Money and Pension Panel

Basic pension

The default option for labour-market pensions

Report by the Committee of the Money and Pension Panel

February 2013

Contents

I. Introduction

The Danish pension system is based on a combination of public pensions financed through taxes and labour-market pensions (Pillars I and II). Added to these are private savings (Pillar III), either in the form of tied pension savings or other voluntary savings. The system endeavours to ensure that everyone has a certain minimum coverage as a pensioner, and that the pension of economically active persons is reasonably proportional to their earned income and living standards in the years they were economically active.

The pension system has gone through a number of changes over the years. However, with the extensive expansion of labour-market pensions from the late 1980s, the system has evolved into its current form through a combination of public pensions financed through taxes and private pensions based on savings. For most groups, contribution rates for labour-market pensions have risen considerably. The Danish pension system has proven relatively strong and international comparisons consider the system attractive.

Thus, there is no need for drastic pension reforms, though it is natural to take stock of the situation and carefully examine the system. A combination of public pension systems financed through taxes, and labour-market pensions based on savings, invites questions about the interplay between these two pillars. Also, background factors of significance to the pension system regularly change; the upward trend in life expectancy poses a particular challenge for both pillars of the pension system. Unchanged retirement age in times of increasing life expectancy challenges both public and savings-based pension systems. With regards to public pensions, the Welfare Agreement and the Retirement Reform have set the framework for developments in the statutory retirement age. Such initiatives have contributed to make the pension system stronger. However, it is challenging to meet many people's wishes for flexible and gradual retirement schemes. Currently, there is also a risk that pension savings over a long period will yield low returns, with a possible higher returns risk at the same time.

The task of the pension system is simply and fundamentally to ensure pensioners an appropriate and reasonable pension and comparable living standards. However, reaching this goal is difficult; it involves many choices and requires specific expertise on financial markets and products. Even though many people consider a reasonable pension a central welfare goal, few people are interested in the more technical details of pensions. This "pension paradox" is a particular challenge for the pension sector. Presumably, this reflects both expectations that such matters are already taken care off in a welfare society, as well as the complexity of specific aspects in relation to pension savings and pension schemes. Even though the regulations for public pensions and contribution rates for labour-market pensions are fixed for the individual, a number of important

choices still have to be made. This applies to the central decision on when to retire from the labour market, but also decisions on how to invest pension savings, the distribution of such savings between pension and insurance cover, as well as the payment profile for the pensions. Increased knowledge and information is important, but it is hardly a realistic way to solve the problem. It is important for the design of the pension system to take into account that realistically a large group of people do not want such involvement. For this group of people, pension schemes must be constructed in a proper and reliable manner and in a way which requires as few choices as possible.

Therefore, the Money and Pension Panel has set up a committee, to answer in general terms the following question (For the terms of reference for the Committee, see Annex I)

> *How should a generic pension and life-assurance product be designed if it is to sustain the purchasing power of the members, ensure relevant insurance cover to members in different life situations, and be suitable for members who do not want to spend much time on pension choices, but who want a transparent product which "takes care of itself"?*

The terms of reference asks how mandatory a default option for mandatory labour-market pensions can be designed so as to ensure a reasonable pension scheme including essential insurance elements

This report is the Committee's answer to this question. The report provides a brief overview of the Danish pension system (Part II) as well as an overview of the factors of significance to pension savings as well as the composition/payment profile of pension savings (Part III). Part IV describes the structure of labour-market pensions in relation to investments, payment structure, including insurance elements, and options. Part V examines issues on knowledge about and interest in pension matters to give input on reflections by the Committee on a possible generic product for labour-market pensions; a basic pension. Recommendations by the Committee (Part VI) are divided into three parts: 1) Recommendations for the composition of a basic pension (pension and insurance product) in labour-market pensions. The product must be simple and transparent, include a minimum of required options and provide adequate coverage for "passive" members, 2) general recommendations for the pension sector, and 3) recommendations for the political system.

Due to limitations in time and resources, the Committee has not been able to make a detailed analysis of the structure and composition of all labour-market pension schemes in terms of investment policy, savings products and insurance options, as well as any possibilities for members to opt-in and opt-out of these dimensions. To create a more specific overview of the situation, a

questionnaire survey was carried out among the ten largest pension funds. See Annex II for a list of the participating pension funds and the questionnaire.

The Committee has been composed of:

Torben M. Andersen, Chairman, Professor, Aarhus University
Torben Möger Pedersen, Managing Director, PensionDanmark
Cristina Lage, Managing Director, Unipension
Peter Melchior, Executive Director, PKA
Lars Rohde, Managing Director, ATP, (Arbejdsmarkedets Tillægspension)

The work of the Committee was assisted by the secretariat of the Money and Pension Panel by virtue of Morten Holm Steinvig, Mette Scharling Tollestrup and Anne Marie Dahl Vestergaard. The Committee would like to thank Joachim Borg Kristensen (DREAM) for data assistance, Ole Beier Sørensen (ATP) and Nynne Bonke (ATP) for extensive analysis and calculation work for the Committee as well as Jens-Christian Stougaard (PensionDanmark) for input to this report.

This report is also available in PDF at the website of the Money and Pension Panel www.ppp.dk

II. The Danish pension system

II.1. A few basic facts

The Danish pension system comprises three pillars:

- Public pensions financed through taxes (public pension)
- Labour-market pensions
- Private pension savings

The public pension includes a basic amount, supplement and supplementary pension benefits. Furthermore, there are a number of age-dependent supplements. Today, all Danes are entitled to receive a public pension from the age of 65, if they are not receiving a high earned income and also meet the residence requirements [1]. Moreover, Danes receive *Arbejdsmarkedets Tillægspension* (supplementary labour-market pension) and *Lønmodtagernes Dyrtidsfond* (another supplementary pension, which is being phased out).

Supplements and supplementary pension benefits *(ældrechecken)* depend on income situation and financial circumstances. Pension amounts are regulated in relation to wage rate developments.[2][3]

ATP is a compulsory pension scheme for wage earners[4] and recipients of transfer incomes. A fixed monthly contribution is paid, depending on working hours. It is possible to receive ATP from the age of 65.[5]

Labour-market pensions are agreed as part of an employment relationship or through collective agreements between the social partners. Both in the public sector and for the LO/DA area, labour-market pensions are agreed by collective agreement. In the private market outside the LO/DA area, some undertakings have entered into agreements on a labour-market pension scheme. Labour-market pensions have been gradually improved in recent years. In 1991, labour-market pensions were introduced for the LO/DA area and in several stages, contribution rates were

[1] In order to gain full entitlement to receive the publicpension, pensioners must have resided in Denmark for 40 years between the ages of 15 and 65. In the case of shorter residences, the state retirement pension is paid proportionally.
[2] This adjustment is carried out relative to increases in annual wages two years earlier, according to wage statistics from the Confederation of Danish Employers. If the rate of increase exceeds 2%, 0.3% is allocated for the adjustment pool.
[3] According to the Tax Reform Agreement between the Danish Government, Denmark's Liberal Party and the Conservative People's Party in June 2012, transfers in the period from 2016 to 2023 will be adjusted less than what corresponds to the wage adjustment so that, on average, they are only adjusted by changes in prices.
[4] Wage earners employed in the period from 1977-79 also receive a pension from LD pensions.
[5] With adjustments of ATP contributions for persons who receive different types of transfer incomes, groups on transfer incomes for shorter or longer periods of time are also ensured that they can sustain a supplementary contribution for old-age (ATP).

augmented to the current minimum 12% of gross pay. Contribution rates were also increased in other areas where labour-market pensions had been introduced earlier. For example, the contribution rate is 17% for people with tertiary education in the public sector, although not all wage elements/supplements release pension contributions. Finally, many public employees are entitled to receive civil servant retirement pay. The Danish pension system has not yet been completely phased in,[6] as this would presuppose a full working life with pension contributions at the contribution rates stated above.

Labour-market pensions are typically composed of an annuity, pensions payable in instalments and capital pensions, and also different insurance covers may be linked to these. See Part IV for a more detailed description of labour-market pensions.

Corporate pension schemes are also part of pillar II of the pension system.

Private pension savings comprise other savings (voluntary savings) as well as savings in pension savings schemes in banks and insurance companies.

The early retirement scheme is a supplementary scheme based on contributions, which enables early retirement from the age of 60. The early retirement scheme is a hybrid in the pension system, as it is financed through taxes and based on contributions.

