	(48.58)	3,560
– Skupna	74,957	273.4	(24.11)	3,647
– Pokojninska družba A	47,000	181.3	(15.98)	3,856
– Moja naložba	32,822	96.4	(8.50)	2,936
Mutual pension funds	53,532	252.1	(22.23)	4,709
– KVPS	35,485	180.7	(15.94)	5,093
– Banka Koper	6,022	29.7	(2.62)	4,935
– Generali	4,772	19.5	(1.72)	4,080
– A Banka	2,997	14.8	(1.30)	4,938
– Probanka	4,256	7.4	(0.65)	1,732
Insurance companies	126,016	331.0	(29.19)	2,627
– Prva osebna zavarov.	78,890	172.1	(15.18)	2,182
– Triglav	44,698	154.0	(13.58)	3,445
– Adriatic Slovenica	2,428	4.9	(0.43)	2,026
Total	568,312	1,779.9	100.00	3,132

Source: 2009 Annual Report of Skupna.

Note: For Triglav the assets are estimated. For the voluntary supplementary schemes, their shares (shown in brackets) are calculated within these schemes.

9.3.2.2. Performance of the supplementary pension funds

Table 9.8 presents data on the rates of return of selected pension funds, and the minimum guaranteed rate of return as stipulated in the rules for pension funds. The rates of return provided here are computed on the net values of premia, i.e. after the deduction of entry fees. Although the average rates of return have so far exceeded the admittedly low guaranteed rates of return, the investment performance of pension funds needs to be monitored in the long term.

Table 9.8
Average rate of return on investments, 2003–2009 (%)

Pension fund	2003	2004	2005	2006	2007	2008	2009
CMPFPE	—	—	3.87	3.91	3.16	–9.05	17.94
MSPF	10.28	7.53	3.63	3.11	2.34	–9,37	7.62
CMPF	10.92	8.02	3.66	3.56	2.47	–12.18	8.57
Skupna	—	—	5.20	7.90	6.10	–3.70	4.40
Pokojninska družba A	8.33	6.32	4.04	5.61	6.11	1.06	3.77
Guaranteed rate of return	6.90	4.54	1.98	1.49	1.98	2.17	2.13

Source: Annual reports of the pension management companies.

Note: 1. The guaranteed rate of return in the table is set at 50 percent of the interest rate on Government bonds with at least one year of maturity. This is above the legally set minimum, which is 40 percent. Actually, some pension funds guarantee an even higher minimum rate of return, equal to 60 percent.

2. The high yield of CMPFPE in 2009 is due to the fact that the manager of the fund covered the difference between the actual rate of return and the guaranteed rate of return in 2008 through the fund's own resources.

The financial crisis had a profound effect on the entire financial industry in Slovenia, including the pension funds. Almost all pension funds recorded negative rates of return in 2008, which resulted in a drastic reduction in the holding of stocks in the second half of 2008. This can be observed in Table 9.9, which presents the asset structure of Skupna, the second largest pension management company (after the KAD).

Table 9.9
The asset structure of the Skupna Pension Fund, 2006–2009 (%)

Asset structure	31.12.2006	31.12.2007	31.12.2008	31.12.2009
Cash	0.0	0.0	0.0	0.0
Deposits	24.0	26.5	29.1	26.0
Government bonds	28.5	26.1	38.4	33.6
Other bonds	30.1	28.4	31.5	34.4
Stocks	17.5	19.2	1.4	6.4
Liabilities/claims	–0.2	–0.3	–0.4	–0.4
Immoveable property	0.0	0.0	0.0	0.0
Total	100.0	100.0	100.0	100.0

Source: Annual reports of Skupna for 2008 and 2009.

It should be noted that Article 306 of the 1999 PDI Act, revised and updated in 2006, imposes the following ceilings on the asset shares of investment instruments:

- stocks and company bonds traded on the stock exchange: 70 percent;
- investments which are not traded on the stock exchange: 30 percent; and
- assets denominated in other (non-euro) currencies: 30 percent.

Pension fund managers are obliged by law to provide a detailed statement of their investment policy, which must be approved by the Insurance Supervision Agency or the Securities Market Agency.

Table 9.10 presents the entry and management fees of selected pension funds in Slovenia.

