

**NATIONAL STRATEGY REPORT ON THE DANISH PENSION SYSTEM**

**JULY 2005**

**NATIONAL STRATEGY REPORT ON THE DANISH PENSION SYSTEM - 2005****1. INTRODUCTORY REMARKS**

This strategy report was prepared in cooperation between the Danish Ministry of Finance, the Ministry of Economic and Business Affairs, the Ministry of Employment and the Ministry of Social Affairs, the last-mentioned having also coordinated the work. As part of the preparation of the strategy report, a seminar for parties interested in the area was held on 17 March 2005. These parties included the social partners, older people's organisations, etc. At the seminar, they had the opportunity to state their points of view concerning the experience gained in connection with the previous report and the contents of the coming report. Together with other organisations, they were consulted about a draft of this report. Furthermore, the report was sent for consultation in the EU Special Committee on labour market and social issues (includes a number of ministries and interest groups), and the EU Special Committee on the financial sector (includes a number of ministries and interest groups).

The previous strategy report from 2002 is available to the public on the Ministry of Social Affairs' website. Organisations, etc. have expressed their general approval and recognition of the importance of the open method of coordination. In the Government's view, it is positive that EU has not laid down quantitative targets in the pension area that might distort the debate.

Since the first strategy report was submitted in September 2002, the pension system has been expanded, a step that has aided in making the system more flexible. Furthermore, pensions have been raised for pensioners with the lowest incomes. The most important changes are set out below:

- In the collective agreements of 2004 covering parts of the private labour market, the social partners agreed that the pension contribution to private labour market pensions will be gradually increased from some 9 per cent to 10.8 per cent in 2006.
- In the collective agreements of 2004 covering the private labour market, the social partners also agreed that the contribution to the Labour Market Supplementary Pension Scheme (ATP), which is a fixed amount, will be increased by 9 per cent in 2006. The contribution has not been adjusted since 1996.
- In the local and county authority area and the state, the collective bargaining in 2005 led to agreements concerning a number of pension scheme expansions: (1) Payment of pension contributions in the periods of maternity/paternity leave where no wage is paid; (2) Increase of ATP contributions as in the private labour market for the majority of the agreement areas, and further extraordinary increases for a number of the groups that have paid rates lower than the usual A-rate; the average increase in ATP contributions for public employees is 17.1 per cent from 2006; (3) Increase in pension contributions to labour market pensions for many agreement areas (e.g. teachers from 17.1 to 17.3 per cent) and a change of the conditions governing waiting periods; (4) Increase of pension contributions to labour market pensions to 12,5 per cent for certain individuals not covered by a group pension scheme, e.g. because of waiting period provisions.

- The contribution of 1 per cent of earned income to the Special Pension Savings Scheme (SP) has been suspended in 2004 and 2005. This was part of the Government's so-called Spring Package to stimulate demand and employment. A political agreement has paved the way for prolonging the suspension in 2006 and 2007. The SP scheme is a savings-based pension scheme, introduced in 1998 (under the name of the Temporary Pension Scheme) to curb demand.
- With effect from 1 January 2005, a wider choice was introduced in the SP scheme, with the effect that savings holders themselves may choose the pooled investment schemes into which they wish their savings would be. Moreover, savings holders are allowed to move their SP savings to another pension provider. The Government has considered the question of providing a wider choice in the ATP and labour market pensions. Further considerations will be made in dialogue with the social partners.
- With effect from 1 July 2005, a wider choice has been introduced in the Employees' Capital Pension Fund (LD). Individual savings holders in the LD scheme can then choose to move their entire deposits to another pension fund.
- As from 1 July 2004, the age at which a person becomes eligible for public old-age pension is 65 years. Before 1 July 2004, a person became eligible for public old-age pension at the age of 67. The formal pensionable age was lowered as part of a reform of the voluntary early-retirement scheme in 1999. The lowering of the formal pensionable age is not assessed to have any significant effect on the average retirement age.
- Rules on deferred pension were introduced with effect from 1 July 2004. Persons who have reached public old-age pension age and who participate actively in the labour market to a considerable extent (at least 1,500 hours annually) may choose to defer their public old-age pension against later having their current public old-age pension increased by a supplement for deferred pension. This has made the public old-age pension age more flexible. The implicit tax on continued work for one year after public old-age pension age has thus been reduced by some 15 percentage points for an average employee income (see OECD, Economic Surveys: Denmark, February 2005).
- Public old-age pension has been augmented by the introduction of a new supplement from 2003 – the supplementary pension benefit. The supplementary pension benefit is targeted at the financially most disadvantaged pensioners. The benefit is calculated according to fixed rules, taking into account the pensioner's other income and liquid assets. The supplement was raised in 2004.
- With effect from 2004, the rules on the right for self-employed persons to deduct contributions to pension schemes were improved. A self-employed person can now pay an amount corresponding to up to 30 per cent of the enterprise's profits into a pension scheme – without being bound to making specific payments in subsequent years, as was previously the case. The new scheme takes into account the fact that profits can vary from one year to the next. The self-employed person can thus save up for his/her pension when possible.
- In recent years, the so-called mortgage equity withdrawal loans have become increasingly popular. They give pensioners better possibilities for liberating funds invested in their private homes. Most banks and credit institutions offer such loans today. Most banks and credit institutions also offer interest-only loans with long

maturity, which have made it easier for pensioners to liberate capital invested in their private homes.

## **2. THE DANISH PENSION SYSTEM IN OUTLINE: TARGETS AND CHALLENGES**

### **2.1. Introduction**

The strategy report on the Danish pension system is Denmark's contribution to the EU open method of coordination in the pension area. The open method of coordination is meant to compare national progress concerning the eleven common objectives to secure adequate, sustainable and well-functioning pension systems, adopted at the Laeken European Council meeting in 2001, and in general to secure mutual exchange of knowledge.

In brief, the eleven objectives for the pension system, which fall into three main categories, are as follows (see also appendix 4):

#### Adequacy of pensions

1. Ensure older people a decent standard of living and a share in the economic well-being of society
2. Provide access for all individuals to pension arrangements, enabling them to maintain their living standard after retirement
3. Promote solidarity within and between generations

#### Financial sustainability

4. Achieve a high level of employment
5. Ensure that pension systems encourage older people to stay longer in the labour market
6. Ensure that pension systems support sustainability of public finances
7. Ensure a fair balance between contributions from the active and benefits to the retired
8. Ensure a high degree of security and efficiency of pension savings

#### Modernisation

9. Ensure that pension systems are compatible with flexibility of the labour market
10. Ensure gender equality
11. Make pension systems more transparent

The Danish pension system is assessed as well-balanced and able to secure present and future pensioners an adequate coverage. With the present rules, future pensioners can look forward to having a share in the general rise in incomes, since public pensions are adjusted on the basis of wage increases in the private sector. Furthermore, the greater prevalence and expansion of supplementary pension schemes will lead to higher incomes for pensioners<sup>1</sup>.

With the current rules, the anticipated rise in life expectancy will also mean that citizens will receive tax-financed public transfer payments/pensions for a greater part of their lives. Consequently, in reality, the coverage period of the schemes will be longer, thus weakening public finances, since the effective age of retirement cannot be expected automatically to rise in step with rising life expectancy.

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<sup>1</sup> The build-up of the mandatory savings-based schemes will presumably to some degree supersede other savings.

The key objective of fiscal policy is fiscal sustainability. New initiatives in the labour market and continued reduction of public debt ensure that the pension system is reconciled with a sustainable development in relation to the ageing of the population.

The sustainability of the pension system cannot be assessed independently of other public expenditure and the sustainability of the overall fiscal policy. The standard of living and the replacement rate ensured by the pension system must be seen in relation to the facts that a number of income-related cash benefits (housing benefits, heating benefits, health allowances, reduced tax on owner-occupied dwellings, etc.) and a large proportion of total public expenditure (health and elderly care) are targeted at pensioners. Similarly, the long-term fiscal requirements must be considered in view of the facts that public pensions are financed on a pay-as-you-go basis and that public assets in the form of deferred income tax payments in the savings-based pension schemes have accumulated.

The operational fiscal target continues to be government (structural) surpluses<sup>2</sup> of 1.5-2.5 per cent of GDP on average through 2010. The target meets the requirements of the Stability and Growth Pact on “close to balance or in surplus” in the medium term. To support the long-term sustainability of the pension system and the fiscal policy and make room for a moderate increase in public consumption per user and lower tax, the level of employment must be permanently raised to an extent equivalent to an improvement in public finances of 1 per cent of GDP, corresponding to some 60,000 persons (2.25 per cent of employment) up to 2010. This is an ambitious target, since employment in Denmark is already high by international standards and higher than the common targets set in the Lisbon strategy.

The Government intends to submit an employment plan to create more jobs. The initiatives aim at better labour market participation of immigrants, getting students through the education system faster, reducing sickness absence, having more older people in the labour market and performing a service check on employment policies. The first initiative is the Government’s integration plan *A new chance for everyone* from May 2005. In June 2005 a majority of the political parties have agreed on the implementation of the integration plan.

The Government has set up a Welfare Commission, which is before end-2005 to submit specific proposals for reforming the Danish welfare system aimed at increasing employment and ensuring socially balanced and targeted efforts to help the groups most in need of assistance. The proposals must support the objective of a sustainable fiscal policy in order that the welfare benefits can be financed without raising taxes. With a view to maintaining the long-term targets of economic policies, in spring 2006 the Government will present a new economic multi-year plan for Denmark, covering at least the period up to 2015. The plan will be prepared in the light of the analyses from the Welfare Commission.

## **2.2. The Danish pension system**

The Danish pension system is based on three pillars, each having its own main target and form of financing consistent with those that the World Bank proposed in 1994 in its publication “Averting the old age crisis”.

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<sup>2</sup> The target range concerns the surplus on a national accounts basis (including, for instance, the labour market supplementary pension fund, ATP).

The **first main target** is to secure a decent minimum standard of living for all citizens. This function is ensured by the old-age pension, supplementary pension benefits and, to some extent, ATP.

Public old-age pension is a basic, (tax-financed) public pension meant to ensure all citizens a fair income when they retire, irrespective of previous labour market attachment. The pension is granted from the age of 65. Pensioners receive the basic amount of public old-age pension independently of any supplementary income (except earned income), including income from private pension schemes. Public old-age pension is financed on a PAYG basis.

Public old-age pension is presently the most important source of income for pensioners and accounted for more than half of pensioners' gross incomes in 2002 (see table 3.2). A great majority of the political parties made a political agreement in 2000 to the effect that public old-age pension should be the sound foundation for present and future pensioners.

The **second main target** is to secure citizens a reasonable replacement rate when they enter retirement. Labour market pension schemes perform this function, presently covering some 90 per cent of all full-time employees.

The bulk of labour market pensions are contribution-defined, savings-based group schemes that are either based on collective agreements or agreed in individual enterprises. Labour market pensions are typically mandatory for the individual person, but he/she may increasingly decide on the combination of benefits. Labour market pensions are robust against increasing life expectancy, since the individual pension saver bears and may influence the financial consequences. Labour market pension schemes have expanded considerably over the last couple of decades. There has been a general political consensus on leaving the expansion to employees and employers instead of having the public sector build up this part of the pension system.

The **third main target** is to ensure flexibility, i.e. the ability to allow for individual requirements. Individual pension schemes, in particular, perform this function. Insurance companies, etc. provide a wide variety of offers. Some one million Danes pay to individual pension schemes.

In addition, there are a number of supplementary, statutory pensions such as the Labour Market Supplementary Pension Scheme (ATP), the Special Pension Savings Scheme (SP) and the Supplementary Labour Market Pension Scheme for Recipients of Anticipatory Pension (SAP), which cannot be placed in one of the three pillars without ambiguity. ATP, SP and SAP are contribution-defined and savings-based schemes that also cover certain transfer payment recipients. The ATP scheme is perceived as part of basic retirement income and can in this area be described as a pillar 1 pension.

Almost all citizens of working age pay contributions to ATP and SP (however, as mentioned above, contributions to the SP scheme are presently suspended). Furthermore, several groups of persons temporarily or permanently outside the labour market pay contributions to the schemes. Thus, these schemes ensure almost all future pensioners supplementary pension besides public old-age pension.

Finally, the aims are to make the pension system more transparent and flexible and to ensure that the individual's access to wider choice in relation to the pension system is not

hampered unnecessarily. The Government wants to give individual citizens the liberty to exercise greater influence on the investment and management of their pension savings.