Statutory ages in the pension system (for public pensions and for early retirement, and age limits for payment of funds from pension schemes) are established by legislation and thus regulated at political level. In connection with the Welfare Agreement (2006) and the Retirement Reform (2011), these statutory ages were increased, and, in the longer term, it was decided to tie them to developments in life expectancy. The statutory retirement age for public pensions will be raised by six months every year from 2019 to 2022, when it will culminate at 67 years. At the same time, the early retirement age will be raised by six months per year from 2014 to 2017. In 2017, it will be possible to qualify for early retirement at the age of 62 and receive early retirement pay for five years. In future, the early retirement period will be reduced from five to three years by gradually raising the early retirement age from 2018 and up to 2023. In 2023, it will be possible to qualify for early retirement at the age of 64 and receive early retirement pay for three years. When these changes have been completely implemented, the early retirement age and the normal retirement age will follow developments in life expectancy, in accordance with a yet to be detailed pension index rule[7].

Tied pension savings are tax-privileged. Contributions are tax-deductible (according to regulations for different forms of pension schemes and up to specific thresholds) and are taxed as personal

[6]Collective bargaining rounds from 2007 and onwards have focused on closing the gaps in contributions by adjusting the time when pension contributions are to be paid (short or no waiting period), reducing the age limit to the now usual 18 years, reducing the duration of contributions for wages and pension during maternity leave, illness and children's first (and second) sickness day.

[7] The benchmark of this rule is that the average pension period must be 19½ years.

income when paid out[8]. In some cases, the tax payable when paying contributions may be higher than when the pension is paid out. The regular return on capital is taxed at 15% in the period of commitment as well in the payment period, which means it is lower than tax on capital income. However, such tax conditions should be seen in the context of income and asset dependency in the public pension (the supplements) according to which private savings are offset in the amount of the public pension, see Part II.[9]

The many elements of the Danish pension system serve several purposes. The public pension actually forms the foundation of Danish pensions, i.e. it represents the minimum income that all pensioners are ensured independently of any labour-market pension or other private savings. Supplements are dependent on income and wealth and they target public pensions to economically disadvantaged pensioners. Therefore, public pensions play a very important role in terms of distribution. Labour-market pensions depend on the extent of work and income during the economically active years. High employment rates and income result in high contributions and thus high pension savings, and thus in turn high consumption opportunities as a pensioner. Labour-market pensions therefore play a decisive role in ensuring that the consumption opportunities of pensioners are proportional to the possibilities prior to retirement. Compulsory labour-market pensions ensure that a large group of people save up for their pension. Finally, voluntary private pension savings give individuals the opportunity to ensure a higher pension for themselves than that which follows from compulsory public pensions and labour-market pensions.

Public pensions and labour-market pensions differ from each other in several ways. Public pensions are financed through taxes, and are generally regularly financed in the general public budgets. They are not funded but financed on a pay-as-you-go basis. Through payment of various taxes[10], economically active persons ensure that there is a basis for payment of pensions at all times (and financing for other public expenditure). Benefits in the public pension system are paid throughout life (from the date age conditions are met)[11]. For the individual, the right (access, amount, etc.) to a pension is laid down in the relevant regulations (defined benefits). Pensions may be changed at political level and are therefore subject to political risk.

Conversely, labour-market pensions are characterised by defined contributions. Contributions are ascribed to an individual account in a funded scheme. For given pension contributions the return

[8] After the 2012 Tax Agreement, contributions to capital pensions are no longer deductible for tax purposes. This includes supplementary lump-sums from pension funds; and they have been replaced by a new pension scheme in which contributions are not tax-deductible and where payments are not taxable. Existing capital pensions may be transferred to the new scheme in exchange for paying taxes earlier.

[9] The Danish Economic Council (2008) has calculated the combined effects of taxes on pension savings, as well as the effects of offsetting via public benefits, and has found that the net effect of certain income segments for the two elements is close to zero. See also Parts II and III.

[10] Tax payments are not necessarily made when the income is earned, but the basis for tax payments is income earned as an economically active person. At the same time, there may be derogations from current financing through public budget deficits/surpluses.

[11] There is also an implicit insurance policy in the form of access to public healthcare, nursing etc.

determines the level of the future pension. Thus, there is a market risk linked to the return on savings and thereby the size of labour-market pensions. Typically, labour-market pensions are linked to insurance products and thus certain collective elements, and there are more detailed rules laying down pension commitments etc., see Part IV.

In Denmark, public pensions are adjusted in relation to wage rate developments[12] which means that welfare increases for economically active persons are reflected in pensions. For private pensions, the return includes compensation for expected price increases, but the purchasing power for a given paid out nominal pension depends on developments in consumer prices.

In a societal context, a pension system based on several pillars has the advantage that financing is divided between tax financing and private financing. This makes the system more robust. In particular, the structure of labour-market pensions greatly relieves public finances compared with an alternative in which the same pensions cover is secured through the public system.

The combination of the three pillars in the pension system ensures that distributional concerns are addressed, as well as providing most people with good pensions cover after retirement from the labour market. A general labour-market pension system rather than firm-specific funds (as in many other countries), provides a better overall risk distribution in addition to underpinning labour market mobility. The Danish pension system meets the recommendations for a pension system set by the World Bank (1994) to ensure fair coverage for the individual as well as robust financing.

As a large proportion of pension savings are compulsory for the individual, the responsibility for ensuring appropriate pensions is shared between politicians, the social partners and the individual. Through the public pension, politicians are responsible for ensuring a fair basic pension for everyone as well as for ensuring adaptation to changes in demographics, including not least increased life expectancy. The public pension system, as laid down by the most recent reforms (the Welfare Agreement and the Retirement Reform) taken as given in the following. The structure of labour-market pensions is discussed in relation to the overall goals of the pension system, as well as in relation to political intentions to ensure later retirement from the labour market in line with increasing life expectancy and the possibilities of flexible withdrawal from the labour market.

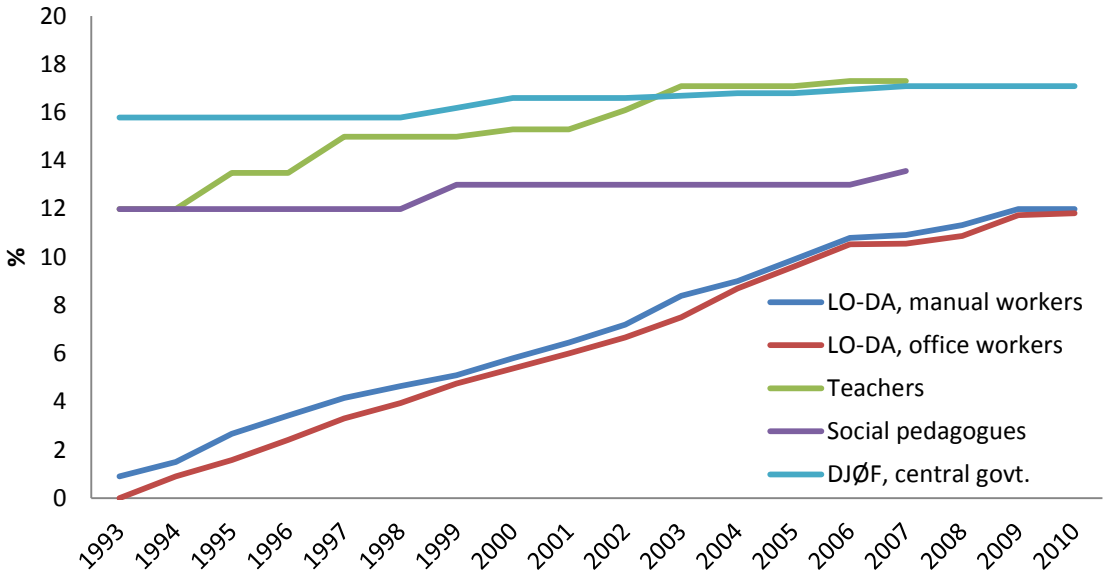
II.2. Trends in pension savings

Most labour-market pension schemes are still being developed and matured; for a number of years, pensions will not be payable on the basis of contributions paid at the current contribution rates throughout an entire working life. For example, since 2009, the contribution rate has been

[12]This adjustment is on the basis of wage rate developments in the private sector; however, such that in the event of wage increases of more than 2%, adjustment of transfers is 0.3% lower than wage rate developments. However, according to the Tax Reform Agreement of June 2012, adjustment will correspond to price developments in the period from 2016-2023.

12% for the LO/DA area. In 2012, with the current contribution rate, a 25 year-old (born in 1987) will thus not have paid contributions[13] for 45 years until 2057. Generally, with the current contribution rates, labour-market pension systems will not be fully phased in until 40-50 years from now. Thus, for several years onwards, there will still be people who retire after a long working life with a relatively modest labour-market pension. The trend in contribution rates for some main areas is shown in figure II.1. In 1984, the average contribution rate (total pension contributions in relation to total earnings) was about 4% and about 11% in 2010 (see Cramp et al. 2012).