Table 9.10
Entry fees and management fees for pension funds, 2009

Pension fund	Entry fee (% of premia)	Management fee (% of assets)
CMPFPE	0.625	0.5
MSPF	4.0	1.5
CMPF	up to 6	1.3
Skupna	specified in contract	1.25
Pokojninska družba A	3.0	0.65
Moja naložba	up to 2.6	up to 1.2

Source: 2009 annual reports of pension management companies.
Note: These fees refer to the collective pension schemes. "Entry fees" refer to the fees collected from each payment of premia.

Some pension management companies are decreasing their fees. The MSPF has decreased their entry fees from 6 percent in 2001 to 4 percent in 2009, and plans a further decrease to 3 percent by 2019. Similarly, the CMPFPE has decreased its entry fee from 0.75 percent in 2004 to 0.625 percent in 2009, and its management fee from 0.75 per cent to 0.5 percent during the same period.

With regard to the payment phase, the pension management companies and insurance companies are of the view that sex-specific annuities should be provided. This is unlike the practice of the First Pension Fund (FPF), which started disbursing annuities in 2004 and uses unisex mortality tables[32].

The current 1999 PDI Act allows for lump-sum withdrawals, conditional on a minimum ten-year membership with a fund (Article 358 of the 1999 PDI Act, revised and updated in 2006). The first withdrawals may occur in 2011. In spite of the fact that the lump-sum payment will be taxed at the personal income tax rate, there is concern among pension management companies that many members might opt for these lump-sum withdrawals[33].

32 The manager of the KAD was compelled to adopt the unisex tables of the Insurance Supervision Agency. The model annuities presented in 2000 by the KAD were based on unisex mortality tables, and the Agency took the position that the insurance contracts could not be unilaterally modified. KAD was thus obliged to 'stick to' the unisex mortality tables.

33 The currently proposed draft of the PDI Act does not allow for lump-sum withdrawals.

9.3.3. Adequacy of pensions

Table 9.11 shows different types of pensions as a percentage of the average net wage. In Slovenia, these ratios, called the "replacement rates", have been gradually decreasing since the passage of the 1999 PDI Act. This is because the newly entitled pensioners have lower accrual rates, and because pensions have not been indexed fully in line with wage increases.

Table 9.11
Average wages and average pensions by type, 1991–2009

Amount					
Year	Net Wage	Old-age	Disability	Survivors'	Total
1991	10,322	7,533	6,220	5,365	6,816
1992	30,813	23,977	19,835	17,056	21,775
1993	46,826	34,611	28,467	24,424	31,366
1994	60,089	45,344	37,524	32,270	41,174
1995	71,279	54,344	44,900	38,615	49,326
1996	81,830	61,008	50,109	43,186	55,270
1997	91,199	67,799	55,405	47,850	61,352
1998	99,919	74,477	60,598	52,377	67,338
1999	109,279	82,856	67,249	58,177	74,909
2000	120,689	90,864	73,700	63,928	82,224
2001	134,856	98,712	80,083	69,276	89,363
2002	147,946	107,640	87,409	75,637	97,562
2003	159,072	113,029	91,574	79,332	102,524
2004	168,203	117,999	95,434	82,746	107,140
2005	176,311	121,805	97,759	84,688	110,498
2006	185,936	127,201	102,047	88,516	115,929
2007	834.5	559.6	447.8	383.7	511.5
2008	899.8	603.7	483.6	416.4	554.2
2009	930.0	619.3	496.6	427.9	570.3

As a percentage of the average net wage					
Year	**Net wage**	**Old-age**	**Disability**	**Survivors'**	**Total**
1991	100.0	73.0	60.3	52.0	66.0
1992	100.0	77.8	64.4	55.4	70.7
1993	100.0	73.9	60.8	55.2	67.0
1994	100.0	75.4	62.4	53.7	68.5
1995	100.0	76.2	63.0	54.2	69.2
1996	100.0	74.6	61.2	52.8	67.5
1997	100.0	74.3	60.8	52.5	67.3
1998	100.0	74.5	60.6	52.4	67.4
1999	100.0	75.8	61.5	53.2	68.5
2000	100.0	75.3	61.1	53.0	68.1
2001	100.0	73.2	59.4	51.4	66.3
2002	100.0	72.8	59.1	51.1	65.9
2003	100.0	71.1	57.6	49.9	64.5
2004	100.0	70.2	56.7	49.2	63.7
2005	100.0	69.1	55.4	48.0	62.7
2006	100.0	68.6	55.1	47.8	62.5
2007	100.0	67.1	53.7	46.0	61.3
2008	100.0	67.1	53.8	46.3	61.6
2009	100.0	66.6	53.4	46.0	61.3

Sources: Annual reports of the ZPIZ for 2002, 2006 and 2009.