High security is ensured for pillar 2 and pillar 3 pensions, because they are savings-based and covered by investment and diversification rules. Furthermore, pension funds are financially supervised by public authorities.

Table 2.1 shows the individual schemes in the pension system placed in relation to the three pillars.

**Table 2.1 The pillars in the pension system and Danish pension schemes**

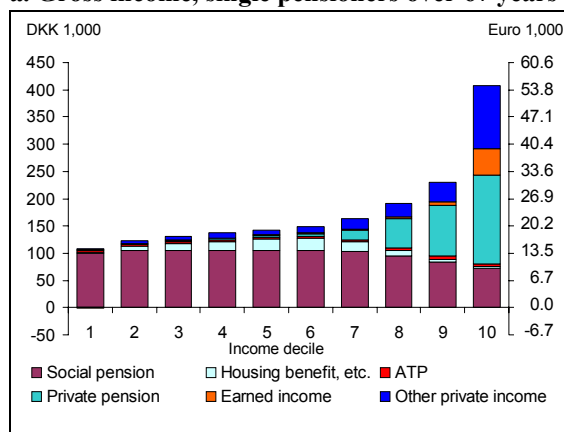
	<b>Pillar 1</b>	<b>Pillar 2</b>	<b>Pillar 3</b>
	Publicly administered, universal. (residence requirement)	Privately administered with requirement for membership	Privately administered with voluntary payments
Objective and method	Avoid poverty as a pensioner via same benefits to everybody, income-related benefits or guaranteed minimum pension	Ensure replacement rate via mandatory savings scheme in relation to employment	Flexibility through individual pension savings or other savings for retired life
Financing	Financed by taxes	Savings-based	Savings-based
Danish Schemes	Public old-age pension	Labour market pension	Individual pension schemes
	ATP	SAP	SP

Note: ATP, SAP and SP cannot be placed as either pillar 1 or pillar 2 pensions without ambiguity. They have been placed in the table under both pension pillars and shifted towards the pillar with which they are assessed to have most features in common. There are no residence requirements as such in ATP, SP and SAP. Anyone who pays contributions obtains a pension right. The individual pension schemes are described in more detail in appendix 1.

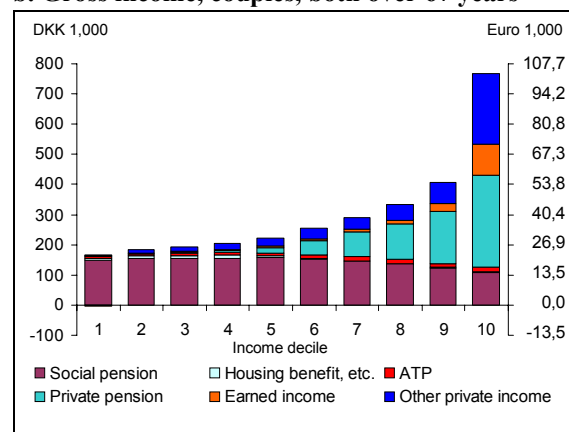
Figure 2.1 illustrates the importance of individual sources of income for the pensioners' total income. Social pension (i.e. public old-age pension and any personal allowances in addition to public old-age pension) is the most important source of income for the majority of older people. For the 70 per cent of older people with the lowest incomes, social pension thus accounts for 50 per cent or more of gross income for both single pensioners and couples. Only for the older people with the highest incomes do private pension schemes (labour market pension, etc.) account for a larger share of total income than social pension.

**Figure 2.1. Income composition for those aged 67+, broken down by income level<sup>1)</sup>, 2002**

**a. Gross income, single pensioners over 67 years**



**b. Gross income, couples, both over 67 years**



1) The figures rank the older people according to amount of gross income, column 1 indicating the decile with the lowest gross income and column 10 the decile with the highest gross income.

Note: Other private income: Including net investment income and imputed rents. Public old-age pension age was 67 in 2002.

The pension system is undergoing a development process that will bring the savings-based schemes to constitute a larger share of the income of future pensioners. This is particularly due to the expansion and greater prevalence of the labour market pension schemes, where the proportion of employees covered has increased from some 30 per cent in the early 1980s to some 90 per cent today.

Since the labour market pension schemes are expanding and becoming more prevalent, in future pillar 2 pensions will carry more weight in the overall pension system. Thus, in future fewer pensioners will experience a significant decline in income when they enter retirement.

### 3. MEETING THE COMMON OBJECTIVES

#### 3.1. Adequacy of pensions

##### 3.1.1. Politically determined objectives

###### *Basic retirement income*

The purpose of public old-age pension is to ensure all older people a basic retirement income at a reasonable level. Public old-age pension is currently adjusted on the basis of wage developments in the labour market. Thus, public old-age pensioners get a share of the general welfare development in society.

Public old-age pensioners' basic retirement income most recently increased when the supplementary pension benefit, granted in connection with public old-age pension as part of social pension benefits, was introduced in 2003. The supplementary pension benefit was raised in 2004.

The amount of public old-age pension should be seen in view of the fact that public old-age pensioners are entitled to a number of supplementary benefits (particularly favourable housing benefits, heating benefits, health allowances, reduced tax on owner-occupied housing), most of which depend on objective criteria (income, assets, etc.). Furthermore, particularly disadvantaged pensioners may be granted a personal allowance following a specific, individual assessment of their needs.



The amount of public old-age pension should also be seen against the background that pensioners and others are entitled to a number of free services, such as home-help services and hospital treatment. For example, some 50 per cent of all citizens aged 80+ receive free home-help services.

ATP, which presently covers almost the entire population, may also be seen as part of basic retirement income. The average ATP pension for new generations of old-age pensioners presently corresponds to some 10 per cent of public old-age pension. The proportion and coverage are on the rise.

The proportion of people aged 65+ with incomes of less than 60 per cent of median income for the entire population was 8 per cent in 2002. Some of these persons may have considerable consumption possibilities via financial assets or equity in their own homes.

### ***Reasonable replacement rate***

Public old-age pension including supplementary benefits granted independently of the recipient's previous labour-market attachment results in a relatively high replacement rate for persons with low incomes before retirement.

The contribution to the ATP scheme and the ATP pension earned depend on the scope of employment, but are independent of the amount of income. In this way, ATP also contributes to ensuring a high replacement rate for persons with modest incomes before retirement.

In the long term, the expansion of private labour market pensions will ensure that most employees with high incomes achieve considerably higher replacement rates.

A person who retires at the age of 65 will in 2005 have a gross replacement rate from public old-age pension and ATP alone of 45 per cent of the average wages of a full-time male worker. The total replacement rate is 50 per cent and net after tax 60 per cent; see figure 3.1. In the long term, the total replacement rate including labour market pension, etc. will be considerably higher.

Finally, a number of tax-privileged possibilities for building up individual pension savings contribute to flexibility as regards meeting individual requirements for replacement rate, etc.

### **3.1.2. Status as regards meeting the Laeken objective of the adequacy of pensions**

The overall pension system is described in appendix 1. Basically, the intention is to meet the objectives of (i) basic retirement income; (ii) a reasonable replacement rate; and (iii) solidarity between generations by maintaining and expanding the present 3-pillar pension system, thus preserving a fair balance between the different pillars and ensuring that each pillar maintains its special function, form of financing, organisation, etc.

The overall pension system is assessed to be sufficiently flexible for achieving the different objectives concerning the adequacy of pensions.

### ***Public old-age pension***

A great majority of the political parties made a political agreement in 2000 to the effect that public old-age pension should be the sound foundation for present and future pensioners.

Public old-age pension is adjusted on the basis of wage developments, is based on the time of residence and granted with uniform amounts to everybody (but subject to means testing for supplementary income against the income-related supplementary amounts of public old-age pension). Public old-age pension is independent of previous labour-market attachment, and the basic amount of public old-age pension is granted independently of supplementary pension income.

When the time comes, each citizen can thus expect to receive public old-age pension that will ensure him/her a basic retirement income. Since the amount of public old-age pension is determined according to simple rules, the individual has a transparent and safe basis for planning his/her life and standard of living on retirement.

The introduction of the supplementary pension benefit connected with public old-age pension has increased social pension to the financially most disadvantaged pensioners. Eligibility for supplementary pension benefit is based on time of residence and adjusted on the basis of wage developments in the same way as public old-age pension.

The reduction of public old-age pension age to 65 years, which took effect on 1 July 2004, does not affect the amount of the individual pensioner's current public old-age pension. To the extent that the reduction of public old-age pension age leads to earlier payment of private pension schemes, the current payments from such schemes will be reduced.

### ***ATP***

Over the years, the ATP scheme has been expanded to include several groups of persons temporarily or permanently outside the labour market. As a general rule, the scheme mandatorily covers these persons.

In 1993, the ATP scheme was expanded to include groups of transfer payment recipients. From 1997, double contributions are paid for recipients of unemployment, sickness and maternity benefits, which are meant to ensure them a certain compensation for periods in which they do not qualify for labour-market pension because they are temporarily without employment. With effect from 1997, the ATP scheme was further expanded to include recipients of cash assistance and rehabilitation benefits, and recipients of anticipatory pension and early retirement benefits also became able to make voluntary payment contributions. The scheme mandatorily covers persons awarded anticipatory pension under the anticipatory pension reform after 1 January 2003.

Almost the entire population is thus eligible for pension benefits from the ATP scheme. Persons temporarily outside the labour market will typically continue to be eligible for ATP pension. Consequently, both public old-age pension and ATP pension contributes to ensuring a basic retirement income and a high replacement rate for persons with low incomes.

### ***Labour market pensions***

The greater prevalence of labour market pension schemes and the on-going expansion of these schemes (the combination of higher contributions and the fact that more people pay contributions throughout their working lives) mean that most future pensioners will receive labour market pension in addition to public old-age pension.

The general consensus has been that expanding the labour market pension schemes is desirable. The schemes are seen as a supplement to public old-age pension, not a replacement, a view also supported by the above political agreement on public old-age pension.

In its entirety, the pension scheme is assessed to secure all pensioners against the risk of poverty and secure them a replacement rate on retirement that ensures a reasonable degree of continuity in their conditions of life. In addition to this come the supplementary options for allowances targeted at pensioners, which help them avoid poverty in old age.

***Concerning persons without pension savings and with a low replacement rate***

Today, only relatively few people have no pension savings and will experience substantial changes in their standard of living on shifting to pension income. This is one outcome of recent years' expansion of the ATP scheme, a step that has strengthened basic pension cover in Denmark.

Some 15 per cent of all 50-year-olds have made no supplementary pension savings other than ATP savings in the preceding ten years. A considerable proportion of these people are persons without employment, for example unemployed persons and anticipatory pensioners, who will typically have a high replacement rate on retirement, one reason being that the ATP scheme also covers transfer payment recipients.

In that connection, reference can be made to the SAP scheme, which entered into force on 1 January 2003 and gives anticipatory pensioners, i.e. persons who are permanently outside the labour market, a possibility to qualify for an public old-age pension supplement resembling labour market pension (besides ATP pension, by which they continue to be covered).

The pension savings of an estimated 2 per cent of those aged 40-49 are so small that unless these people change their behaviour, the replacement rate is estimated to be under 50 per cent when they start receiving public old-age pension. One quarter of the above persons are self-employed and thus do not necessarily have a pension problem, since their businesses may represent accumulated wealth. From 2004, better opportunities have been introduced for self-employed persons to save up for their retirement. The others may also be saving up in other ways, for example by owning their homes<sup>3</sup>.

**3.1.3. Incomes of future pensioners**

If productivity continues to increase at about the present pace, the consumption possibilities per inhabitant may be more than twice as high in 2050 as today although fewer persons are in employment. With the existing rules, the rise in prosperity will be distributed about evenly on pensioners and people in employment.

**Table 3.1. GDP per inhabitant and public old-age pension per recipient, 2005-2050**

	2005	2010	2020	2030	2040	2050
	-----DKK 1,000-----					
GDP per inhabitant.....	280 (38)	306 (41)	356 (48)	404 (54)	465 (63)	567 (76)
GDP per employee.....	552 (74)	596 (80)	702 (94)	837 (113)	991 (133)	1,189 (160)
Public old-age pension. per recipient <sup>1)</sup> .....	97 (13)	101 (14)	121 (16)	142 (19)	167 (22)	198 (27)

Note: Incomes over time have been deflated by the trend in prices and thus illustrate the increase in purchasing power.  
 1) It is assumed that the funds transferred to the rate adjustment pool are retransferred proportionately to the pensioners in the form of a pension increase; see box 3.1. Some 85 per cent of the stated increase in public old-age pension in 2050 excl. means testing can be ascribed to actual rate increases pursuant to the Rate Adjustment Percentage Act, while the remainder is an included contribution reflecting an assumption that funds from the rate adjustment pool are carried back, see box 3.1.  
 Source: Ministry of Finance.