Figure II.1 Contribution rates for labour-market pensions



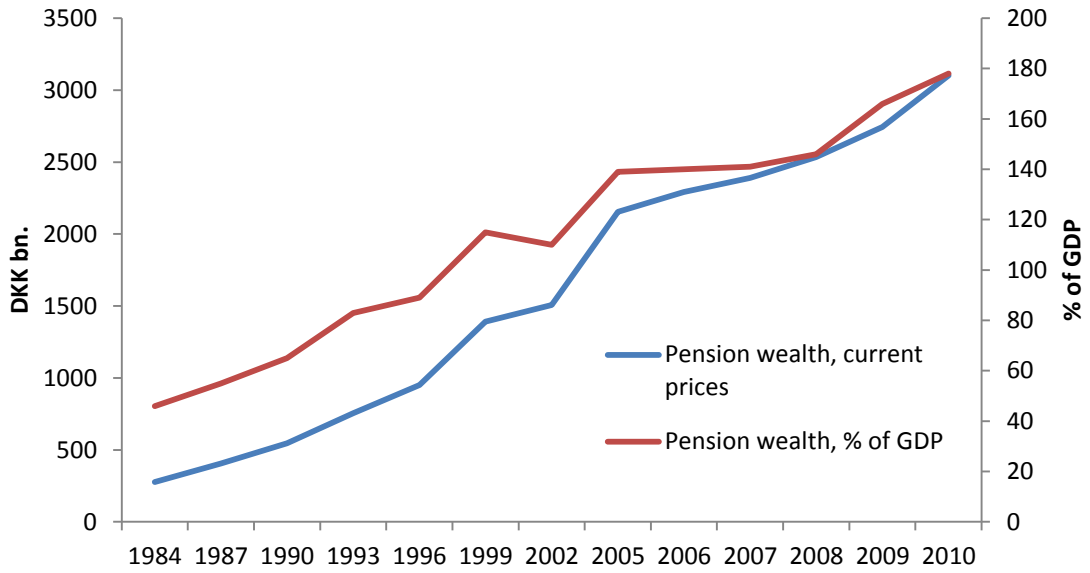
Source: Danish Economic Councils, 2008

In 2010, about 2.8 mill. people were in employment, and about 2.1 mill. paid contributions to a labour-market pension (80%). 90% of the population aged between 16 and 66 paid contributions to ATP. Just under 1 mill. people also paid into a private pension scheme (35%). In line with increases in contribution rates and many people in the age groups paying contributions, in recent years total pension assets have increased considerably, see figure II.2. At the end of 2010, pension assets came to just under 180% of GDP. With a fully phased in labour-market pension system at

[13] This is difficult to calculate more accurately as the retirement age follows developments in life expectancy. In 2055, with the most recent projection of the population in DREAM, the retirement age will thus be 72.5 years, according to the Economic Council (2012).

the current contribution rates, assets in % of GDP will increase by 60 percentage points over the next 30 years.

Figure II.2: Pension assets, 1984-2010

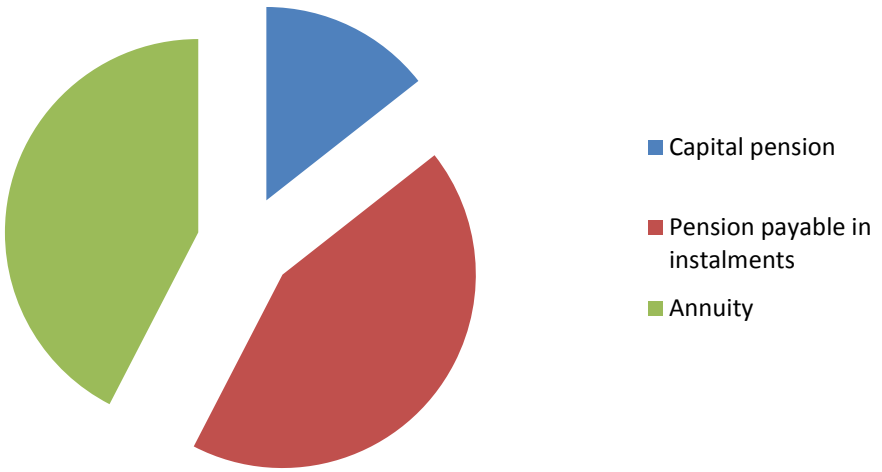


Source: Danish Ministry of Taxation, www.skm.dk

In 2010 total contributions to pension schemes totalled about DKK 100 bn., of which more than 40% was for pensions payable in instalments, more than 40% for annuity products, and about 15% for capital pensions, see figure II.3. In recent years the relative significance of pensions payable in instalments has increased, whilst the significance of capital pensions has fallen.[14]

[14] When interpreting these figures, the option at the date of retirement of converting e.g. pensions payable in instalments to annuities should be considered. Changes in tax regulations are also of great importance to the composition.

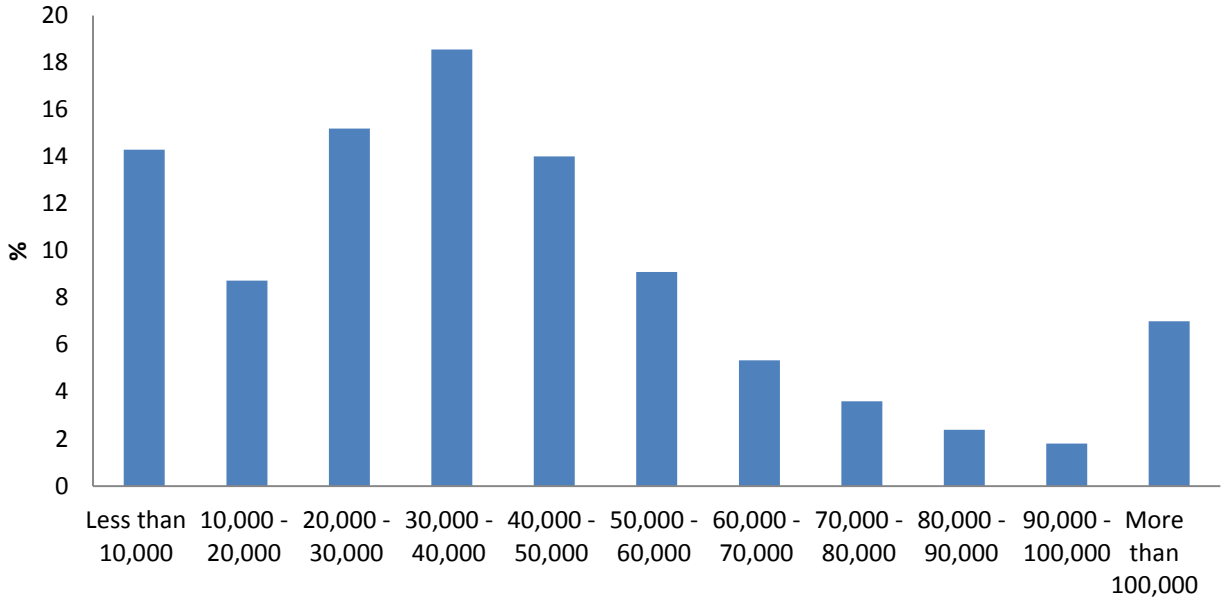
Figure II.3: Distribution of pension contributions 2010



Source: Danish Ministry of Taxation, www.skm.dk

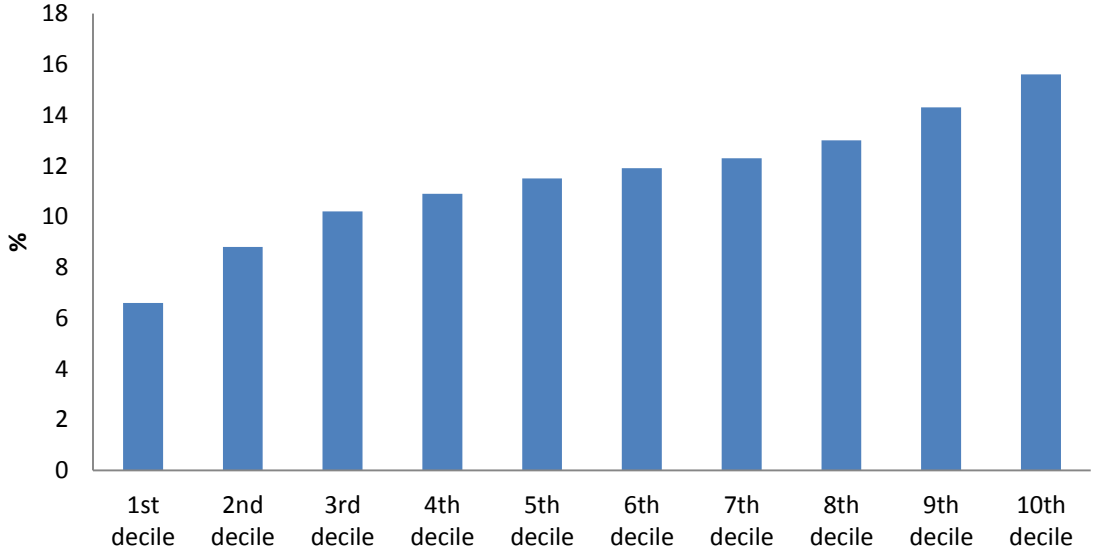
Despite the increase in average contribution rates, there is still a great spread in contributions for pension savings. Figure II.4 shows the distribution of amounts paid for persons who have contributed to a pension scheme, and Figure II.5 shows how pension savings as a percentage of income have varied according to income distribution. A large group of people continue to pay relatively small contributions for their pensions, and contributions as a percentage of income increase in line with income. Note that moderate contribution rates for people on low incomes (typically people without significant labour-market earnings) are not tantamount to equally low pensions coverage, as public pensions are targeted at these economically disadvantaged pensioners (see below). Note also that the figure only includes people who make pension contributions and therefore people not making contributions are not included.