Note: The values above refer to net values. Amounts for 1991–2006 are expressed in SIT and in euros from 2007 onwards.

The decreasing pension level has also affected the poverty levels of pensioners. As seen in Table 9.12, despite the decreasing poverty rates among various potentially vulnerable groups, the poverty incidence amongst pensioners has increased, in particular for those in households without active members (pensioner households). The poverty incidence rate of pensioners in pensioner households has increased by 4.3 percentage points from 1997–1999 to 2005–2007. Pensioners living in single pensioner households are another particularly vulnerable group. The large majority are single women, many of whom are widows. Table 9.A.4 presents a more detailed picture of the change in the cumulative distribution of old-age pensions by sex between 1999 and 2008.

Considering the deteriorating labour market conditions in 2009 and in 2010, it seems likely that the overall poverty risk would also increase for pensioners, in particular those living in pensioner households.

Table 9.12
Poverty incidence rates for selected socio-economic groups, 1997–1999 and 2005-2007 (%)

	1997–1999 (1)	2005–2007 (2)	Difference (2) – (1)
All persons	14.4	12.4	–2.0
Pensioners	17.2	19.3	2.1
Pensioners in pensioner households	21.1	25.4	4.3
Persons aged 60 and above	22.4	21.7	–0.7
Children (up to age 18)	13.6	10.1	–3.5
Unemployed	39.5	38.1	–1.4

Source: Kump and Stanovnik, 2008.

Note: The poverty line is set at 60 percent of the median equivalized household income.

9.3.4. Taxation of pensions

Public pensions are, to a large extent, not subject to taxation. According to ZPIZ data, only 27,000 pensioners (5 percent of all pensioners) were subject to a withholding tax for personal income taxation in 2008. The small number of pensioner taxpayers is due to the generous tax relief in the form of tax credit, amounting to 13.5 percent of each individual pension. Contributions to the public pension system are also exempt from taxation both at the corporate and personal levels.

As explained earlier, the premia for collective schemes are exempt from corporate income tax, social contributions and personal income tax, whereas the premia for individual schemes are exempt from personal income tax only. However, these exemptions are subject to a ceiling, as described in Section 1.2.

Annuities paid from second-pillar pension funds will be subject to personal income taxation, meaning that their overall tax treatment will be EET (Exempt-Exempt-Taxed). In contrast, annuities paid from the First Pension Fund (FPF), which is a third-pillar pension fund, are exempt from personal income tax[34]. The purchase of coupons for the FPF is also implicitly exempt from personal income tax[35]. Thus the benefits of the FPF are effectively not taxed in any phase.

34 See Article 32 of the Personal Income Tax Act (OG 117/2006), effective from 1 January 2007. This law superseded the 2004 Personal Income Tax Act (OG 54/04), which was in effect from 1 January 2005 to 31 December 2006. The previous Act stipulated that FPF annuities are subject to taxation. This Article of the Act was contested, and the Ministry of Finance amended the law in 2007 prior to the Court's ruling.

35 Assets of the FPF were increased by 20 percent by the Government to compensate the holders of FPF pension vouchers for the personal income tax they were subjected to. The average rate of personal income tax was 20 percent (First Pension Fund and the Transformation of Investment Companies Act, OG 26/05).

9.4. Expenditure and financing

9.4.1. Contribution rates

Contributions collected from employers and insured persons are the main source of revenue for the ZPIZ. Table 9.13 provides the contribution rates for pension and disability insurance from 1992 to 2009. No change has been made to the contribution rates since the drastic decrease in the employer contribution rate in July 1996.