<sup>3</sup> 'A sustainable pension system', the Government 2000.

This is because most transfer payments, including public old-age pension, are adjusted in step with wage increases in the private sector; see box 3.1. The adjustment rules thus imply that productivity improvements generate a general rise in the standard of living for people in employment as well as pensioners. Furthermore, the expansion of the labour market pensions will give pensioners higher incomes.

### **Box 3.1. Adjustment of pension transfers**

The rates for different types of transfer payments (and the progressive limits, etc. in the tax system) are automatically adjusted once a year on the basis of wage developments in the private sector (the area covered by the Danish Employers' Confederation). Transfer payments are adjusted at the rate adjustment percentage; cf. the Rate Adjustment Percentage Act.

The rate adjustment percentage for a given fiscal year is fixed on the basis of wage developments in the wage year, which is the year two years before the fiscal year. The rate adjustment percentage for 2005 was thus fixed on the basis of wage developments from 2002 to 2003. Wage developments are assessed on the basis of the Structural Statistics compiled by the Danish Employers' Confederation. The yearly wage for workers and salaried employees, respectively, is calculated excluding inconvenience payments, wage during sickness absence, etc., and pension contributions in the relevant year. Moreover, labour market contributions are deducted simultaneously in relation to the fiscal year, since transfer payment recipients do not pay labour market contributions. The yearly wage for workers and salaried employees is co-weighted, and only wage information from businesses that have reported to the statistics in both years (identical businesses) is used.

If the rise in yearly wage is over 2.0 per cent, an amount corresponding to the rise less 2.0 percentage points, but not more than 0.3 per cent, is applied for a pool amount. The rate adjustment percentage is equal to the rise in yearly wage less the percentage rate set aside for the pool amount. The pool amount is used for measures in the social, health and labour market areas with a view to improving conditions for transfer payment recipients and weak groups.

Public old-age pension is presently the most important source of income for pensioners. However, supplementary pension payments and return on assets help enhance total average income for pensioners. One third of present pensioners receive payments of more than DKK 20,000 annually (euro 2,700) from supplementary pension schemes<sup>4</sup>.

On the assumptions made, public old-age pensioners' average disposable income may increase from some DKK 130,000 to some DKK 140,000 (2000-level) in the period from 2000 to 2050 for single pensioners and from DKK 110,000 to DKK 140,000 for couples; see table 3.2.

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<sup>4</sup> Moreover, only 43 per cent of pensioners receive payments from supplementary pension schemes over DKK 10,000 (euro 1,350).

**Table 3.2. Average disposable income for pensioners, 2000 and 2050**

	Singles				Couples			
	2000		2050		2000		2050	
	----- DKK 1,000 (euro 1,000), 2000-level -----							
Public old-age pension and housing	101	(14)	86	(12)	69	(9)	53	(7)
Pension payments	37	(5)	78	(10)	42	(6)	98	(13)
ATP and SP income	6	(1)	23	(3)	6	(1)	26	(3)
Return on assets	34	(5)	18	(2)	35	(5)	25	(3)
Tax	45	(6)	63	(8)	43	(6)	65	(9)
Disposable income	134	(18)	143	(19)	109	(15)	137	(18)

Note: 65-69-year-olds in 2050, 68-72-year-olds in 2000. In both years, earned incomes, etc. have been disregarded, and public old-age pension, tax and housing benefits have been calculated in accordance therewith. Couples include only married/cohabiting couples where the partner is in the same age group. An annual growth in productivity of 2 per cent, an inflation rate of 1.8 per cent and a real interest rate of 4.6 per cent in the long term have been assumed. Incomes in 2050 have been deflated by wage developments and not only by the price development and should thus not be confused with the increase in purchasing power stated in table 3.1.

Source: Ministry of Finance.

As labour market pensions mature and expand, the payments from private pensions may increase to almost twice the amount in 2050. Similarly, average annual payments from ATP and SP are calculated to increase from some DKK 5,000 to DKK 25,000 (i.e. from euro 670 to euro 3,360). Conversely, the higher private pension payments lead to increased means testing of the pension supplement to public old-age pension, meaning that public old-age pension – including housing benefits – may fall from an average of DKK 100,000 (euro 13,500) in 2000 to some DKK 90,000 (euro 12,000) in 2050 for single pensioners and from some DKK 70,000 (euro 9,500) to some DKK 50,000 (euro 6,700) for couples. Consumption possibilities depend on the possible supersession of free savings.

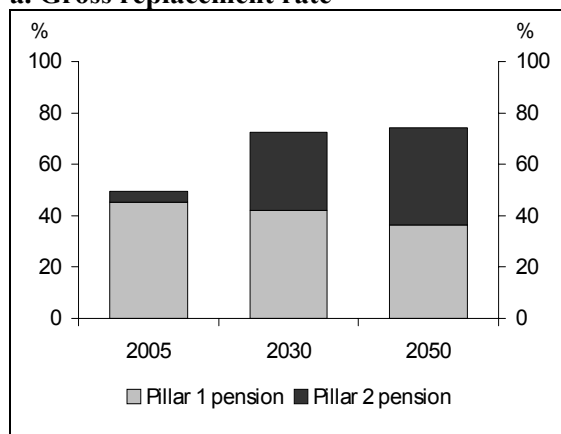
Labour market pensions and the payments from ATP and SP will make up an increasing proportion of pensioners' total incomes, because these payments grow faster than wages and salaries and hence than the adjustment of public old-age pension. Another reason is the rules for setting off other income against the pension supplement to public old-age pension. Overall, the various savings-based schemes will thus have a greater impact on pensioners' retirement income than public old-age pension in 2050.

Figure 3.1 shows an example of the trend in the replacement rate for a single wage-earner with average wage and employed in the private sector. In the example, the contribution to the replacement rate from labour market pension and SP grows from 4 per cent in 2005 to 30 per cent in 2030 and 38 per cent in 2050. This reflects the expansion of labour market pensions and SP during the past 10-15 years. As SP and labour market pension payments increase, the income-related proportion of public old-age pension is reduced, with the result that its contribution to the replacement rate in the example falls from 45 per cent in 2005 to 42 per cent in 2030 and 36 per cent in 2050; see figure 3.1a<sup>5</sup>.

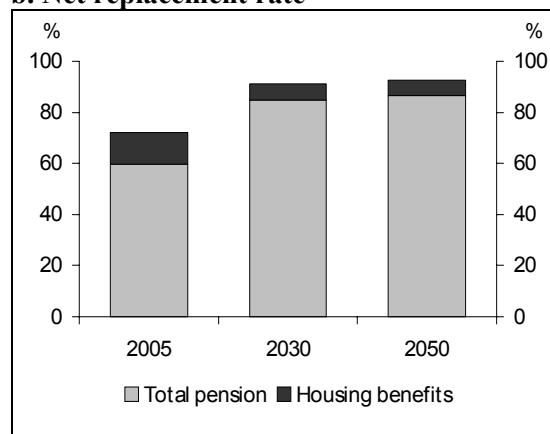
<sup>5</sup> The SP contribution has been suspended in 2004 and 2005, and a political agreement has paved the way for prolonging the suspension in 2006 and 2007. The present calculations assume that the SP contribution will be reintroduced as from 2008.

**Figure 3.1. Examples of replacement rates for a single industrial worker with average income, 2005-2050**

**a. Gross replacement rate**



**b. Net replacement rate**



Note: 30.5 per cent of the annual amount contributed to labour market pension has been deducted for disability cover and other costs, contribution period: 40 years. No spouse's pension or private pension savings. ATP forms part of the pillar 1 pension. A real rate of interest after tax of 3.7 per cent and rent increases corresponding to wage developments are assumed. The corresponding calculations from the EU Commission assume a real rate of interest after tax of 2.3 per cent and rent increases corresponding to inflation.

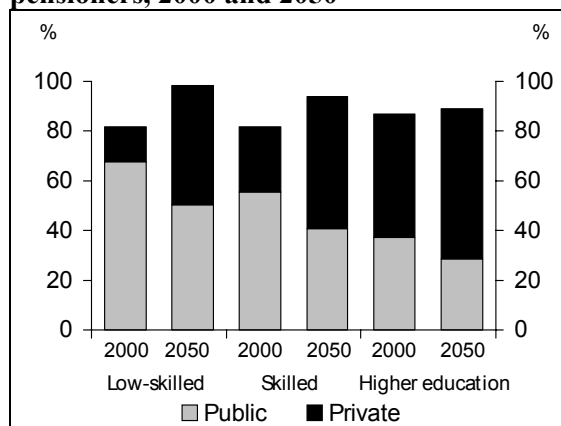
Source: Ministry of Finance.

In the example, the net replacement rate without housing benefits grows from 60 per cent in 2005 to 87 per cent in 2050. If housing benefits are received, they contribute considerably to the replacement rate. The contribution from housing benefits falls over the years in step with the increase in the gross replacement rate. In the example, the net replacement rate consequently grows a little less, from 72 per cent in 2005 to 93 per cent in 2050; see figure 3.1b.

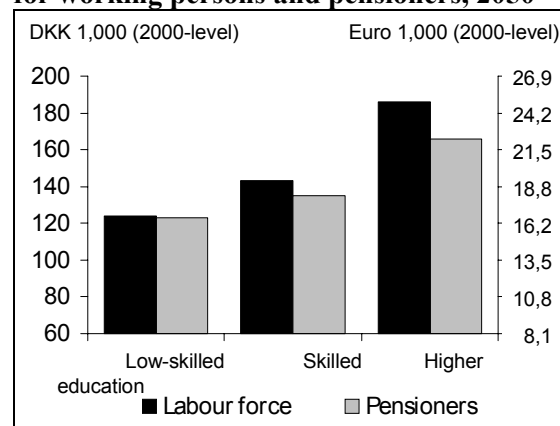
The increase in pension payments is largest for low-skilled and skilled workers because in 2000 these groups had only built up negligible pension assets, and labour market pensions for these groups are expected to expand significantly in the years up to 2050. The average, individual replacement rate for low-skilled pensioners is thus assessed to increase from some 80 per cent in 2000 to some 100 per cent in 2050; see figure 3.2a.

The income distribution for pensioners is assessed to be more even in 2050 than in 2000, since pension rises most steeply for the groups with the lowest and medium incomes (low-skilled and skilled workers), where labour market pensions have not been expanded before the most recent decades.

**Figure 3.2a. Individual replacement rates for pensioners, 2000 and 2050**



**Figure 3.2b. Projected disposable incomes for working persons and pensioners, 2050**



Source: Ministry of Finance.

Trends towards more equal income distribution will probably be uneven, since pension payments to the highly paid (higher education) must for a period (10-20 years) be expected to rise at a greater rate than for the low-paid. This is because the schemes for the highly paid proportion of the population were started at an earlier point in time. This is supported by calculations on the DREAM CGE-model, which show that the Gini coefficient for the group of persons over 66 years may grow up to 2020 and then decline to a level that is considerably lower in 2040 than now; see table 3.3.

**Table 3.3. Gini coefficient for persons over 66 years, 2001-2040**

	2001	2010	2020	2030	2040
Gini coefficient	26.7	29.1	31.7	26.2	21.4

Note: The 2001 level of the Gini coefficient is not directly comparable with the calculations in 'Distribution and Incentives', Ministry of Finance 2004, in which the Gini coefficient is calculated at 20.8 per cent in 2001. The DREAM calculations are based on the distribution of personal income – before tax and without investment income and tax-free transfers – calculated on a pure person level, i.e. without income equation.