Figure II.4: Distribution of contributors to pension schemes according to amounts paid in, 2009



Note: Number of contributors in the given interval based on all contributions to pensions in 2009; 2,040,000 persons.
Source: Danish Insurance Association, www.forsikringogpension.dk/Presse/statistik og analyse

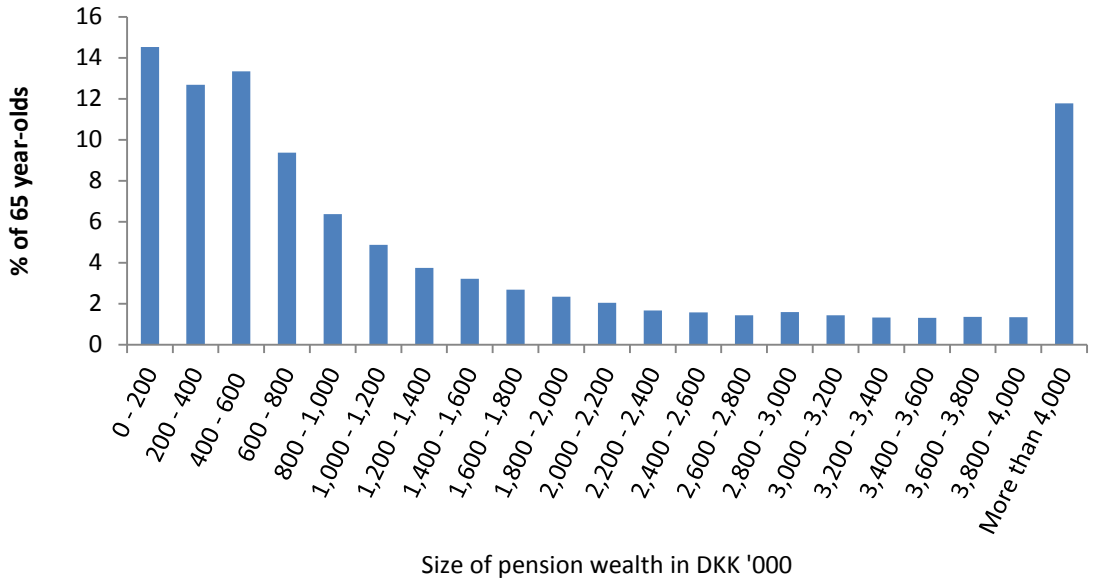
Figure II.5: Pension contributions, % of income, 2009



Note: Income deciles are calculated on the basis of disposable income. The pension contribution rate represents total pension contributions as a percentage of adjusted gross income. Total pension contributions make up contributions for schemes administered by employers as well as private schemes. The adjusted gross income represents all income (except for income from shares) less contributions to private pension schemes.
Source: Danish Insurance Association, www.forsikringogpension.dk/Presse/statistik og analyse

The difference in pension savings is mirrored in large differences in the size of pension assets for 60 year-olds, see figure II.6. A large number of 60 year-olds only had moderate pension assets; however, with the development of labour-market pensions, in future, the size of this group will decrease.

Figure II.6: Pension assets for 60 year-olds, 2009, DKK '000



Source: Danish Insurance Association, www.forsikringogpension.dk/Presse/statistik og analyse

In future, the level and distribution of pension savings will change considerably as more people will have contributed to their pension savings over a longer period of time as labour-market pensions are phased in. However, there will still be a group with no or relatively modest pension savings; a "residual group".

Skaarup (2010) assesses issues relating to the residual group based on these three definitions: 1) Persons with a contribution percentage of gross income of less than 50% of the median contribution percentage. In 2007, this corresponded to a contribution percentage of less than 4.4%. 2) Persons contributing less than DKK 6,500 per year (2007 level). This amount corresponds to 6% of the benefit level for single (non-provider) recipients of cash benefits. 3) All persons making total pension contributions of DKK 0. A snapshot based on 2007 data shows that, according to all three definitions, one-third of all persons between 18-59 years-old belong to the residual group. However, this means that the issues relating to the residual groups are significantly over-estimated, as many people in the younger age groups are still undergoing training and education, and as there may be variations in pension savings for other groups from year to year. Based on an assessment of 25-29 year-olds, about 30%, 26% and 20%, respectively, belong to the three residual groups. Considering full-time employed wage earners alone the share is 13%, 9%

and 5%, respectively. The residual group has been falling and is likely to continue to fall as labour-market pensions are further developed.

Finally, note that particular issues with the residual group exist in relation to pensions for immigrants. This is due to low average participation rates, shorter periods on the labour market, as well as fractional public pensions linked to period of residence (see e.g. Andersen og Borchsenius (2011)).

Issues with the residual group are also linked to people with no or very modest labour market attachment, employment in areas with no or moderate pensions coverage, as well as self-employed people. Whether this group should have better cover is a political issue.

II.3. Replacement in the Danish pension system

The replacement rate is a central parameter for the pension system, i.e. the size of the pension seen in relation to the income received as an economically active person. The idea is that the possible material living standards of pensioners should be compared with the living standards of an economically active person. The closer the replacement rate is to 100%, the closer pensioners are to having the same consumption opportunities as an economically active person. This means that withdrawal from the labour market will not entail substantial changes in terms of economic opportunities. Unchanged living standards can usually be achieved with a replacement rate of less than 100%, partly because of lower costs for work participation, and partly because of access to consumer durables. Furthermore, consumption wishes and needs may depend on age, see Part III.

However, it may be difficult to calculate these degrees of coverage. The calculation assumes an accurate calculation of the disposable income of a pensioner and an economically active person. However, the disposable income is not representative for actual consumption opportunities, which also depend on assets, wealth etc. Typically replacement rate is calculated on retirement (e.g. at 65). This calculation might be misleading for the pensions coverage, as the pension is to cover the rest of a person's life, and as a high replacement rate on retirement (e.g. through capital pension or pensions payable in instalments over a shorter term) is no guarantee for a high cover throughout life.

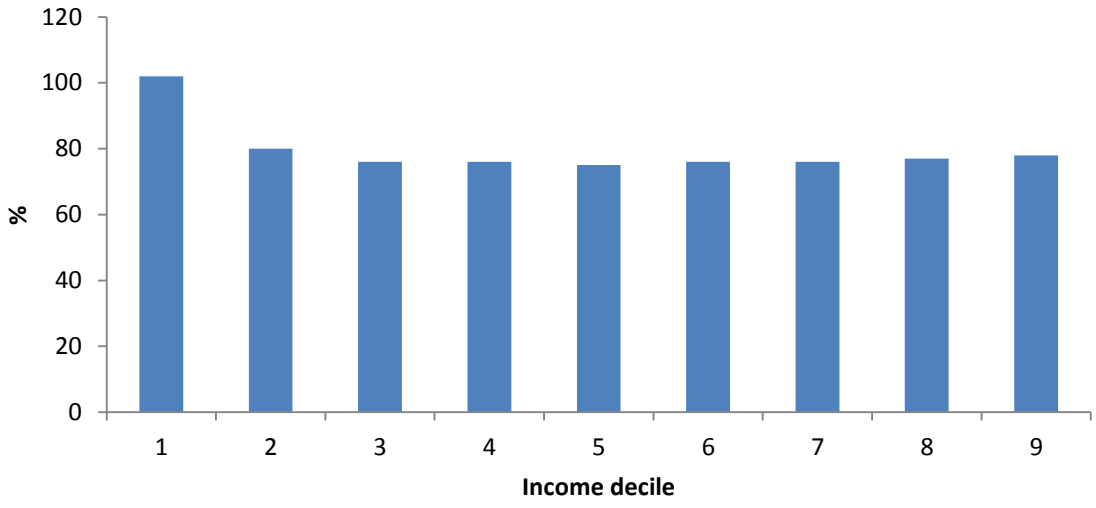
Furthermore, it is debatable whether the pension should be seen in relation to income just before retirement or in relation to income over a longer period of time before retirement. Alternatively, the pension could be seen in relation to the income of the economically active persons, and thus developments in living standards for the economically active. Wage rate developments actually show something about the relative position of the pensioner in terms of distribution (here the relative position is usually used, see e.g. poverty lines defined as income of less than a certain percentage of the median income). To assess developments in the purchasing power of the pension, and thus possible material living standards, it is relevant to assess the pension in relation

to price developments (inflation). Thus, there is a difference in ensuring an unchanged purchasing power and an unchanged relative position (wage increases are typically higher than price increases).