Table 9.13
Contribution rates for pension and disability insurance, 1992–2009 (%)

Year	1992	1993	1994 to 31 January 1996	1 February to 30 June 1996	1 July 1996 to 2009
Employees	14.40	15.42	15.50	15.50	15.50
Employers	14.40	15.42	15.50	12.85	8.85
Total	28.80	30.84	31.00	28.35	24.35

Note: The reduced rate for employers has been in force since July 1996.

As seen in Table 9.5, the minimum wage is used as the minimum contribution base for employees, the self-employed and mandatorily insured farmers. There is no cap placed on contributions from employees. High-income self-employed persons have more flexibility in choosing their contribution base and may cap their contributions, allowing them to opt for a maximum contribution base.

9.4.2. Financial operations of the ZPIZ

Table 9.14 presents the revenue and expenditure of the ZPIZ for the period from 2000 to 2009. In recent years, the contributions cover only about 70 percent of the expenditure of the ZPIZ, and transfers from the State budget represent some 27 percent of the expenditure. These transfers from the State budget consist of (i) specific transfers, which the Government is obligated to contribute based on various laws, and (ii) compensation for the shortage of contributions. The budget of the ZPIZ remains balanced only because the Government is obliged by law to cover its deficit.

The ZPIZ also pays some benefits that are not strictly related to pensions. For example, wage compensations are paid to employed persons who work part-time due to disability[36]. The ZPIZ also transfers some 9 percent of its expenditure to the Institute for Health Insurance (*ZZZS – Zavod za zdravstveno zavarovanje Slovenije*) as health insurance contributions for pensioners.

36 The 1999 PDI Act changed this favourable treatment. Thus, from 2003 these employed persons receive a part-time wage and a partial disability pension (instead of a wage compensation). Previously, these persons received a 100 percent wage compensation for the difference between full-time employment and part-time employment.

Table 9.14
Revenue and expenditure of the ZPIZ, 2000–2009

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
A. REVENUE	573.6	655.3	732.9	783.7	833.2	877.2	923.0	4,064.0	4,479.7	4,653.6
A1. Contributions	399.6	452.0	495.0	536.6	574.8	610.2	647.1	2,934.0	3,250.8	3,288.5
– Employers and employees	375.8	416.6	457.9	497.7	535.1	569.0	603.7	2,741.9	3,036.0	3,046.4
– Self-employed	21.3	23.0	24.6	25.9	27.8	30.0	31.4	139.0	152.2	162.9
– Other contributions	2.4	12.4	12.5	13.0	11.9	11.2	12.0	53.1	62.5	79.2
A2. Transfers from the State budget	153.6	184.4	216.7	228.3	238.8	247.3	251.6	1,028.1	1,111.7	1,237.7
A3. Transfers from other sources	2.5	5.1	5.1	5.5	5.7	6.1	6.7	30.3	34.6	50.5
A4. Transfers from the Capital Fund	13.3	8.4	10.0	6.4	6.4	6.4	9.4	39.1	49.0	49.0
A5. Other transfers	0.2	0.3	0.4	0.2	0.5	0.0	0.0	0.0	0.0	0.0
A6. Other revenue	4.4	5.1	5.7	6.8	7.1	7.2	8.1	32.3	33.6	27.8
B. EXPENDITURE	587.9	655.2	732.8	781.3	828.6	877.1	923.0	4,063.6	4,479.7	4,653.6
B1. Administrative expenditure (the ZPIZ)	4.2	5.2	5.5	5.8	6.3	7.0	7.6	32.6	36.7	35.8
B2. Current transfers										
– Pensions	490.7	544.5	600.8	640.2	677.5	713.6	756.6	3,354.9	3,680.8	3,859.3
– Wage compensation	22.3	26.7	31.8	34.2	37.5	39.3	41.1	172.3	182.9	183.8
– Social assistance	23.1	25.3	33.5	36.0	38.9	40.6	42.7	176.5	226.8	207.4
– Transfers to non-profit organizations	0.4	0.5	0.5	0.5	0.6	0.2	0.1	0.7	0.7	0.8
– Transfers to the Institute for Health Insurance	44.1	48.8	56.6	60.5	64.2	72.9	70.8	312.6	337.6	352.2
B3. Other transfers	—	—	—	—	—	0.5	0.5	0.0	0.0	0.0
B4. Other expenditure	3.1	4.2	4.8	3.9	3.5	3.0	3.6	13.9	14.2	14.3
Balance (revenue minus expenditure)	–14.3	0.0	0.0	2.5	4.6	0.1	0.0	0.0	0.0	0.0
Expenditure as a percentage of GDP	13.8	13.8	13.8	13.2	13.0	13.0	12.6	11.8	12.0	13.2
GDP	4,252.3	4,761.8	5,314.5	5,922.9	6,393.0	6,768.3	7,296.6	34,568	37,305	35,384