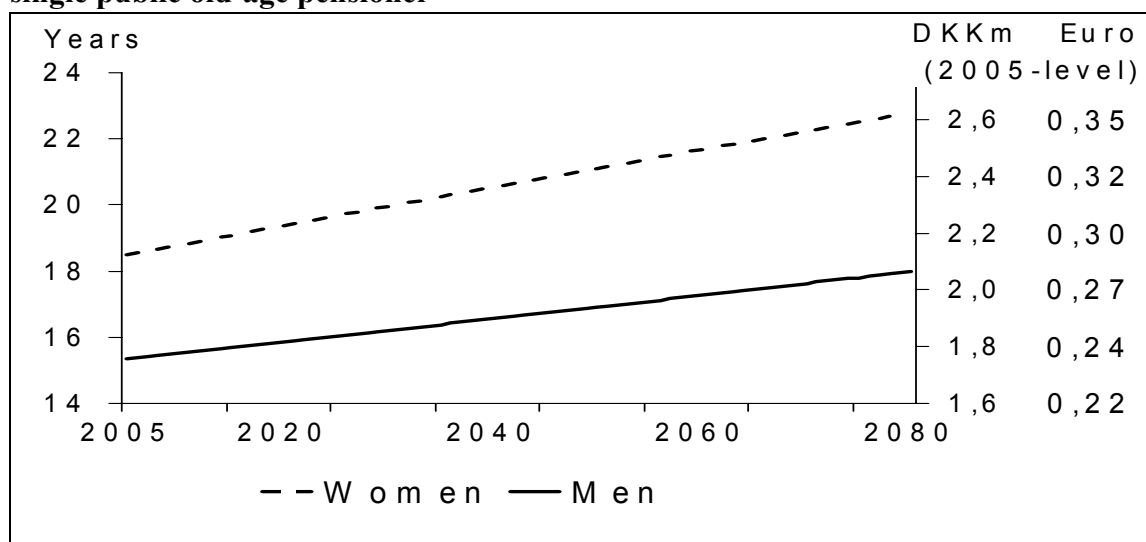
Source: Public expenditure, fiscal sustainability and income distribution among future pensioners, DREAM 2003.

The prospect of longer life expectancy implies that, on average, pensioners will receive public old-age pension for more years and thus for a greater part of their lives. This involves larger pension expenditure per pensioner during his/her life, and growing future pension obligations for the public sector, which tightens fiscal policy requirements.

The population projection used assumes that the remaining years of life for a 65-year-old will increase by 3 years for men and by 4½ years for women up to 2080. This will imply an expected average extension of the period in which persons are entitled to public old-age pension to a total of 18 years for men and a total of 23 years for women, compared with some 15 and 18½ years, respectively, today.

Applying the current 2005 rules and rates, the amount that a single, female public old-age pensioner is expected to receive in her lifetime will go up from some DKK 2.1 million to DKK 2.6 million before tax (i.e. by DKK 500,000 or euro 70,000 at 2005-level), while the corresponding figures for a single, male pensioner will go up from DKK 1.7 million to DKK 2.0 million (i.e. by DKK 300,000 or euro 40,000); see figure 3.3.

**Figure 3.3. Remaining years of life for a 65-year-old and total pension over life, single public old-age pensioner**



Source: DREAM's population projection 2004 and the Ministry of Finance.

### **3.1.4. Strategies to secure the adequacy of pensions in the future**

The pension system is already organised in a way that reasonably secures the adequacy of pensions towards changes in (i) employment patterns; (ii) family structures; and (iii) life expectancy:

#### ***Changed employment patterns***

Public old-age pension is not affected by temporary periods of absence from the labour market and is independent of any preceding part-time employment. ATP contributions and pension depend on the scope of employment, but contributions are typically still paid during periods of temporary absence from the labour market. Public old-age pension and ATP thus contribute towards ensuring the adequacy of pensions in future.

#### ***Changed family structures***

The public pension system and the labour market pensions do not distinguish between genders. Furthermore, women have a high rate of labour market participation and will thus typically be eligible for their own supplementary labour market pension. However, women receive a somewhat lower pension than men (some 5-15 per cent after tax) because of a somewhat lower participation rate, lower hourly wage and often lower number of hours in employment. On the other hand, their replacement rate is typically 10-15 per cent higher. The Danish pension system thus seems well prepared to meet the challenges from, for example, looser family structures and greater individualisation. The Spouse's Pension Committee is considering the need for a special statutory adjustment of the handling of pensions and insurance rights in connection with divorce.

#### ***Longer life expectancy, etc.***

Public old-age pension is adjusted on the basis of wage developments. This is also true of a number of supplementary benefits, for example housing benefit and heating allowance. Furthermore, a number of services such as home-help services and medical treatment are free. As regards old-age pension and the services, the public sector and not the individual pensioner bears the additional expenses triggered by an increase in life expectancy. In this respect, the services are advantageous to the individual pensioner. However, increasing life expectancy poses a considerable challenge to fiscal sustainability; see section 3.2 below.

The other schemes in the pension system (such as ATP, labour market pension and individual pension schemes) are private and fully savings-based schemes. In relation to these schemes, the private scheme or the pensioner, not the public sector, bears the financial consequences of longer life expectancy.

## **3.2. Financial sustainability**

### **3.2.1. Fiscal policy objectives and the pension system**

To prepare Denmark's economy for the demographic challenge, the Government has set the operational fiscal target of upholding a structural budget surplus (including ATP) of 1.5-2.5 per cent of GDP *on average* through 2010. After 2010, no specific position has been taken on fiscal policy prioritisations<sup>6</sup>.

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<sup>6</sup> See, for example, Budget Outlook, May 2005, and Convergence Programme for Denmark, November 2004.



The operational target is reconciled with fiscal sustainability. Fiscal sustainability is defined by the ability to maintain the targets for taxation, adjustment of transfers – including public old-age pension – and public expenditure standards in 2010 under the long-term assumptions made for interest rate, life expectancy, etc. in the years after 2010, without subsequent needs for tightening of fiscal policy to prevent uncontrolled increases in public debt.

Generally, the economic policy is aimed at ensuring high and stable employment, a sustainable fiscal policy and favourable conditions for growth. Maintaining a sustainable fiscal policy, including continued surplus on public finances and reduction of public debt in accordance with Denmark's 2010-projection, is assessed to presuppose a permanently higher employment and moderate growth in total public expenditure.

Medium-term fiscal objectives meet the rules of the Stability and Growth Pact and are more ambitious than the Pact's medium-term objective of "close to balance or in surplus", to accommodate the future pressure on expenditure associated with the ageing of the population.

In Denmark, pension savings are not income taxed until the time of payment to the pensioner, while contributions to pension schemes can be deducted from ordinary income tax at the time they are paid into the scheme. Public assets in the form of deferred income-tax payments have thus been built up, which will improve public finances in step with the pensions becoming payable and the labour market pensions maturing. Conversely, however, the public net debt is higher today. Consequently, the long-term fiscal requirements must be considered in view of the facts that public pensions are tax-financed on a pay-as-you-go basis, and that large public assets in the form of deferred income tax payments in the savings-based pension schemes have accumulated.

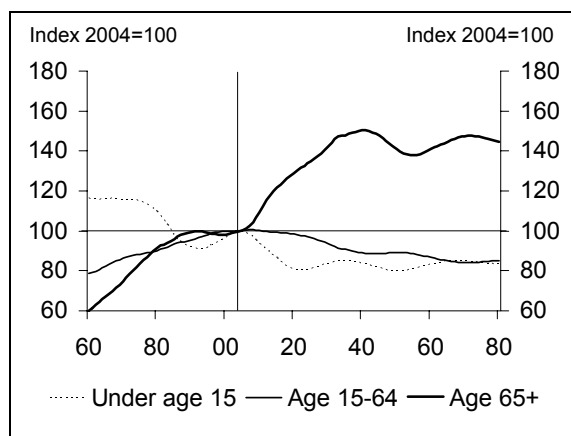
The contribution- and savings-based pension system (pillars 2 and 3) is, all else being equal, robust in relation to ageing.

### **3.2.2 - 3.2.3 Fiscal policy challenges**

#### **3.2.3.1 Demographic trends**

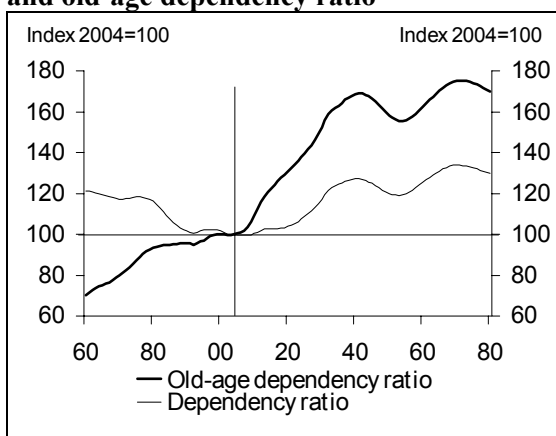
Towards the middle of this century, demographic trends will change. The combination of the rising average life expectancy, the historic fall in the number of children and the fact that the large post-war generations are retiring will mean a significant increase in the old-age dependency ratio (the number of persons older than 64 relative to the number of persons of working age 15-64). Similarly, the demographic dependency ratio (the number of persons younger than 15 or older than 64 relative to the number of persons of working age) is also increasing; see figure 3.4a-b. This will put public finances under pressure.

**Figure 3.4a. Demographic trends**



Source: DREAM's population projection 2004 and Ministry of Finance.

**Figure 3.4b. Demographic dependency ratio and old-age dependency ratio**



### 3.2.3.2 Long-term pressure on public expenditure

Generally, the long-term projections are based on a *policy scenario* up to 2010 and an *economic-policy neutral scenario* in the years after 2010. No specific position has been taken on prioritisations after 2010, for which reason the principles of calculation applied for this period are not an expression of any fiscal policy objectives. The principles of calculation represent a general continuation of fiscal policies as conducted in 2010, so that expenditure and revenues in per cent of GDP are mainly affected by demographic shifts and increasing tax proceeds from private pension schemes.

After 2010, the following general principles of calculation are applied:

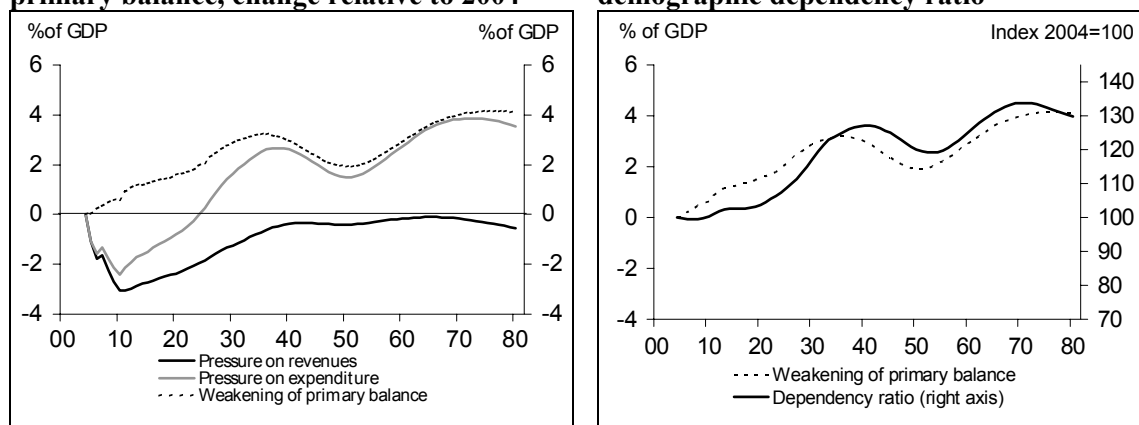
- Nominal public consumption expenditure follows wage trends and the estimated demographic effects on public services.
- Public transfer payments are indexed to private sector wages.
- Labour participation rates and population shares on various transfer payment schemes broken down by age, gender and ethnic origin are assumed constant. The total unemployment rate is also assumed constant.
- Public investments, subsidies and net transfers abroad are assumed to remain constant as a share of GDP.
- Tax rates are constant, while excise duties, etc. are adjusted in step with price developments.

The projection implies that central and local government's primary structural balance (i.e. the actual balance adjusted for contributions from fluctuations and excluding net interest payments and public funds) is weakened by 4 per cent of GDP up to 2070; see figure 3.5a.

The weakening of the balance up to 2070 is dampened by some 3 per cent of GDP, primarily as a result of the assumptions up to 2010 of tight control on expenditure and a rise in employment of some 60,000 jobs generated from new structural policy initiatives. Lower tax on earned income with full effect as from 2004 and the tax freeze up to 2010 pull in the opposite direction.

Overall, the weakening of the primary balance of central and local government largely mirrors trends in the demographic dependency ratio; see figure 3.5b.

**Figure 3.5a. Pressure on revenues and Figure 3.5b. Weakening of structural primary balance as from 2004 and the demographic dependency ratio**



Source: Ministry of Finance.

### **Public old-age pension**

All else being equal, trends in expenditure on public old-age pension contribute to increasing expenditure on public transfer payments in the long term<sup>7</sup>. Public expenditure on public old-age pension is presently 4.5 per cent of GDP and is estimated to gradually increase by 2.3 percentage points up to 2050 (before tax); see table 3.4.