The replacement rate is a relative goal and therefore, a high replacement rate may be linked to a low absolute pension if earned income is modest, and conversely, a low replacement rate may denote a high absolute pension for people with very high earned incomes. The degrees of coverage may be calculated before (gross) and after (net) tax; a post-tax calculation based on disposable income best reflects consumption opportunities[15]. For calculations of degrees of coverage in the Danish pension system, see also the Economic Council (2008) and the OECD (2011).

The structure of the pension system currently generates large differences in level, spread and composition of the degrees of pension coverage. As a point of departure, the current net replacement rate is around 75 for most income groups but higher for the lowest income groups, see Figure II.7 (see similar calculations in e.g. the Economic Council (2008), Jørgensen (2008), the Ministry for Economic and Business Affairs (2010), Nielsen (2011)). The reason for high degrees of coverage (often close to 100%) for people with low incomes is that public pensions are often at a par with transfer incomes.

Figure II.7: Net replacement rate for public pensioners at 66-67, 2010



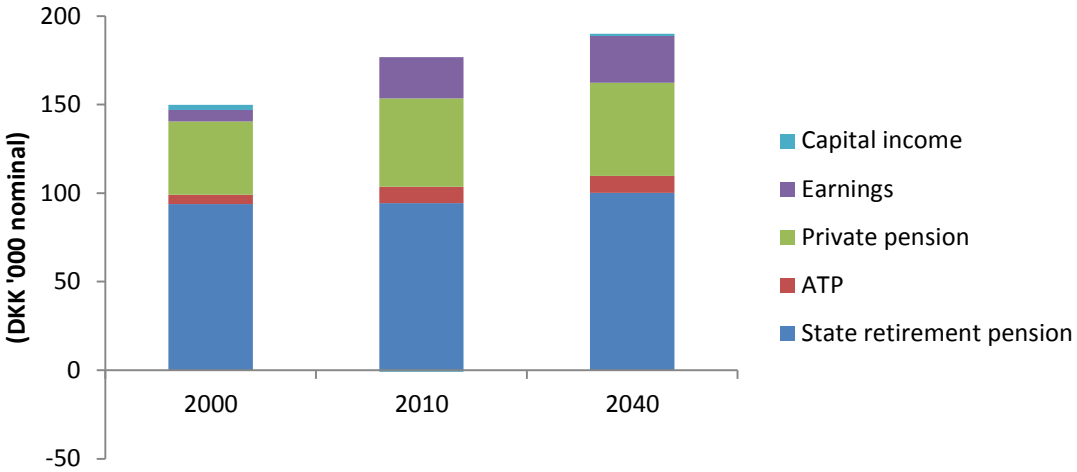
Note: The net replacement rate is calculated as the relationship between disposable income for 66-67 year-olds in 2010 and disposable income for 58-59 year-olds in 2002. Incomes for 2002 were indexed forward using the consumer price index. This calculation only includes persons who received a public pension in 2010. Furthermore, the calculation excludes persons without

[15] It is debatable whether the pension should be seen in relation to annual earnings just before retirement or in relation to income over a long period as an economically active person.

significant earned income in 2002, including disability pensioners. The calculation also excludes the upper decile for disposable income and earned income in 2002, respectively, and the first decile of negative earned income.
Source: ATP for the Committee.

Because many pension schemes are currently being phased in, see the above, there will be a tendency towards increasing pensions and towards a changing composition of the overall pension. Figure II.8 shows the projection of average income for 65+ year-olds as well as the composition of such income. There will be a significant increase in income, and higher private savings are instrumental in this development.

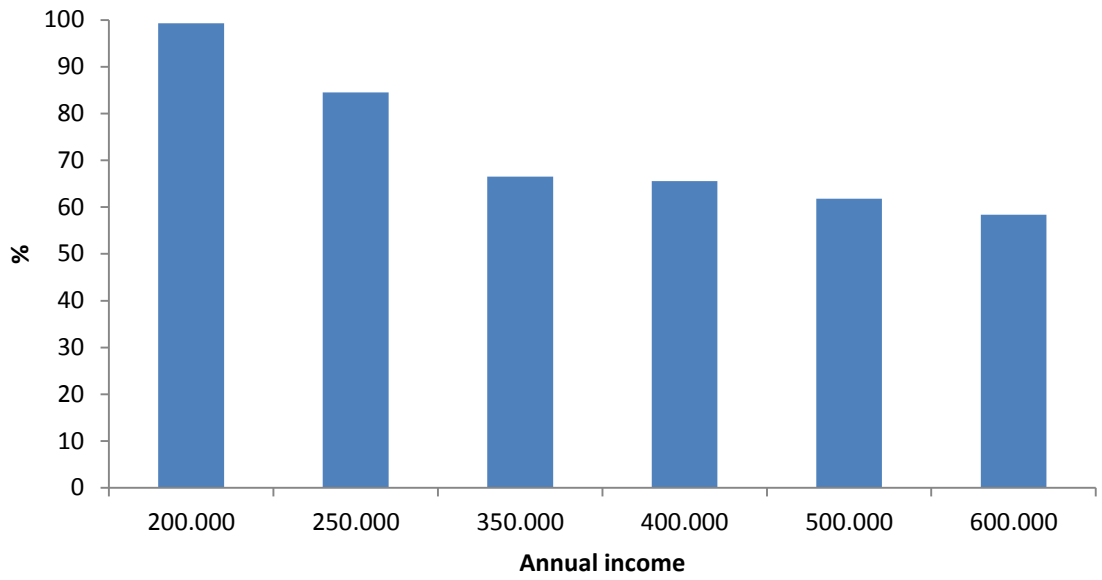
Figure II.8: Average taxable incomes of 65+ year-olds, level and composition, 2000, 2010 and 2040



Source: ATP, Statistics Denmark and DREAM (special run for ATP 2010).

Figure II.9 gives an indication of the degrees of coverage secured through public pensions and labour-market pensions (pillars I and II) with a fully developed pension system. Average degrees of coverage will then be between 60% and 80% for most labour-market groups. As mentioned, only public pensions and labour-market pensions are included in these figures, and therefore the total degree of pension coverage will be higher for people with private savings. As discussed in more detail in Part IV, the degrees of coverage are highly sensitive towards trends in returns and life expectancy, and the figures in Figure 11.9 are only estimated.

Figure II.9: Net replacement rate of public as well as labour-market pensions, fully implemented labour-market pension



Note: For a 25 year-old, annual income is excluding social security contributions and calculated at the 2011 wage level. This presupposes a work period at full-time of 40 years and thus retirement at the age of 65. The contribution rate is 12% for low-skilled/skilled workers, 15% for people with short or medium cycle higher education, and 17% for people with long-cycle higher education. Other calculation assumptions: Inflation 2%, wage increases 3% and wage adjustment of 2.7% and return (before tax) on pension savings 4.5%. Costs of 1% of assets/savings (however, no more than DKK 10,000). ATP is adjusted according to changes in wage rates. Calculated on the assumption of current taxation and pension regulations. The calculation is for an unmarried person.

Source: ATP for the Committee.

Typically, the degrees of coverage are higher for people with low incomes than for people with high incomes, while the absolute size of the pension increases in line with to income. The fact that degrees of coverage fall with income reflects the income/asset dependency of public pensions, see Part II.4.