Source: Annual reports of the ZPIZ, Statistical Yearbooks of the Republic of Slovenia, Statistical Office of the Republic of Slovenia.

Note: Amounts for 2000–2006 are expressed in billion SIT and in million euros from 2007 onwards.

9.4.3. Demographic trends

Table 9.15 presents the number of pensioners from 1990 to 2009. The annual growth rate of the total number of pensioners is 1.9 percent for 1990–2009, 2.2 percent for 1990–1999, and 1.5 percent for 2000–2009. Although the growth rate has diminished in the last decade, long-term demographic trends will continue to exert pressure on the pension system and threaten its sustainability. As Table 9.16 shows, the old-age dependency ratio (the ratio of the population aged 65 and over to the population aged 20–64 years) has risen from 17.8 percent in 1991 to 25.7 percent in 2009, and is estimated to increase rapidly from 2020 onwards and eventually reach 61.5 percent by 2050.

Table 9.15
Number of pensioners by type, 1990–2009

Year	Old-age	Disability	Survivors'	Other	State pension	Total
1990	197,259	82,289	76,726	27,820	—	384,094
1991	227,524	87,194	78,482	25,727	—	418,927
1992	252,393	92,378	80,531	23,526	—	448,828
1993	259,525	94,739	81,764	21,517	—	457,545
1994	260,751	95,698	82,120	19,516	—	458,085
1995	262,587	96,883	83,121	17,671	—	460,262
1996	265,341	97,649	84,527	15,805	—	463,322
1997	269,958	98,146	85,970	14,142	—	468,216
1998	274,477	98,251	87,133	12,533	—	472,394
1999	279,114	98,105	88,171	11,059	—	476,449
2000	282,005	97,804	87,639	14,742	50	482,240
2001	287,926	97,704	88,877	13,440	4,538	492,485
2002	295,304	97,621	90,973	12,215	12,970	509,083
2003	302,365	97,433	92,113	10,997	14,843	517,751
2004	308,443	96,556	92,827	9,888	16,140	523,854
2005	315,092	96,665	93,231	8,909	17,178	531,075
2006	322,755	95,736	92,304	8,023	17,690	536,508
2007	332,780	94,511	91,514	7,236	17,432	543,473
2008	342,992	93,389	91,552	6,493	16,832	551,258
2009	354,514	92,123	91,818	5,805	16,168	560,428

Source: Annual reports of the ZPIZ for 2002 and 2009.

Note: "Other" includes (1) recipients of farmers' pensions based on pre-1983 legislation (this pension fund merged in 1983 with the general public pension system); (2) recipients of military pensions (since 2000); and (3) recipients of "acompte" pensions, i.e. pensions for former officers of the Yugoslav Army (since 2000).

Table 9.16
Population aged 20–64 years and population aged 65 years and above, 1991–2050

Year	Population aged 20–64 (1)	Population aged 65 and above (2)	Old-age dependency ratio (%) (2) / (1)
1991	1,228,602	218,927	17.8
1995	1,225,394	244,767	20.0
2000	1,255,897	278,230	22.2
2005	1,283,194	309,537	24.1
2009	1,312,488	336,860	25.7
2015	1,270,461	358,817	28.2
2020	1,221,065	410,715	33.6
2030	1,127,876	502,865	44.6
2040	1,056,979	558,343	52.8
2050	963,063	592,047	61.5

Source: Statistical Office of the Republic of Slovenia for data up to 2009; Eurostat for projections from 2015 to 2050.