The increase in pension expenditure should be seen in relation to the large post-war generations reaching retirement age and the expected increase in average life expectancy. The income-related supplement to public old-age pension is reduced to a certain extent, in step with increasing payments from savings-based pension schemes, which, all else being equal, will curb the rise in expenditure. Presently, about one third of public old-age pension is granted in the form of income-related supplements.

Moreover, the expenditure measured as a share of GDP also depends on employment trends. Demography pulls in the direction of fewer persons in the normal working age and thus lower GDP, whereas the assumption of new structural labour market initiatives generating higher employment by some 60,000 jobs up to 2010 will increase GDP all else being equal.

**Table 3.4. Public transfers and of which public old-age pension, % of GDP**

	2004	2010	2020	2030	2040	2050	2060	2070
	Level	-----Change relative to 2004-----						
Public transfers <sup>1)</sup>	17.7	-1.4	-0.4	0.5	0.4	-0.6	0.1	0.5
Of which public old-age pension	4.5	0.7	1.7	2.4	2.9	2.3	2.5	3.1

Note: In the calculations, the basic amount of public old-age pension and pension supplement are adjusted by wage developments. It is assumed that the funds transferred to the rate adjustment pool are retransferred proportionately to the pensioners in the form of a pension increase. However, the pension amounts paid increase at a slower rate than wage, because means testing of income-related supplements when the contribution- and savings-based pensions are paid. The reduction of the public old-age pension age from 67 to 65 has been included.

1) Before tax. Transfers from social funds (ATP, etc.) are not included.

Source: Ministry of Finance.

### **Health and elderly care**

Besides transfers to older people, for example in the form of public old-age pension, the public sector is also responsible for health and elderly care, which presently represent

<sup>7</sup> Besides old-age pension, the transfers include income-replacing benefits, such as daily cash benefits, early-retirement benefits, anticipatory pension, transitional benefits, cash assistance, etc.

about 8 per cent of GDP. The demographic changes gradually contribute to an increase in these public expenditure, which, based on the calculation assumptions made, will increase by 2.7 percentage points of GDP up to 2050; see table 3.5.

Age-related expenditures are adjusted in the projection to allow for the effect of people's improved health. Several Danish and international studies have revealed that the bulk of health and elderly care costs are concentrated in the years immediately preceding an individual's time of death. Improved age-related health status may, all else being equal, reduce the pressure on public expenditure caused by demographic changes. The projection assumes that the expenditure related to older people depends partly on remaining years of life (as a measure for the average health status) and not just on age.

**Table 3.5. Public expenditure and of which health care for older people and health, % of GDP**

	2004	2010	2020	2030	2040	2050	2060	2070
	Level	Change relative to 2004						
Public expenditure	26.7	-1.0	-0.5	1.2	2.4	2.3	2.9	3.6
Of which health and elderly care costs	8.3	-0.2	0.6	2.0	2.7	2.7	2.8	2.8

Note: Total expenditure on health service is shown in the table – not just expenditure ascribable to pensioners. Without the correction for improved health status, the expenditure on health and elderly care will increase by about further 1 per cent of GDP in the long run.

Source: Ministry of Finance calculations.

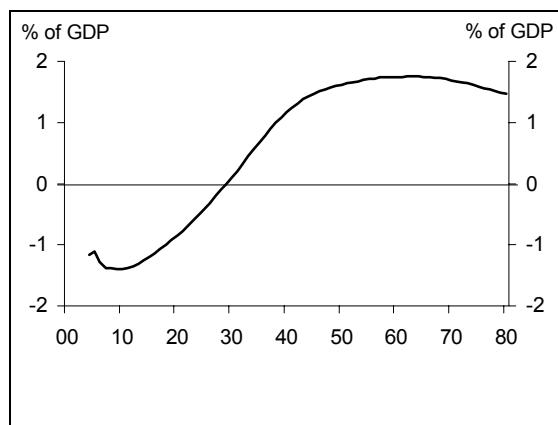
### ***Contribution- and savings-based pension system***

The expansion of the contribution and savings-based pension system, especially the labour market pension schemes, has led to a steep increase in pension assets during the past 10-20 years. In total, pension assets represented just over 120 per cent of GDP in 2004.

A long-term projection of public finances must include contributions received and payments made from the pension sector, because the scope of private pension savings is large and pension savings are not taxed until the pensions are paid out, while contributions to pension schemes can be deducted from ordinary income tax at the time they are paid into the schemes. Whether the amount is taxed at the time of contribution or at the time of payment does not affect individual pension savers if the income tax rate is the same at the two dates. But all else being equal, the future rise in revenue resulting from increasing pension payments will improve public finances. Because the revenue springs from deferred tax payments, the flip side to this is a higher general public net debt today.

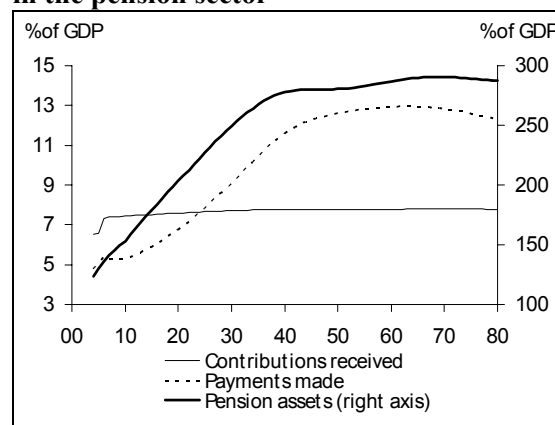
In the long term, the fiscal revenue from net payments can – compared with today – be estimated to amount to some 2.5 per cent of GDP; see figure 3.6a. This reflects the fact that, from 2004 onwards, pension contributions will equal some 7 per cent of GDP, while pension payments will rise from just under 5 per cent of GDP to 12 per cent of GDP in the long term (both figures calculated before tax); see figure 3.6b. The trends in contributions and payments in the pension sector coupled with the interest rates and growth assumed mean that after 2040 total pension assets will amount to more than 2.5 times GDP, which represents a doubling compared with today.

**Figure 3.6a. Revenue from taxation of net pension payments**



Source: Ministry of Finance.

**Figure 3.6b. Pension assets and contributions received and payments made in the pension sector**



### 3.2.3.3 Fiscal sustainability

The operational target for fiscal policy is to maintain a structural surplus on public finances *averaging* 1.5-2.5 per cent of GDP through 2010<sup>8</sup>.

In the so-called 2010-projection<sup>9</sup> the average (structural) surplus<sup>10</sup>, which is reconciled with fiscal sustainability, is 2.0 per cent of GDP in the period from 2003 to 2010, thus falling in the middle of the target interval, given the assumed fiscal and structural policies; see table 3.6. The requirement for average surpluses up to 2010 can be divided into four components.

- *Future net obligations primarily due to ageing:* The ageing of the population will gradually weaken public finances, in part because expenditure on public old-age pensions, health and elderly care is increasing. The estimated pressure on expenditures weakens public finances by 1.6 per cent of GDP, on average, from 2003 to 2010, given the assumptions of tight expenditure control and increased employment up to 2010.
- *Interest burden of public net debt:* The interest burden is the part of the interest payments not eroded by GDP growth and thus requiring financing to avoid the debt's increasing as a share of GDP. When fiscal sustainability is assessed, the key debt measure is public net debt excluding net assets in public funds, including ATP, i.e. that part of the net debt that concerns central and local government. The interest burden weakens the balance by 0.5 per cent of GDP.

<sup>8</sup> The target is inclusive of ATP. The multi-year target allows room for letting the automatic stabilisers play over the economic cycle, thus helping to dampen cyclical fluctuations. The target thus takes into account the possibility of unfavourable economic trends and other unforeseen risks. The target for general government finances has been set as a target interval because of the general uncertainty of the calculation. In Denmark, ATP is excluded from the public balance in the national accounts as from June 2005 because of a EU Regulation. The changed position of ATP is of no importance to fiscal policy sustainability or the requirements to fiscal policy. Allowance has already been made in the calculation of fiscal sustainability for the fact that ATP assets are already earmarked for future pension payments. A changed position of ATP solely means a technical downward adjustment of the surplus on the public balance. The target interval for the necessary average public surpluses through 2010 represents some 0.5-1.5 per cent of GDP, when the public balance is calculated excluding ATP.

<sup>9</sup> The 2010-projection forms the basis of the Convergence Programme for Denmark.

<sup>10</sup> Excluding the temporary contribution as a result of lower tax deduction derived from the Spring Package's suspension of SP contributions in 2004 and 2005.

- *Net interest expenditure*: One can recalculate the assessed requirement to central and local government's primary balance into a requirement to the total government balance (excluding funds) by including interest expenditure on government debt of 1.1 per cent of GDP.
- *Balance in public funds*: The assets in public pension funds (primarily ATP) is earmarked for higher pension payments in the long term and can therefore not be used to finance future pressure on expenditure. The surpluses represent 1.1 per cent of GDP.

**Table 3.6. Assessed requirement for public finances, % of GDP**

	Average 2003-10	Target interval
Future net obligations because of ageing	1.6	
+ Interest burden on central and local government's net debt	0.5	
= Assessed requirement for central and local government's structural primary balance	2.1	
+ Structural net interest expenditure in central and local government	-1.1	
+ Structural balance in public funds	1.0	
= Assessed requirement for structural government balance (incl. funds)	2.0	1.5-2.5

Source: Ministry of Finance.

The calculation requirement for fiscal sustainability, on which the projection is based, may be seen as a test of whether fiscal policies with the rules, etc. adopted are generally coherent in the long term, so that, given the assumptions made, no major tightening is needed after 2010 and taxation can thus be maintained at the 2010-level. When the projection meets the requirement for fiscal sustainability, the surplus on central and local government finances will in all years be able to correspond to the interest burden of central and local government's net debt and the estimated future net public obligations that follow from ageing, etc.

In the absence of further initiatives that can permanently increase employment by some 60,000 jobs (corresponding to 2.25 per cent of employment), a fiscal adjustment of about 1 per cent of GDP still needs to be dealt with (given the estimated growth in revenues and expenditure).

### 3.2.4. Strategies to secure fiscal sustainability

#### *Targets for employment*

An important part of the medium-term scenario is the requirement for a permanent increase in employment, assessed at about 60,000 jobs when the increase is realised before 2010. All else being equal, the increase in employment implies an improvement of public finances of some 1 per cent of GDP<sup>11</sup>.

The Danish participation rate is already among the highest in the OECD and is also somewhat above the common EU target of 70 per cent laid down in the Lisbon strategy. To meet the employment requirement, initiatives must be taken in several fields, including better integration of immigrants, getting students through the education system faster, reducing sickness absence, having more older people in the labour market and ensuring a better functioning labour market; see below.

<sup>11</sup> In relation to the objective of fiscal sustainability, the key objective is the development of public finances – not meeting a certain employment target up to 2010.

The increase in employment up to 2010 should be seen against the background that, all else being equal, demographic trends implies a fall in structural employment of 40,000 jobs from 2004 up to 2010; see table 3.7.

It is assessed that structural employment may fall by 13,000 jobs from 2004 to 2010 if no further structural initiatives are taken. The increase in structural employment in relation to the demographic contribution should be seen in the light of how reforms already adopted impact on, for example, the access to early retirement (including transfer payment, voluntary early-retirement scheme and anticipatory pension) and the beneficial structural effects of lower tax on work and the action plan *More people in work*.

**Table 3.7. Contribution to increase in structural employment, 1,000 jobs**

	Change 2004-10
1. Demographic contribution <sup>1)</sup>	-40
2. Assumed contribution from reforms already implemented	27
- of which abolition of transitional allowance	6
- of which anticipatory pension reform and changed influx, etc.	5
- of which reform of the voluntary early-retirement scheme	8
- of which changed influx to the voluntary early-retirement pay scheme	-11
- of which More people in work	5
- of which increased training and education	11
- of which other contributions (e.g. lower tax on earned income)	3
3. Structural employment in policy-neutral scenario	-13
4. Requirement for new structural initiatives that increase employment	58
5. 2010 scenario (policy included up to 2010)	62

1) Unchanged aggregated unemployment rate and unchanged participation rate for individual gender, age and origin groups from 2004 to 2010 are assumed.

Source: Ministry of Finance.