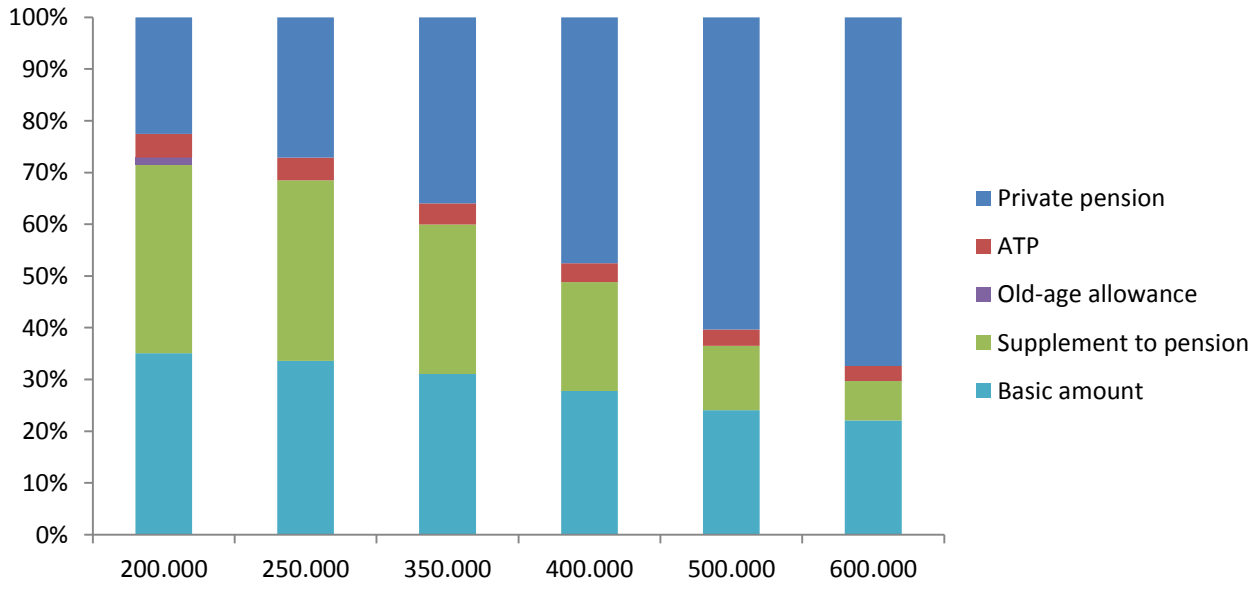
The calculations of degrees of coverage above do not take into account that consumption opportunities as a pensioner also depend on wealth. Analyses in Nielsen (2011) show that the average net replacement rate in 2009 for a 66 year-old is about 10-15 percentage points higher taking into account net wealth. However, this average figure varies greatly due to the large spread in the distribution of wealth. Calculations show an upper-limit estimate, as it is assumed that the entire savings are spent evenly during the retirement period, without taking inheritance into account. Analyses of income distribution typically include the family structure, i.e. they take into account a family's total income and the opportunities for economies of scale through shared household expenses (equivalence scales). This would mean that net wealth would only have a moderate positive effect on the net replacement rate, see Nielsen (2011).

II.4 The interplay between public pensions and labour-market pensions

The interplay between public pensions and labour-market pensions is extremely important. This is because supplements for public pensions depend on income and assets. This is mostly because of a political wish to target public pensions towards pensioners with the weakest finances.

The composition of pensions for different income groups (corresponding to the degrees of coverage in Figure II.8) is shown in Figure II.9. For persons with an annual income of DKK 200,000, public pensions (including ATP) represent about 75% of total pensions, whereas for persons with an annual income of DKK 600,000, public pensions only represent about 25%. The higher the income the greater the role of private savings for a person's pension. Figure II.10 shows that the public pension system ensures a certain minimum coverage for everyone, whilst labour-market pensions aim at ensuring a pension which is reasonable in proportion to earned income.

Figure II.10: Composition of gross replacement rate

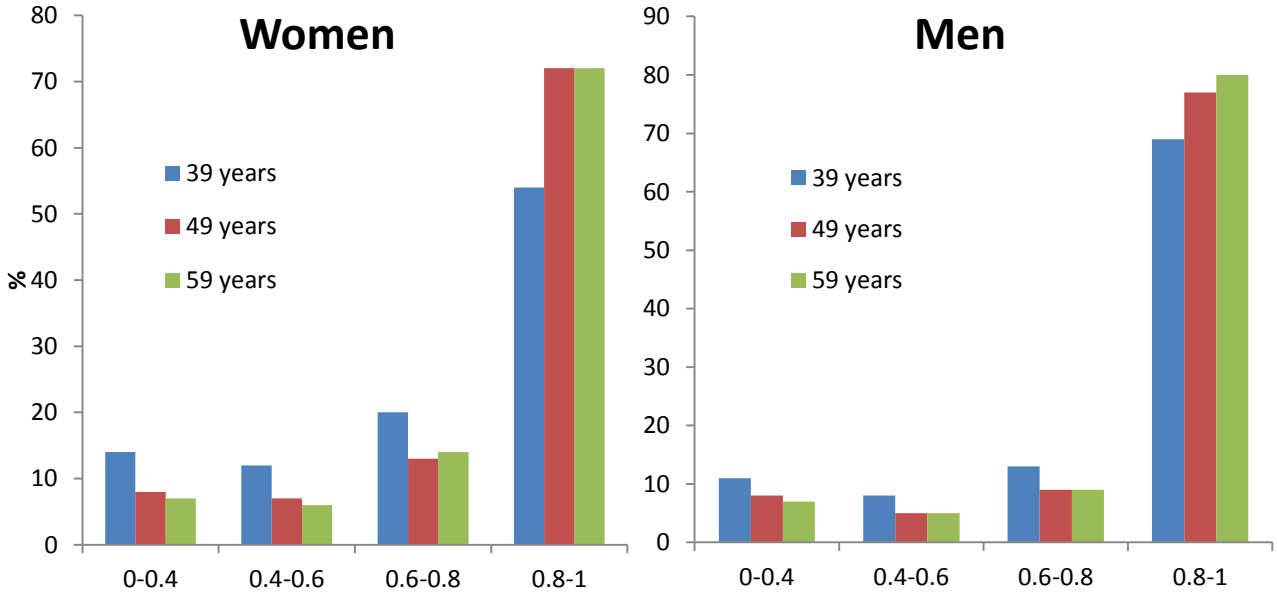


Note: see Figure II.8
Source: ATP for the Committee.

This distribution or insurance function for public pensions also appears when assessing the importance of the total pensions coverage of deviations from full-time employment and subsequently fewer contributions to labour-market pensions. At the given contribution rates, total savings in a labour-market pension depend on earned income. However, earned income depends greatly on actual labour-market participation. Voluntary or involuntary reduction in working hours during working life may thus also be extremely important for the composition of the ultimate pension, and for persons with higher incomes this also applies to the overall pension level.

Just about two-thirds have high employment rates, corresponding to full-time or near-full-time employment (80% or more over the period 2000-09), but there is a large spread, see Figure II.10. About 15% have an employment rate below 50% over the period, whereas just under 5% of 50 year-olds had been in employment for the whole period. The percentage of full-time or near-full-time employed is higher for men than for women and the difference becomes greater for both genders with age. The spread in employment rates is lower for men than for women and decreases with age for both genders. For young people in particular, employment rates vary according to the level of training and education. Young low-skilled people, women in particular, have much lower work participation than people with training and education; and people with tertiary education have higher work participation than other groups.

Figure II.11: Employment ratio in relation to full-time employment for the period 2000-09 by gender and age

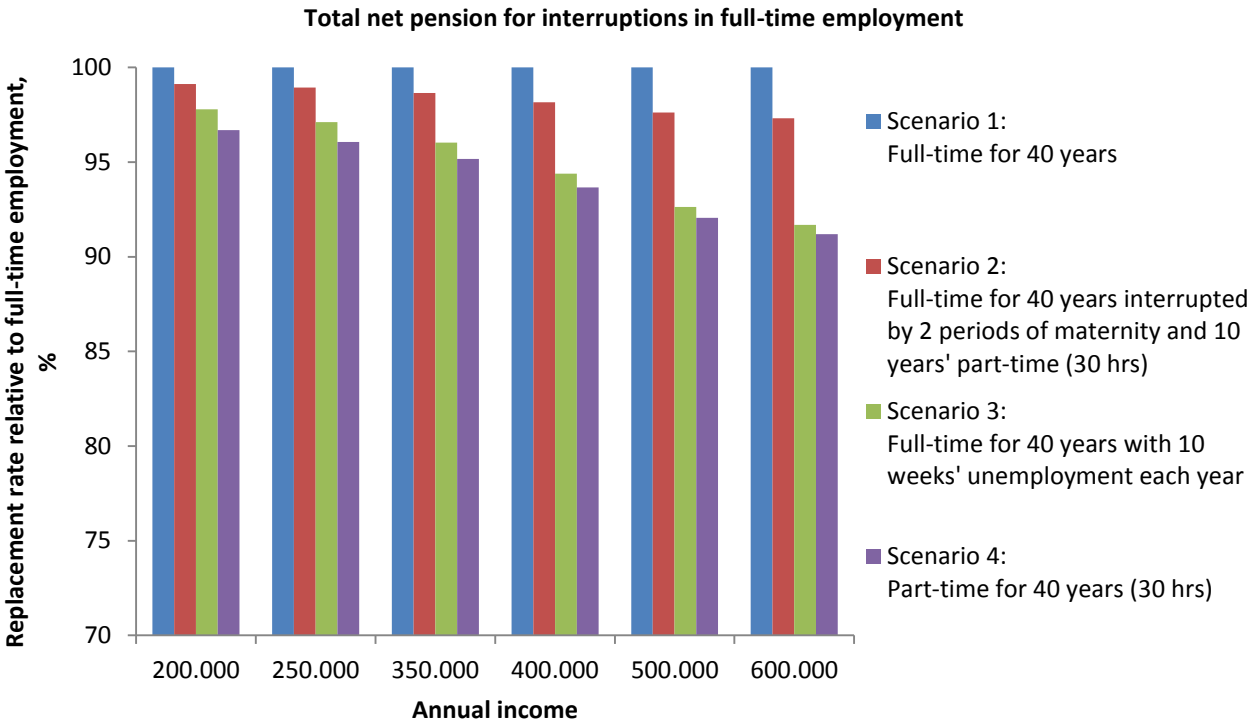


Note: The figure shows the employment rate as a percentage of the period in full-time employment. The employment rate is calculated over a 10-year period (2000-2009) and is stated for age in the final year (2009). Persons undergoing training and education as well as disability pensioners are omitted. Note that disability pensioners tend to have increasing employment rates with age.
Source: ATP for the Committee.