Table 9.17 compares the working period and the retirement perid for each sex in 2000 and in 2009. Men retiring in 2009 had an 11-month longer work period on average than men retiring in 2000, but due to increased longevity their retirement period was longer by one year and ten months. Similarly, women retiring in 2009 had a two-year and one month longer work period on average than women retiring in 2000, but their period of retirement was longer by four years and five months. Reference should be made to Tables 9.A.2 and 9.A.3, which show the effective retirement age and life expectancy by sex. In spite of the tightening of eligibility conditions by the 1999 PDI Act, extending the working period did not offset the increase in the retirement period.

Table 9.17
The working period and the retirement period by sex, 2000 and 2009 (in years)

		Men	Women
Working period			
2000	(1)	37 + 3m	33 + 7m
2009	(2)	38 + 2m	35 + 8m
Difference	(2) – (1)	11m	2 + 1m
Retirement period			
2000	(3)	14 + 9m	17 + 1m
2009	(4)	16 + 7m	21 + 6m
Difference	(4) – (3)	1 + 10m	4 + 5m

Source: 2009 Annual Report of the ZPIZ.

9.5. Social dialogue in the pension reform

Social dialogue in Slovenia has a long tradition. The Former Yugoslavia had a specific form of socialism known as "self-managed" socialism, which was a form of decentralized decision-making with strong worker representation and democratic participation. The dramatic political and economic changes that occurred in the early 1990s did not completely dismantle this culture. After Slovenia gained independence, trade unions retained their role as a key political force capable of mobilizing workers and influencing governmental action. In the realm of pension reform, trade unions were instrumental in the failure of the mandatory second pillar proposed in 1998, and the failure of the reform proposals made by the center-right Government in 2005. Overall, the employers' organization (The Association of Employers of Slovenia) has generally aligned itself with the Government and has rarely come out with its own proposals.

The Economic and Social Council (ESC) provides the main forum for tripartite negotiations. Although the ESC was not established by law, the rules that govern it are established through Government regulation. Any legislation concerning labour relations, labour remuneration and social security is discussed in the ESC. As a general rule, such legislation is not considered ready for parliamentary discussion until it is agreed upon in the ESC. There are, however, cases in which the Government attempts to bypass the ESC. This happened in July 1998 when the Government approved the draft 1999 PDI Act despite the strong opposition voiced by the trade unions[37]. A similar tactic was used in August 2010, when the Government approved the current draft of the PDI Act without the agreement of the trade unions[38].

As for the governance structure of the ZPIZ, the 1999 PDI Act (Articles 265 to 269) establishes the creation of a Council and a Managing Board. Pursuant to the legislative changes made in July 2005 (OG 72/2005) that were proposed by the center-right Government, the Managing Board has been abolished and the membership of the Council has been reduced from 30 to 27 members. The structure of the Council's membership has also changed. Thus, the number of members appointed by the Government has been increased from seven to ten, the number of the trade union representatives has been reduced from eight to six, and the number of the representatives of employers' associations was reduced from eight to four. Also represented in the Council are representatives of the pensioners' associations, a representative of an organization of workers with disabilities, and the ZPIZ. The prerogatives of the Council have expanded as it has now taken over some of the tasks of the Managing Board. These tasks include decisions on pension indexation and appointing and dismissing the Director-General of the ZPIZ.

9.6. Recent developments

After the parliamentary elections in October 2008, the new center-left government appointed a working group on the "modernization of the pension system". Its first meeting was held in March 2009.

37 In 2010, the Minimum Wage Act was passed without the support of the employers' associations and the Labour Market Act was passed without the support of the trade unions.

38 Negotiations with trade unions were mostly held in small working groups formed by the ESC. According to a senior official at the Ministry of Labour, Family and Social Affairs, more than 50 meetings were held with the trade unions to discuss pension issues and the draft of the PDI Act. In addition, a separate working group was formed to discuss disability pensions and workers with disabilities.