The Government intends to submit an employment plan to create more jobs. The plan includes the following initiatives:

- *More older people in the labour market.* The aim is to increase the average retirement age by six months. The official retirement age is 65 and the average retirement age is 61. The Government has adopted a supplement for deferred public old-age pension, giving people who wish to work beyond the official retirement age of 65 the possibility of having their current public old-age pension increased by this supplement<sup>12</sup>.
- *More immigrants in work.* The target is to get up to 25,000 more immigrants and descendants in work by 2010. Today, less than 45 per cent of 15-64-year-old immigrants from less developed countries are employed. The first initiative is the Government's integration plan *A new chance for everyone, May 2005*.
- *Lower age at completion of training or education.* The aim is to reduce young people's average age at completion of training or education by one year. On average, a year group of young people spends some 2.3 years longer in the education system than if they finished their training or education in the shortest possible time.
- *Reduced sickness absence.* The aim is to reduce the average number of sickness days by one day. With respect to sickness absence, the number of workweeks lost in Denmark is in line with the EU average. The Parliament has in 2005 adopted a bill concerning an improved model for sickness-benefit approval and follow-up, which could reduce sickness absences when the amended rules have been fully phased in 2007<sup>13</sup>.

The initiatives contribute to ensuring sustainable public finances.

<sup>12</sup> Deferred old-age pension strengthens retirement flexibility, but is not expected to increase fiscal sustainability, since persons who also under the previous rules would work longer than age 65 are now entitled to higher pension. The employment potential of deferred old-age pension is limited because of the many people who retire on early-retirement benefits before the official pension age.

<sup>13</sup> Some 90 per cent of sickness benefit recipients are already included in employment, but the initiative will increase fiscal sustainability in so far as expenditure on sickness benefits is saved and the number of working hours performed will increase.



### 3.2.4.1. Risks in the private pension systems

In Denmark the private pensions consist of labour market pensions and individual pensions. Both labour market pension schemes and individual pension schemes can be contracted either in a bank, if it is a saving scheme without an element of insurance, or in a pension fund or life-insurance company, when there is an element of insurance in the scheme. Pension funds and life-insurance companies are called pension companies below.

Pension companies have traditionally sold insurance policies with a promise of guaranteed benefits. The group bonus potential is used in years with high returns to offset losses suffered in years with low returns. At present, however, the companies also offer unit-linked products, which usually do not include any guarantee, as well as the so-called “life-cycle products”, where the underlying assets behind the insurance policies are currently adapted to the remaining life of the policies. The latter insurance policies also are generally without guarantee.

The Danish Financial Supervisory Authority conducts risk-based supervision, which means that the Authority’s work is prioritised on the basis of risks that may result in the withdrawal of the licences of individual financial enterprises. One reason for such a withdrawal could be an enterprise’s lack of financial strength. No direct risk-based capital requirements currently apply, but so-called *traffic lights* indirectly increase the capital requirements applying to the companies, helping to ensure that risks on assets versus liabilities correlate more closely; see box 3.4.

#### Box 3.4. Scenarios for the use of the traffic-light system in connection with risk-based supervision

**Red light** – is used if even *moderate* changes in the market value of the assets cause solvency problems. Red light is defined as a situation in which share prices are assumed to drop by 12%, interest rates are assumed to change by 0.7 percentage points (upwards or downwards, whichever is worst for the company), and real property prices are expected to drop by 8%.

**Yellow light** – is used if *major* changes in the market value of the assets cause solvency problems. Yellow light is defined as a situation in which share prices are assumed to drop by 30%, interest rates are assumed to change by 1 percentage points (upwards or downwards, whichever is worst for the company), and real property prices are expected to drop by 12%.

If, following the loss suffered in the scenarios, the capital base of a company falls below the solvency margin required after 3% of provisions are deducted, the Danish Financial Supervisory Authority will intensify its supervision and require more frequent reporting of data, or it will initiate discussions with the company and possibly order it not to increase its risk exposure<sup>14</sup>.

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<sup>14</sup> An insurance company’s capital base consists of the company’s equity after adjustment by a number of deductions and allowances and other permitted capital elements such as own funds, special bonus provisions and member accounts. The capital base must at least correspond to the company’s solvency margin, calculated as the sum of a percentage of the amounts of risk and 4 per cent of the life insurance provisions, but at least 3.4 per cent of the life insurance provisions without deduction for reinsurance. In practice, this corresponds to a solvency requirement of some 4.5 per cent of life insurance provisions. For unit-link policies, where the customer and not the company bears the investment risk, the requirement has been set as the sum of a percentage of the sum insured and 1 per cent of the provisions. *Life insurance provisions* consist of three elements: bonus potential on paid-up policy, bonus potential on future premium payments and provisions to cover guaranteed benefits. The first element is calculated as the maximum of zero and the difference between the deposit value and the value of guaranteed benefits attaching to the paid-up policy, while the second element is calculated as the market value of the agreed future premiums

Besides the risk-based supervision, investments are subject to rules on investment and diversification applying to various types of assets, which must at any time equal at least the value of insurance provisions. In addition, assets must comply with a number of congruence and localisation rules.

Traffic lights impose limitations on assets that depend on liabilities. The calculation factors (interest rates, cost rates and elements of statistical computing) used to calculate insurance premiums, repurchase values and paid-up policies must be chosen carefully. The technical rate of interest<sup>15</sup> must not exceed 2 per cent per annum including a guaranteed cost and security supplement.

All companies<sup>16</sup> have ‘full funding’. This ensures pension savings for all members of the scheme and the Danish Financial Supervisory Authority may also require that the register be deposited. Registered assets must be reported to the Danish Financial Supervisory Authority four times a year. The traffic lights help make the companies and the authorities aware of the companies’ capital needs. The Danish Financial Supervisory Authority must take the necessary steps whenever a company’s financial position shows considerable risk of developing in a direction that may culminate in the company losing its licence.

The requirement for ‘full funding’ is supplemented by statutory provisions governing the conduct of members of supervisory and executive boards, one provision being that the conduct of any member may never give reason to assume that the member concerned is failing to perform his/her duties or carry out his/her job appropriately. The companies’ annual reports must be audited by the companies’ external auditors and possibly their internal auditors and must be submitted to the Danish Financial Supervisory Authority.

Generally, the pension system provides pension savers with a good framework, including supervision and regulation, geared to raise confidence in the financial system. However, the pension system is complex, and much attention is focused on providing information that can give pension savers an overview of their savings and future retired life. Companies must send out annual statements with information about the size of benefits and the bonus situation. Companies put considerable work into holding member meetings, where members can attend general meetings and express their opinions. Members of labour market pension schemes can talk with union representatives, and members of individual pension schemes can change providers.

A common database, PensionsInfo, has been established in cooperation between pension funds, life-insurance companies, banks and public authorities. PensionsInfo gives the individual pension saver access to information from almost all pension suppliers, thus enabling him/her to get a total overview of his/her pension savings. The website of the Danish Financial Supervisory Authority contains information about companies’ repurchase charges, cost deductions and rules on return on equity.

Finally, the so-called Pension Market Council has been set up to foster the debate on openness about the pension funds’ investment policies and ensure focus on their

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less the market value of the guaranteed benefits attaching to the agreed future premiums, which, if negative, is estimated at zero. The third element is calculated as the present value of the expected future net payments from the pension scheme; see *Greater freedom of choice in pension savings*, Ministry of Economic and Business Affairs et al. (2003).

<sup>15</sup> The technical rate is the rate of interest on the basis of which the pension commitments for members are calculated in accordance with the technical basis.

<sup>16</sup> Including company pension funds.

investment decisions as well as on improving members' influence. The Pension Market Council can include experience from individual pension savings schemes and express its opinion in line with other interest groups.

### ***Greater importance of private pension schemes***

Expanding the labour market pensions in pillar 2 ensures greater coherence between income in working life and income in retirement. As part of the social partners' collective bargaining, the contribution percentages are agreed for the next agreement period. In the collective bargaining in 2004, the social partners agreed that the contribution percentage is to increase from typically 9 per cent to some 10.8 per cent in the area covered by the Danish Confederation of Trade Unions and the Danish Employers' Confederation. In the public sector the contribution percentages are typically higher.

Life insurance companies and pension funds manage labour market pension savings. Barring job changes, the possibilities for transferring labour market pension savings are limited, a fact that should be seen in the context that labour market pensions form part of the mandatory agreement system. Consequently, the Pension Market Council has prepared guidelines on good and efficient company management for the labour market pension funds.

If pension savers wish to further supplement their labour market pensions, they may use the individual schemes in pillar 3. Reduced transfer fees for schemes contracted in pension companies have improved the possibilities for transfer, and this is expected to result in intensified competition between companies and thus greater efficiency. The bonus potential is not transferable between pension providers and this makes the consequences of a transfer less transparent.

## **3.3. Modernisation of the pension system**

### **3.3.1. Flexibility in relation to the labour market and career patterns**

The Danish pension system covers most types of employment in Denmark; see appendix 3. The vast majority of both full-time and part-time employees have some kind of private supplementary pension savings. However, self-employed persons use supplementary pension schemes to a lesser extent, which can be explained by the fact that their incomes vary over the contribution period and that they therefore find it difficult to afford a fixed annual contribution to the pension scheme.

The Danish Government wishes to put self-employed persons on an equal footing with employees when it comes to the possibility for saving up for retirement. The rules have thus been changed to the effect that self-employed persons are no longer forced either to commit themselves to paying a fixed pension contribution ten years ahead or to meet the "fill-up deductible" of some DKK 40,000 (euro 5,400). Self-employed persons can now achieve full deductions for pension contributions of up to 30 per cent of the profit for the year and can thus decide on an ongoing basis how much they wish to contribute.

The options for using the rules on discontinuation-of-business pension schemes have also been improved. The taxable profit on the sale of a business, though a maximum of DKK 2,249,800 (euro 302,800) in 2005, can be contributed to a pension scheme. Previously, the contribution option could only be used if the person concerned had operated his/her

own business for at least ten consecutive years, although a 12-month break was allowed in connection with a change of businesses. This condition has now been relaxed so that the person concerned must now have operated his/her own business for at least 10 years within the past 15 years.

Danish labour market pension schemes are contribution-defined and savings-based, for which reason they are to a great extent neutral towards atypical careers, including frequent job/industry changes, leave, etc. However, in connection with a new job an employee is often subject to a waiting period before he/she becomes a member of the pension scheme.

**Table 3.8. Typical waiting periods in pension schemes**

Employment sector	Waiting period	Comments
Private sector	½–¾ year	In case of a change of jobs within or to the sector, any accumulated waiting period is transferred
Public sector	1 – 4 years	In case of a change of jobs, any accumulated waiting period is transferred

The waiting period in Denmark is not publicly regulated. The waiting period in the private sector is typically 6-9 months, and when a person changes jobs within the sector or from the public sector, the accumulated waiting time can be transferred. In the public sector significant groups of employees have no waiting period, while other groups have a waiting period of 1-4 years. The accumulated waiting time for public employees can be transferred within the public sector, while persons from the private sector will typically have to accumulate a new waiting period.

The pension saver may transfer his/her pension savings when changing jobs. Rules exist governing the transfer of rights between insurance and pension schemes, and since the rules must be fair to members, in practice no requirements exist for the length of membership when pension savings are transferred. Alternatively, the member may choose to retain his/her pension savings in the scheme. Payments are modified by recalculating the benefits, so that the future periods in which no contributions are paid do not form part of pension calculations. The previous pension scheme provider may demand a service charge in connection with transfer, a cost that must be weighed against the management costs of several schemes. The option to move savings also includes moving savings to another country, but then a duty is payable on the pension savings, which is the general rule when a person wishes to permanently withdraw pension savings from the pension scheme.

The pension saver is informed about the possibilities for transferring pension savings before the agreement is made, and if conditions change, the company must inform the pension saver.

### ***3.3.2. Gender equality between women and men***

The rules concerning public old-age pension do not distinguish between genders. Thus, men and women receive the same amount of public old-age pension, and the age limits and award criteria are identical. The same applies to the supplementary pension schemes ATP and SAP. In these savings-based schemes, pension rights are earned on the basis of

a unisex principle<sup>17</sup>, which is an advantage for women because of their longer life expectancy. SP is a purely savings-based scheme without re-distribution.

The weight of public old-age pension in the Danish pension system helps equalise men's and women's annual incomes as pensioners. Thus, women's typically lower total time of employment during their working years and lower wage have a smaller impact on their financial circumstances as pensioners. In addition, women receive pension for a considerably longer time as a result of their longer life expectancy.