The design of public pensions means that fewer working hours - voluntarily or involuntarily - will only moderately reduce the total net pension. Even though deviations from full-time employment reduce contributions to labour-market pensions (maternity leave is exempt) this is largely compensated for by public pensions. The fall in net pension in relation to deviations from full-time employment increases with income. The interplay between pillars I and II in the pension system thus alleviates the consequences of less than full-time employment for the total pension, see Figure II.12. This has both an insurance as well as an incentive effect. The insurance effect arises

because pensions coverage is only slightly affected by deviations from full-time employment throughout working life (particularly for low-paid persons). However, this also means that the pension savings incentive is weakened as increased savings do not significantly affect the total net pension, see also the Economic Council (2008) and Foxman (2010).

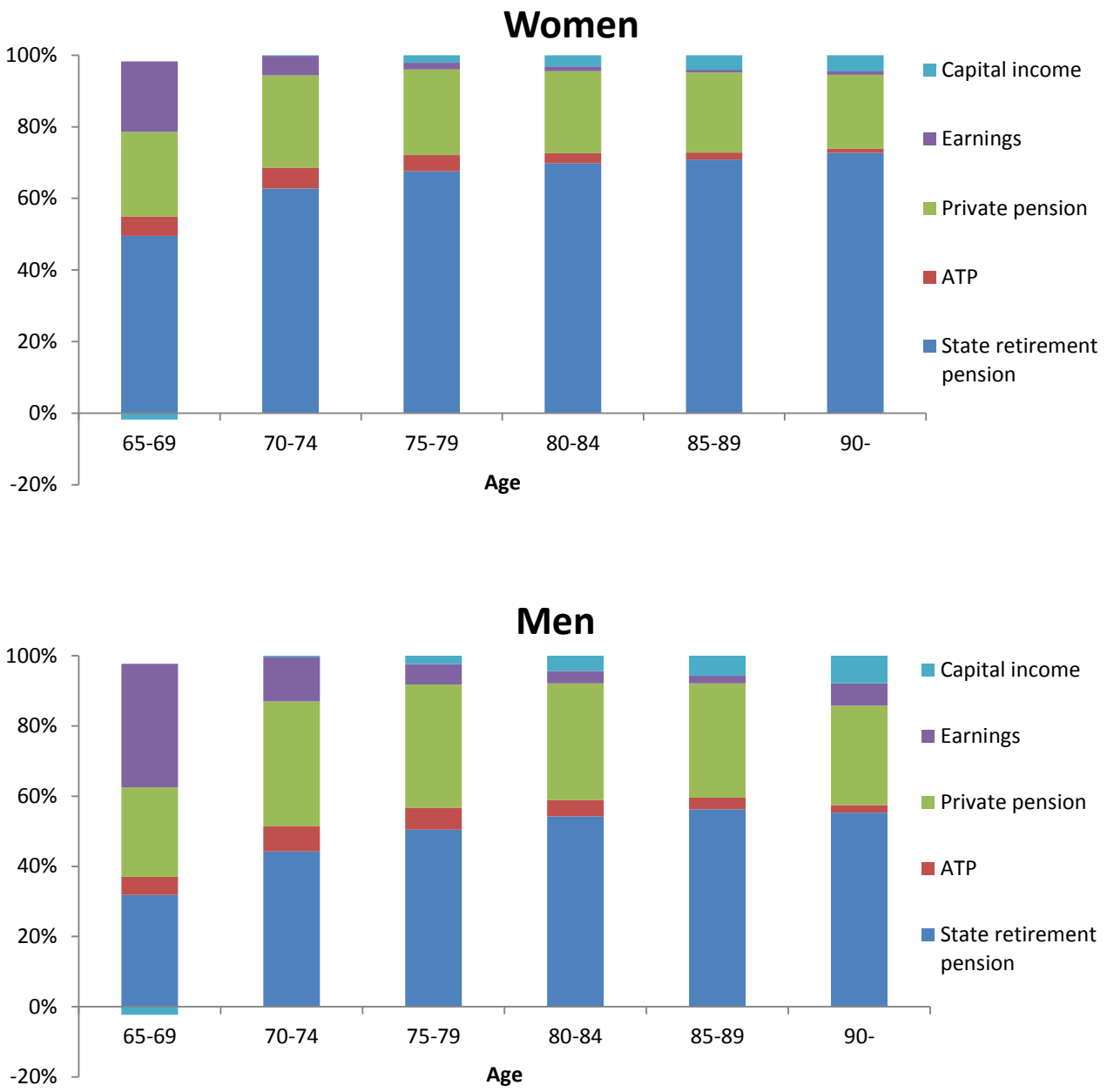
Figure II.12: Total net pension in connection with deviations from full-time employment



Note: The net pension is pension after tax. Basic situation for full-time employees as in Figure II.8. Maternity leave and temporary part-time: Full-time for 40 years interrupted by two maternity leaves as well as ten years on part-time of 30 hours. Unemployment: Full-time interrupted by ten year's unemployment. Part-time: 30 hours for 40 years.
Source: ATP for the Committee.

For most people, the relative importance of public and other pensions changes considerably with age. This is because public pensions apply throughout life and are regulated according to general wage rate developments. For private pensions, only some provide lifetime benefits, whereas pensions payable in instalments and capital pensions are paid out over a shorter period. Figure II.12 shows the composition of income depending on age for women and men, respectively. For both genders, the relative importance of public pensions increases with age. In this way, the interplay between pillars I and II helps ensure coverage of the risk of growing very old. Figure II.12 also shows that, for all age groups, public pensions play a greater role for women than for men. Among other things, this reflects lower work participation, lower wage levels, and longer life expectancy for women than for men. Figure II.13 is a snapshot, and as the pension system matures this will change. However, the main characteristics still apply.

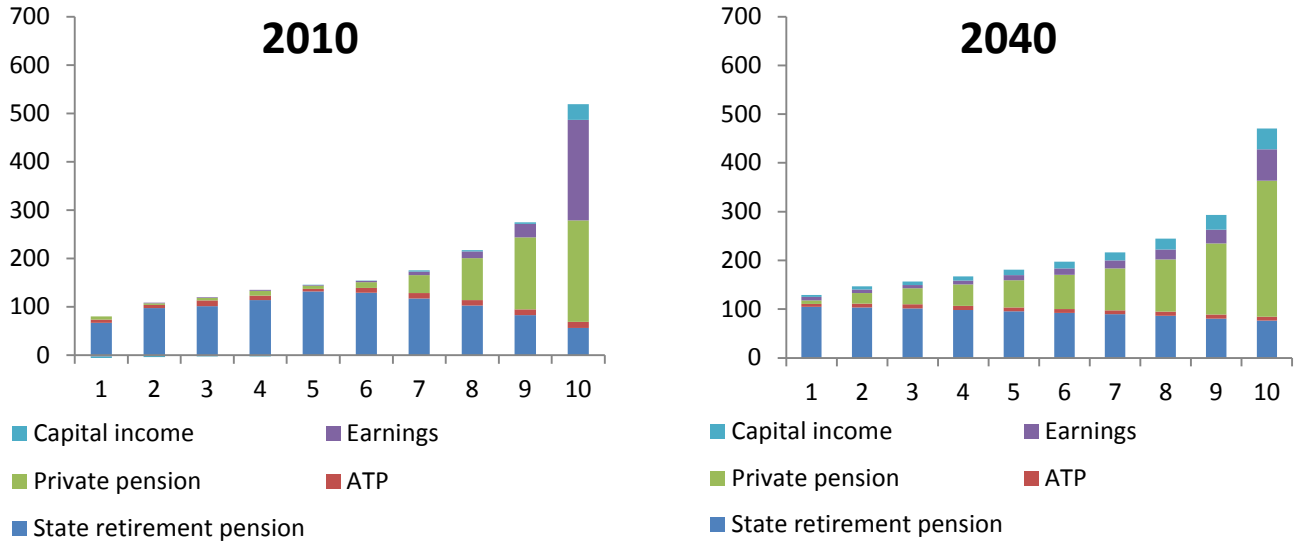
Figure II.13: Composition of income by sources in 2010, by age and gender



Source: ATP and Statistics Denmark.