After a series of intermittent discussions, the Ministry of Labour, Family and Social Affairs presented the Government with a draft Pension and Disability Insurance Act in August 2010. This draft was approved by the Government and submitted to the Parliament (*Državni zbor*) in August 2010. After three readings (and a number of amendments), the Act was finally passed by the Parliament on 14 December 2010. This law introduced important parametric changes, and simplified parts of the existing complex pension system. The key features of the Act are summarized as follows:

- The period for computing the pension assessment base is to be gradually increased from the best 18 years to the best 30 years[39].
- The full retirement age (i.e. retirement without reductions) is to be gradually increased to 65 years for both men and women, with a possible decrease of eight months per child for child-rearing[40] and 12 months for military service.
- Early retirement (with reductions) is possible at age 60 for men with a 40-year pension qualifying period and women with a 38-year period.
- Reduction rates for early retirement are made uniform at 3.6 percent per year, and no increase (higher accrual rate) is applied in the case of deferred retirement.
- Early retirement (without reductions) is possible for men at age 60 with a 43-year pension qualifying period and for women at age 58 with a 41-year pension qualifying period[41].
- New accrual rates and a fixed uniform valorization coefficient have been introduced, meaning that the pension formula will guarantee 60 per cent of one's average wage for 40 and 38 years of insurance for men and women, respectively. This implies that the average effective accrual rate is 1.5 percent per year of insurance for men and 1.58 percent for women.
- Pensions are to be indexed by 70 percent of the nominal wage growth and 30 percent of price increases. This is more favourable than the Swiss formula, which uses the average of the increased rates of wages and prices.
- Various social assistance benefits related to pensions (including pension income supplements and State pensions) are removed from the PDI Act and relegated to the relevant social assistance legislation.
- The overall transparency of the legislation is improved through the elimination of added qualifying periods.

In spite of the fact that the PDI Act was passed, it has not formally been enacted. Namely, the trade unions, which have been opposed to this Act throughout the reform process, have initiated a procedure for a peoples' referendum on the PDI Act. The main reasons for their opposition were the increase in the

39 The two most unfavourable years can nonetheless be discarded.

40 This is generally available only for women, and is available for men only if certain stringent conditions are met. This decrease in the retirement age is similar to the solution adopted in the Czech Republic, where the retirement age for women can be reduced up to three years for child-rearing.

41 Here, the pension qualifying period cannot include purchased years of insurance.

retirement age and the virtual abolishment of favourable retirement options for blue-collar workers. Although the PDI Act eventually did include a more favourable clause for blue-collar workers (retirement for men at age 60 with 43-year pension qualifying periods and retirement for women at age 58 with 41-year pension qualifying periods), the trade unions deemed these conditions unacceptable. The employers' association was likewise unsatisfied with the PDI Act. In particular it demanded a lower employer contribution rate for workers older than 60 years and a lower minimum contribution base for the self-employed[42].

In a move aimed at blocking the trade unions' initiative, the Parliament (*Državni zbor*) sent a demand on 12 January 2011 to the Constitutional Court, asking for an opinion on the constitutionality of such a referendum. The Constitutional Court delivered its opinion on 14 March 2011, unanimously ruling that the referendum would not be unconstitutional. A referendum was thereafter held on 5 June 2011, and the new pension legislation was rejected by a large margin of voters (with 72.2 percent against the new PDI Act and 27.8 percent in favor). Thus, the current PDI Act remains valid.

In spite of the fact that the pension legislation has not become law, there is little danger of pension expenditures "exploding" in the short run. An emergency law passed in December 2009 (OG 98/2009) set indexation of pensions (and other social benefits) for 2010 at 50 percent of nominal wage growth. Similarly, an emergency law passed in November 2010 (OG 94/2010) set the indexation of pensions for 2011 at 25 percent of nominal wage growth. The Government proposed a freeze on pension indexation for 2012. At the time of this writing (October 2011) the *Državni zbor* is about to be dissolved, with early parliamentary elections to be held on December 4. Thus, it is virtually certain that this proposed emergency legislation will not be passed by the outgoing *Državni zbor*.

42 The PDI Act increased the minimum contribution base to 60 per cent of the average wage. The employers' association demanded that the minimum wage be retained as a "contribution floor".

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Annex

Table 9.A.1
Number of insured persons by sex and age, 31 December 2007

Age	Men	Women	Total
20 or below	7,824	2,385	10,209
21 to 30	105,107	78,317	183,424
31 to 40	137,637	122,968	260,605
41 to 50	139,745	128,289	268,034
51 to 60	99,073	60,790	159,863
61 or more	10,473	5,267	15,740
Total	499,859	398,016	897,875

Source: Internal documentation, the ZPIZ.