Neither do the labour market pension schemes distinguish between genders. The schemes are savings-based and the calculated pension rights are calculated on a unisex basis. However, no pension rights are accumulated in periods where no contributions are paid, for example in connection with unemployment or maternity leave without wage, a fact that affects women in particular. As regards maternity leave without wage, the social partners in the central, local and regional government area agreed in connection with the collective bargaining in 2005 that pension contributions will be paid in the maternity leave periods in which no wage is paid.

There is no requirement for a unisex basis in the individual pension schemes.

Table 3.9 shows matters of importance to pension as a result of gender differences:

**Table 3.9. Schemes in the pension system and the importance of gender differences**

Scheme	Does the pension depend on:		
	Annual income during the person's working life	Absence from the labour market	Differences in life expectancy
Public old-age pension	No	No	No
ATP	No	Limited	No
SP	Yes	Limited	No, annuity pension.
Labour market pension	Yes	Yes, but not necessarily maternity in full	No <sup>1)</sup>
Individual scheme	Not officially	Not officially	Yes

1) The unisex principle, which implies that a person's gender must not be taken into account when pension is calculated, became statutory for labour market pensions in 1998. The principle will only take full effect for pensions paid out from 2040 or so.

Source: Ministry of Economic and Business Affairs, et al: Report on women's pension position, 2003.

As labour market pensions are expanded, pensioners' standard of living will increasingly reflect differences in the labour market (for example with respect to wage and periods outside the labour market) and the consequent differences as regards individual pensioners' own savings in the labour market pension schemes. Since, on average, men have a higher annual income and higher working-life earnings, this generally means that men accumulate bigger savings in the labour market pension schemes than women.

In 2003, the Government made an analysis of women's pension position<sup>18</sup>. The analysis shows that:

- If the present savings behaviour and employment situation are maintained, women's pension position in the 40-year term will be rather good, with average replacement rates of between 75 and 90 depending on education and retirement age.

<sup>17</sup> Application of the same death probabilities, etc. for men and women.

<sup>18</sup> Report on women's pension position, Ministry of Economic and Business Affairs, et al, 2003.

- The replacement rate for women will, on average, be 10-15 percentage points higher than that for men with equivalent levels of education and of similar retirement age.
- On average, the annual pension after tax paid to women will, however, still be 5-15 per cent lower than that paid to men with equivalent levels of education and of similar retirement age.
- The primary reason that women receive lower annual pension benefits is lower hourly rates and lower number of hours worked. Moreover, women live longer, and a lower proportion of women in the labour force are in employment than is the case with men. Conversely, the fact that women use a greater proportion of their incomes for pension savings narrows the difference.
- The main reason for women's higher replacement rate is lower annual incomes during their working lives. Lower income during working life pulls in the direction of a higher replacement rate since public old-age pension does not depend on income during working life. The difference in earned income springs from differences in employment, hours worked and hourly rates.

The main reasons for the difference in women's and men's nominal pension are thus to be found in labour market conditions – and to a far lesser extent in the organisation of the pension system. Consequently, differences between men and women in terms of employment, hourly rates and hours worked are the crucial factors. The difference in replacement rates is due to the same factors combined with the fact that the amount of public old-age pension is the same or higher for persons with low incomes.

### ***3.3.3. Other reform considerations***

The Government has set up a Welfare Commission charged with submitting specific proposals before the end of 2005 for reforming the Danish welfare model, including social pensions. The proposals are to support the objective of a sustainable fiscal policy. With a view to maintaining the long-term targets of economic policies, the Government will in spring 2006 present a new economic multi-year plan for Denmark, covering at least the period through 2015. The plan will be prepared in the light of the analyses from the Welfare Commission.

### ***3.3.4. Transparency, etc. of the pension system***

The Pension Market Council was set up to inform politicians and the public about trends in especially the labour-market-related part of the pension system and to stimulate debate on these issues. The Council may also include the individual schemes in its work. The Council is composed of a broad range of interested parties (ministries, the social partners, consumer representatives, specialists and the pension industry). The Council prepares reports on various matters. These include information, replacement rates, etc.

Each pension fund informs its pension savers about their accumulated pension rights. Moreover, a number of pension funds, life insurance companies, banks and public authorities have jointly established the PensionsInfo database, which enables the individual citizen to get an overview of his/her pension via the Internet. PensionsInfo allows a person to see his/her overall pension cover at different retirement ages.

Consumers need to be able to trust that the financial providers are operating their businesses fairly and in accordance with good practice. Denmark seeks to boost consumer confidence in the financial providers by issuing rules and implementing supervision to ensure that all financial businesses are operated according to the principles

of good faith and fair dealing for their business area (good conduct). Good conduct involves requirements for information and that advice is given on the basis of the customer's circumstances.

The greater importance of savings-based pension schemes, more options, etc. have improved the possibilities for considering individual requirements, but also involve more risks. Consequently, it is considered an important focus area to make ongoing efforts to improve the transparency enabling pension savers to make qualified choices concerning their own pensions.

## Appendix 1. Overview of the Danish pension system

The following text describes the elements in the Danish pension system. They are:

- Public old-age pension
- Labour Market Supplementary Pension Fund (ATP)
- Special Pension Savings Scheme (SP)
- Labour Market Supplementary Pension Scheme for Recipients of Anticipatory Pension (SAP)
- Employees' Capital Pension Fund (LD)
- Labour market pensions
- Individual pension savings plans

### 1. Public old-age pension

Public old-age pension is a basic public pension, intended to ensure all citizens a fair income when they retire. The pension is granted from the age of 65.

The amount of the pension depends on the number of years of residence in Denmark. Maximum public old-age pension is achieved after 40 years' residence in Denmark after the age of 15. If the time of residence is shorter, the pension will be reduced proportionately.

Public old-age pension consists of a basic amount and a pension supplement. The pension is independent of the recipient's previous attachment to the labour market and previous earnings, but depends on the pensioner's present income and marital status. Assets have no effect on the amount of public old-age pension.

The basic amount is DKK 56,892 (euro 7,660) annually in 2005 and taxable. The basic amount is reduced only on the basis of earnings from earned income. If the pensioner has earned income of more than DKK 241,700 (euro 32,530) annually, the basic amount is reduced by 30 per cent of the part of the earned income that exceeds DKK 241,700 (euro 32,530).

The pension supplement is DKK 57,276 (euro 7,710) annually for single pensioners and DKK 26,736 (euro 3,600) annually for married or cohabiting pensioners in 2005. The pension supplement is taxable and reduced if the pensioner or his/her spouse or cohabitant has earnings besides public old-age pension (earned income, supplementary pension income, equity income, investment income, etc.) above a certain limit. If the pensioner's spouse/cohabitant does not receive pension, half of the spouse's earnings up to DKK 166,900 (euro 22,460) is disregarded in the calculation of the income base.

For single pensioners, the pension supplement is reduced by 30 per cent of the part of the earnings that exceeds DKK 53,300 (euro 7,170) on an annual basis. For married or cohabiting pensioners, the pension supplement is reduced by 30 per cent of the part of the earnings that exceeds DKK 107,100 (euro 14,415). If both spouses/cohabitants are entitled to pension supplements, their supplements are reduced by only 15 per cent of earnings over DKK 107,100 (euro 14,420).

In addition to the basic amount of public old-age pension and pension supplement, a supplementary pension benefit of DKK 6,200 (euro 830) a year is granted. The supplementary pension benefit is taxable and paid once a year. The benefit is targeted at the financially most disadvantaged pensioners and is consequently reduced if the pensioner or his/her spouse or cohabitant has earnings besides public old-age pension



(earned income, supplementary pension income, equity income, investment income, etc.) above a certain limit.

The supplementary pension benefit is reduced if earnings exceed DKK 15,400 (euro 2,073) for single pensioners and DKK 30,500 (euro 4,105) for married or cohabiting pensioners at 2005-level. For each increment of DKK 379/766 (euro 51/103) that earnings exceed the above amounts for single and married/cohabiting pensioners, respectively, the supplementary pension benefit decreases by 1 per cent.

Public old-age pension and the supplementary pension benefit are adjusted upwards once a year, corresponding to the rise in the yearly wage for workers and salaried employees. The rate adjustment is reduced by up to 0.3 percentage points if the rise in wages and salaries exceeds 2.0 per cent, which are then transferred to a rate adjustment pool. The pool amount is used for measures in the social, health and labour market areas aimed at improving conditions for transfer payment recipients and weak groups.

The level of social pension should be seen in the light that pensioners are entitled to a number of other allowances. These include special housing benefit rules, support for the payment of heating expenses, a health allowance of up to 85 per cent of the pensioner's own expenses for medicine, dentist, glasses, etc. and favourable rules concerning tax on owner-occupied dwellings. In addition, particularly disadvantaged pensioners may be granted a personal allowance to cover reasonable and necessary expenses, following a specific assessment of their needs.

Finally, pensioners have access to a wide range of free services, of which some are relevant for all age groups, while others are especially relevant for pensioners, including hospital treatment, care in special residential accommodation, personal and practical help, home nursing, physical maintenance training and rehabilitation. To this should be added a wide range of preventive and activating measures for elderly people, such as cultural activities, teaching and exercise.

Public old-age pension is paid upon application from the age of 65. From 2004, rules on deferred pension have been introduced. Pursuant to these rules, older people who have reached public old-age pension age may choose to defer old age pension and participate actively in the labour market against having current public old-age pension increased later. It is a condition that the person who has deferred his/her public old-age pension has earnings from personal work for at least 1,500 hours each calendar year. When the older person chooses to receive public old-age pension, the current public old-age pension is increased by a share – the waiting percentage – for the rest of the pensioner's life. The waiting percentage is calculated as the ratio between the number of months the pension was deferred and the average life expectancy of persons at the age the citizen has when retiring.

## **2. Labour Market Supplementary Pension Fund (ATP)**

ATP is a statutory, supplementary pension scheme established in 1964. The scheme is mandatory and presently covers persons both in and outside the labour force.

All employees in Denmark between the ages of 16 and 64 who are employed for more than nine hours a week pay contributions to ATP. Since the early 1990s, the circle of contributors to ATP has been expanded to include a number of transfer payment recipients, including recipients of unemployment benefits, sickness and maternity benefits, cash assistance, rehabilitation benefits, early-retirement benefits and anticipatory pension. Moreover, self-employed persons can pay voluntary contributions. At the end of 2004, ATP had some 4.4 million members, of which just over 3 million

paid contributions and just over 500,000 received pension. In the long term, ATP will ensure almost all Danes a supplement to public old-age pension.

ATP is a contribution-defined and fully savings-based pension scheme. The ATP contribution does not depend on the individual citizen's income, but on hours worked. The annual contribution varies, but is typically DKK 2,700 (euro 360) annually for a full-time employee, corresponding to around 1 per cent of an average employee income. Individual citizens pay only 1/3 of the contribution themselves. The employer pays the remaining two-thirds of the contribution for employees, while the government pays the remaining two-thirds of the contribution for transfer payment recipients.

The ATP scheme ensures members a life-long, current retirement pension from public old-age pension age. The scheme also includes coverage for spouse/cohabitant and children, where an amount is paid to the surviving relatives in case of the member's death.

Maximum, current retirement pension for a 67-year-old is DKK 22,400 (euro 3,000) annually in 2005, corresponding to some 20 per cent of public old-age pension, provided that contributions have been paid to the scheme since its introduction in 1964. Most present ATP pensioners receive a considerably smaller ATP pension, having only paid contributions for a shorter period.

The ATP scheme was changed with effect from 2002. The reform means that, in future, the pension will be calculated on an age-differentiated basis.

### **3. Special Pension Savings Scheme (SP)**

SP is a statutory, supplementary pension scheme. Since 1999, all employees, self-employed persons and some transfer payment recipients paid contributions to SP. At end-2004, there were some 3.4 million savings holders in the scheme.

SP is a purely savings-based scheme, where contributions are paid to individual accounts. The SP contribution is typically 1 per cent of income. However, the SP contribution has been suspended in 2004 and 2005. A political agreement has paved the way for prolonging the suspension in 2006 and 2007.

SP savings are paid as a ten-year annuity pension from the age of 65. In the event of death, the amount saved up will be paid to the estate of the deceased person. Since the SP scheme is only a few years old, a very small number of pensioners presently receive payments from it.

From January 2005, wider choice has been introduced in respect of administration and investment of SP savings.

### **4. Labour Market Supplementary Pension Scheme for Recipients of Anticipatory Pension (SAP)**

SAP is a statutory, supplementary pension scheme for recipients of anticipatory pension. This is a voluntary scheme, the objective of which is to give recipients of anticipatory pension the possibility of earning a supplement to public old-age pension that resembles labour market pension.