Table 9.A.2
Average effective retirement age by sex, 1992–2009

Year	Men	Women
1992	56 + 2m	52 + 6m
1993	56 + 2m	53 + 3m
1994	57 + 7m	53 + 2m
1995	57 + 6m	53 + 1m
1996	57 + 6m	54 + 0m
1997	58 + 3m	54 + 11m
1998	58 + 5m	55 + 3m
1999	58 + 2m	54 + 10m
2000	59 + 2m	55 + 5m
2001	59 + 3m	55 + 5m
2002	59 + 11m	55 + 6m
2003	59 + 11m	55 + 8m
2004	60 + 7m	56 + 7m
2005	60 + 5m	57 + 1m
2006	60 + 4m	57 + 2m
2007	60 + 8m	57 + 5m
2008	60 + 9m	57 + 6m
2009	60 + 11m	58 + 0m

Source: Monthly statistical bulletin, October 2002 and December 2009, the ZPIZ.

Table 9.A.3
Life expectancies at selected ages by sex, 2007 (in years)

	At 60	At 61	At 63	At 65
Men	19.4	18.6	17.2	15.8
Women	24.2	23.4	21.6	19.9

Source: Complete mortality tables of the population of Slovenia, Statistical Office of the Republic of Slovenia, 2007.

Table 9.A.4
Percentage of old-age pensioners by pension amount and sex, 1999–2008 (%)

	Men	Women
1999		
Less than 40% of the average net wage	6.8	12.8
Less than 50% of the average net wage	14.7	25.5
Less than 60% of the average net wage	24.9	51.8
Less than 70% of the average net wage	38.5	65.9
Less than 100% of the average net wage	75.4	93.6
2000		
Less than 40% of the average net wage	6.7	13.0
Less than 50% of the average net wage	14.8	34.6
Less than 60% of the average net wage	25.2	52.2
Less than 70% of the average net wage	39.6	66.0
Less than 100% of the average net wage	76.2	91.7
2001		
Less than 40% of the average net wage	6.1	11.2
Less than 50% of the average net wage	12.9	29.5
Less than 60% of the average net wage	23.2	49.1
Less than 70% of the average net wage	36.8	63.5
Less than 100% of the average net wage	74.5	90.6
2002		
Less than 40% of the average net wage	7.1	13.1
Less than 50% of the average net wage	16.3	37.5
Less than 60% of the average net wage	28.7	55.8
Less than 70% of the average net wage	44.7	69.6
Less than 100% of the average net wage	79.3	93.1

	Men	Women
2003		
Less than 40% of the average net wage	6.7	12.0
Less than 50% of the average net wage	15.6	36.1
Less than 60% of the average net wage	27.5	54.8
Less than 70% of the average net wage	43.7	69.2
Less than 100% of the average net wage	78.6	92.8
2004		
Less than 40% of the average net wage	7.4	13.7
Less than 50% of the average net wage	17.0	39.2
Less than 60% of the average net wage	30.5	57.9
Less than 70% of the average net wage	48.4	73.0
Less than 100% of the average net wage	80.8	93.6
2005		
Less than 40% of the average net wage	6.0	10.2
Less than 50% of the average net wage	14.2	33.0
Less than 60% of the average net wage	25.4	52.1
Less than 70% of the average net wage	41.1	66.6
Less than 100% of the average net wage	77.3	91.7
2006		
Less than 40% of the average net wage	6.5	11.3
Less than 50% of the average net wage	15.6	36.4
Less than 60% of the average net wage	28.4	55.5
Less than 70% of the average net wage	45.7	70.4
Less than 100% of the average net wage	79.8	92.9
2007		
Less than 40% of the average net wage	6.9	12.0
Less than 50% of the average net wage	15.8	36.8
Less than 60% of the average net wage	29.2	56.2
Less than 70% of the average net wage	46.8	70.8
Less than 100% of the average net wage	80.5	93.0

	Men	Women
2008		
Less than 40% of the average net wage	6.1	10.0
Less than 50% of the average net wage	15.5	36.2
Less than 60% of the average net wage	29.0	55.7
Less than 70% of the average net wage	47.1	71.2
Less than 100% of the average net wage	80.7	92.8

Source: Kump and Stanovnik, 2009.

Note: All data refer to December of the given year.