The SAP contribution amounts to DKK 4,680 (EUR 630) annually in 2005, corresponding to 2.8 per cent of the anticipatory pension for a single person. The contribution is adjusted in step with wage developments in the labour market. The government contributes two-thirds of the sum, while the individual person contributes

one third. The pension is granted as a life-long retirement pension from the age of 65. In the event of death, the amount saved up will be paid to the estate of the deceased person.

The SAP scheme is administered by ATP or another pension fund at the pensioner's own option. The scheme entered into force on 1 January 2003, and consequently only a very small number of pensioners presently receive payments from it.

### **5. Employees' Capital Pension Fund (LD)**

The assets of the LD scheme derive from frozen cost-of-living allowances from 1977-79. No further payments are made to the scheme. At the end of 2004, there were just over 1.2 million savings holders and assets of just under DKK 58 billion (euro 8 billion). Payments from the LD scheme consist of a lump sum from age 60. In the event of death, LD savings are paid to the estate of the deceased person. Savings holders may leave savings in the scheme until the age of 70 or, under certain circumstances, have savings paid out earlier. From 1 July 2005, individual savings holders in the LD scheme can move their deposits to another pension fund.

### **6. Labour market pension**

Labour market pension schemes can be divided into schemes based on collective agreements and schemes agreed in individual enterprises. Finally, there are civil service pension schemes for central and local government employees.

The schemes cover most of the Danish labour market. Some 90 per cent of all full-time employees were covered by a labour market pension scheme in 2002.

Except for civil service pension schemes, labour market pension schemes are mostly savings-based. Total savings in the labour market pension schemes are estimated at just over DKK 600 billion (euro 81 billion) or around two-thirds of total private Danish pension assets in insurance-based pension schemes.

#### **6.1 Labour market pension agreed by collective agreement or at enterprise level**

Labour market pensions form part of the Danish agreement-based labour market model. The agreement-based schemes have been agreed between employee and employer organisations, while the schemes at enterprise level have been agreed between an enterprise and its employees.

Labour market pensions are organised as group insurance schemes, where membership is typically mandatory for the individual employee covered by an agreement area or covered by an occupational pension scheme. Thus, the individual employee is unable to choose the pension fund in which the scheme is to be placed, but has a right and an obligation to be a member of the group scheme. Although the schemes are mandatory, the individual employee has increasing possibilities for choosing the benefits that best correspond to his/her present situation.

The fact that the schemes are group schemes and mandatory allows individuals to secure pension benefits at a price that may be independent of individual risks associated with death and disablement. This also means that the scheme can be taken out at a cost overall better than what can be achieved on an individual basis.

The bulk of labour market pensions are contribution-defined, i.e. the amount of the pension depends on the contributions paid. In 2004, contributions to the agreement-based labour market pension schemes were typically 7-10 per cent of the wage in the private labour market and 12-16 per cent of the wage in the public labour market. In connection

with the collective bargaining in 2005, a number of increases of these contributions were agreed. The employer contributes two-thirds of the sum, while the individual person contributes one-third.

The composition of benefits in the labour market pension schemes varies considerably. Typically, a life-long current retirement pension is provided, which may be combined with annuity pension and/or capital pension. To this may come disability pension and spouse's and child's pensions.

## **6.2 Civil Service Pension Scheme**

Civil service pensions for government employees are regulated by law, while civil service pensions for local authority employees are regulated by pension regulations. Civil service pension schemes are defined benefit pension schemes. The amount of the pension depends on the number of years of employment as a public servant and the pensionable pay – typically the final salary.

Pensions are funded by government, regional or local authorities out of current income, i.e. taxes. However, most local authorities and a few regional authorities have hedged their obligations by taking out insurance with the local authority insurance company Kommunernes Pensionsforsikring A/S (KP), to which the local authorities regularly pay insurance premiums. Payments from KP thus cover these local authorities' expenditure on payments of civil service pensions.

In January 2004, some 107,000 employees were covered by pension schemes for central government employees (or employees in public-servant-like positions), including public servants in primary and lower secondary schools in the local authority areas.

Defined benefit pension schemes in the form of civil service pension schemes have diminishing importance in both the central government and the local government sectors, where the employment form is being changed into the more flexible and individual pay forms implemented in the public sector in recent years, and where employees are to a wider extent covered by contribution-financed and contribution-defined pension schemes.

## **7. Individual pension savings plans**

Individual, private pension savings plans are started on the initiative of private individuals and are independent of employment conditions. In these schemes, the individual makes his/her own choices about pension scheme, supplier, premium amount and composition of benefits.

Individual pension schemes can be set up with banks, insurance companies or pension funds. In 2000, more than one million persons paid contributions to individual pension schemes. The average contribution was some DKK 14,700 (euro 2,000). Self-employed persons form the group that pays the highest average contributions, since this group is rarely covered by labour market pension schemes.

The individual schemes are typically capital pension or annuity pension schemes, but may also be current life-long pensions. The amount of the pensions depends on the savings (including return) made by the individual.

## Appendix 2. Sensitivity analyses of fiscal sustainability

While the fiscal impact of population ageing in the coming decades (subject to current rules) can be projected with a reasonable degree of certainty, since the next generation of retirees and workers already live today, a number of central assumptions are uncertain, such as average life expectancy and interest rate-growth differential).

Table A.1 summarises the impact on fiscal sustainability of changes in assumptions. This means that the derived consequences for public finances, which will typically appear gradually over a span of many years, are translated into a lasting fiscal policy adjustment, which is hypothetically implemented from today to ensure stable public debt in percentage of GDP in the long term.

**Table 1. Impact on the sustainability indicator**

	% of GDP
<i>Demography:</i>	
- Average life expectancy increases gradually by 1 year, corrected for better health status .....	-0,2
- Fertility increases by 4,000 children a year from sustainable basis .....	-0,1
- Immigration of some 5,000 persons extra per year	
- from the same countries as today .....	-0,1
- from less developed countries.....	-0,3
- from more developed countries.....	0,1
<i>Labour market:</i>	
- Fall in employment growth by 60,000 persons up to 2010 .....	-1,0
- Fall in average working hours of 2.25 per cent (some 60,000 full-year persons) .....	-0,7
- Fall in agreed (and average) working hours of 2.25 per cent .....	-0,5
- Retirement age increases by ½ year (20,000 full-year persons) .....	0,2
<i>Key assumption:</i>	
- Growth and interest rate increases by 0.5 percentage unit, keeping the interest rate-growth differential unchanged.....	-0,1

Source: Ministry of Finance.

The main conclusions are as follows:

- The increase in *average life expectancy* has a considerable effect on fiscal sustainability when the retirement age is assumed to be constant. This is due to the increase in public old-age pensions and health and elderly care. This is especially true where the interest rate-growth differential is low, since the future demographic challenge as a result of increasing average life expectancy will carry more weight. All else being equal, a one-year increase in average life expectancy weakens public finances by 0.2 per cent of GDP (under the given assumptions on interest rate-growth differential etc.).
- *Fertility* has, subject to the current rules, an almost neutral impact on sustainability, if fiscal policy meets the requirement for sustainability, since the positive contribution to the labour force and the future revenues subject to the current rules, etc. offset the expenditure on child care, education, pensions etc. (measured in net present value). If, however, fiscal policy is not sustainable, increased fertility will weaken public finances.
- Changed *immigration* (distributed evenly on persons from less and more developed countries) has an almost neutral effect on fiscal sustainability. Immigration from less developed countries has, subject to the current rules, etc., a negative effect on sustainability, since these immigrants have a relatively low participation rate.

- *Employment* is of key importance to fiscal sustainability. If the employment requirement of 60,000 jobs is not realised, the sustainability indicator deteriorates by 1 per cent of GDP, all else being equal.
- A fall in *hours worked* has negative impact on public finances. A fall in average hours worked of 2.25 per cent – corresponding approximately to the work supply from 60,000 full-year persons – weakens fiscal sustainability by 0.7 per cent of GDP. A similar fall in the agreed – and average – hours worked has less impact, because it also leads to a reduction in the adjustment of income transfer payments.
- Increased *retirement age* contributes positively to fiscal sustainability. An increase in the average retirement age of just under six months may, for example, neutralise the increased pressure on expenditure resulting from one year's increased average life expectancy. Public finances would be more robust if a higher retirement age is accompanied by an increase in life expectancy.
- Increased *productivity growth, but unchanged interest rate-growth differential* has, subject to current Danish rules, no critical impact on fiscal sustainability. Although productivity growth increases welfare and thus the tax base, public expenditure (primarily wage to government employees and transfer payments) increases largely at the same pace, since it follows wage in the private sector. An increase in productivity growth is a key objective, since it increases the standard of living, but under the current Danish rules, it cannot be expected to improve public finances.

## Appendix 3. Prevalence of labour market pensions

### Pension schemes for persons aged 35-55, 2002

	Employer-managed scheme <i>or</i> civil service pension scheme (1)	Employer-managed scheme, but voluntary scheme (2)	Employer-managed scheme, voluntary scheme <i>or</i> civil service pension scheme (3)	Other dormant schemes <i>or</i> schemes from which payments are made (4)	No scheme (5)	Of which with ATP/SP contributions over the year (6)	Of which without ATP/SP contributions over the year (7)
	----- % -----						
Full-time employees	90.5	4.2	94.7	1.9	3.4	3.4	0.0
Part-time employees	77.3	8.7	86.0	4.6	9.5	9.5	0.0
Partly employed	72.7	8.4	81.1	9.4	9.5	9.5	0.0
Self-employed members	5.9	54.3	60.2	12.0	27.8	25.9	1.9
Fully unemployed, etc.	2.2	14.4	16.6	25.3	58.1	54.2	3.9
Anticipatory pensioners	3.8	12.1	15.9	14.6	69.4	20.9	48.5
All groups, aged 35-55	68.2	9.5	77.7	6.3	16.0	11.1	4.9
- men	68.0	10.6	78.6	6.4	15.1	10.7	4.4
- women	68.3	8.5	76.8	6.2	17.0	11.6	5.5

Note: Columns (3) + (4) + (5) = 100 per cent.

Source: Questionnaire on the sustainability of second and third pillar schemes and their contribution to adequacy, June 2004.

## **Appendix 4. Common objectives**

Common objectives to secure the sustainability of pension systems adopted at the Laeken European Council meeting in 2001.

### **Adequacy of pensions**

1. Ensure that older people are not placed at risk of poverty and can enjoy a decent standard of living; that they share in the economic well-being of their country and can accordingly participate actively in public, social and cultural life.
2. Provide access for all individuals to appropriate pension arrangements, public and/or private, which allow them to earn pension entitlements enabling them to maintain, to a reasonable degree, their living standard after retirement.
3. Promote solidarity within and between generations.

### **Financial sustainability of pension systems**

4. Achieve a high level of employment through, where necessary, comprehensive labour market reforms, as provided by the European Employment Strategy and in a way consistent with the BEPG.
5. Ensure that, alongside labour market and economic policies, all relevant branches of social protection, in particular pension systems, offer effective incentives for the participation of older workers; that workers are not encouraged to take up early retirement and are not penalised for staying in the labour market beyond the standard retirement age; and that pension systems facilitate the option of gradual retirement.
6. Reform pension systems in appropriate ways taking into account the overall objective of maintaining the sustainability of public finances. At the same time sustainability of pension systems needs to be accompanied by sound fiscal policies, including, where necessary, a reduction of debt. Strategies adopted to meet this objective may also include setting up dedicated pension reserve funds.
7. Ensure that pension provisions and reforms maintain a fair balance between the active and the retired by not overburdening the former and by maintaining adequate pensions for the latter.
8. Ensure, through appropriate regulatory frameworks and through sound management, that private and public funded pension schemes can provide pensions with the required efficiency, affordability, portability and security.

### **Modernisation of pension systems in response to changing needs of economy, society and individuals**

9. Ensure that pension systems are compatible with the requirements of flexibility and security on the labour market; that, without prejudice to the coherence of Member States' tax systems, labour market mobility within Member States and across borders and non-standard employment forms do not penalise people's pension entitlements and that self-employment is not discouraged by pension systems.



10. Review pension provisions with a view to ensuring the principle of equal treatment between women and men, taking into account obligations under EU law.

11. Make pension systems more transparent and adaptable to changing circumstances, so that citizens can continue to have confidence in them. Develop reliable and easy-to-understand information on the long-term perspectives of pension systems, notably with regard to the likely evolution of benefit levels and contribution rates. Promote the broadest possible consensus regarding pension policies and reforms. Improve the methodological basis for efficient monitoring of pension reforms and policies.