This also means that there is a clear distribution profile in the relative importance of public pensions, see Figure II.14, and this will be even clearer in a matured pension system. Note that income distribution in the figure only applies to the age group 65+ and no consideration has been taken of family situation (single people versus couples).

Figure II.14: Distribution profile and composition of pensions, 2010 and 2040.



Source: ATP and DREAM.

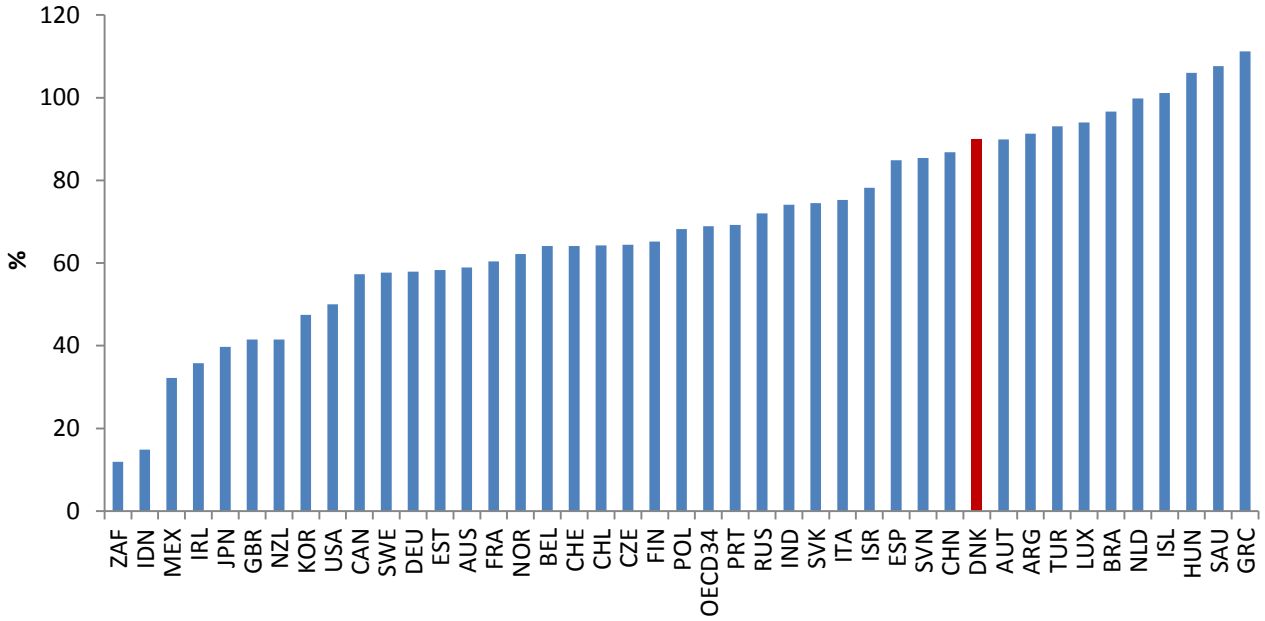
In summary, public pensions play an important role in redistribution, and the relative importance of public pensions increases with age. The redistributing effect is created through the income and asset dependency of the supplements. This creates an insurance effect as, for many people, variations in employment and income in the economically active years are not hugely important for the total pension. However, this also means that work and savings incentives diminish. Age dependency in the role of public pensions arises because more old people are single, the number of women increases with age, private pensions are less common among the oldest pensioners, and because of the lack of indexing and termination of private pensions. Even with a matured pension system, public pensions will continue to be of significantly higher importance for the oldest pensioners than for the youngest pensioners, and the importance of a public pension for the individual will become considerably more profound with age. This is because public benefits are for life and indexed according to wage rate developments, whereas private pensions are mostly front-loaded (i.e. not for life) and are either not indexed or only indexed in relation to price developments. In addition, the number of single people continues to increase with age, and women live longer than men.

II.5. The Danish pension system in an international perspective

In international comparison the Danish pension system offer quite high replacements rates. Figure II.15 shows the average replacement rate for OECD countries, and Denmark is above the OECD average. The comparison is based on current pensions and thus does not take into account that labour-market pensions have not yet been fully implemented. It should also be noted that the

figure does not show the importance of widely different retirement ages across OECD countries as well as variations in pension depending on age.

Figure II.15: Average replacement rate, OECD countries 2006

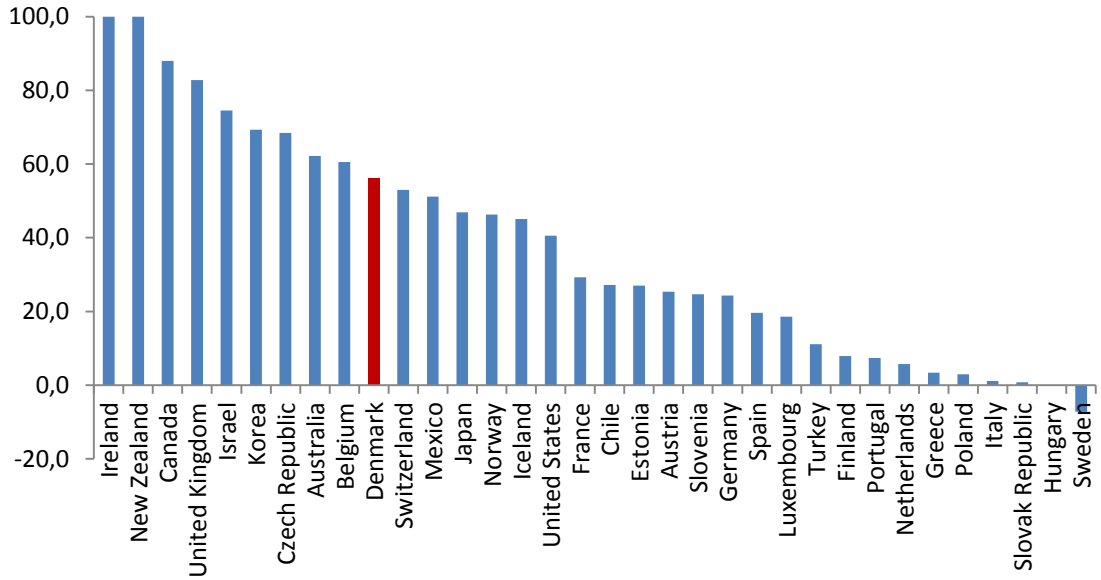


Note: The net replacement rate for a person with average earned income.
Source: OECD (2011)

The degree of redistribution through pension systems in the OECD countries is shown in Figure II.16 below. An index of 100 means that everyone will receive the same pension whereas an index of 0 implies that pensions are completely proportional to previous labour-market earnings. A pension system ensuring a certain minimum coverage for everyone, as well as pensions that are reasonably proportional to income when economically active thus "scores in the middle", as is the case for Denmark.

In international comparisons of pension systems, it is particularly important to consider the extent to which the system is economically sustainable, or whether there is a need for reform. The demographic changes described above will have great importance for pension systems in most countries. Analyses of this question show that Denmark is among the countries where reforms have helped ensure economic viability, whereas a number of other countries face much greater issues (see e.g. European Commission (2010), Allianz Global Investors (2011).

Figure II.16: Progressivity index



Note: Calculated as 100 minus the Gini coefficient for pensions. If the basic pension is the same for everyone, the Gini coefficient will be 0, and 100 if entirely insurance-based (defined contributions).
Source: OECD (2011).

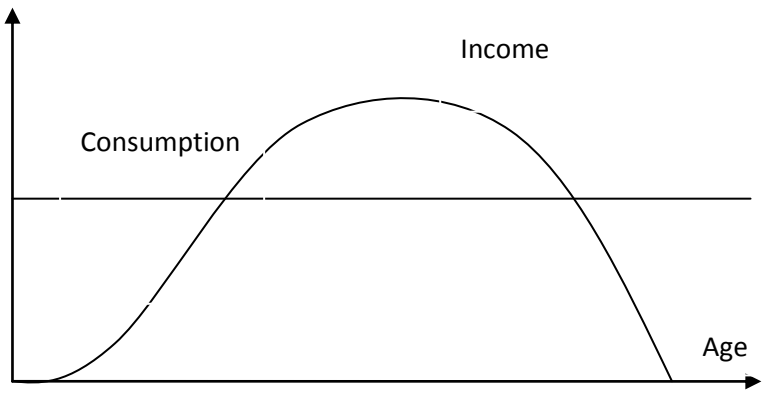
III. Consumption and savings in a life cycle perspective

In order to discuss the appropriate design of the pension system, the needs and wishes for the pensions must be identified. The following briefly discusses these matters with a few, yet central, empirical facts.

III.1 Consumption smoothing

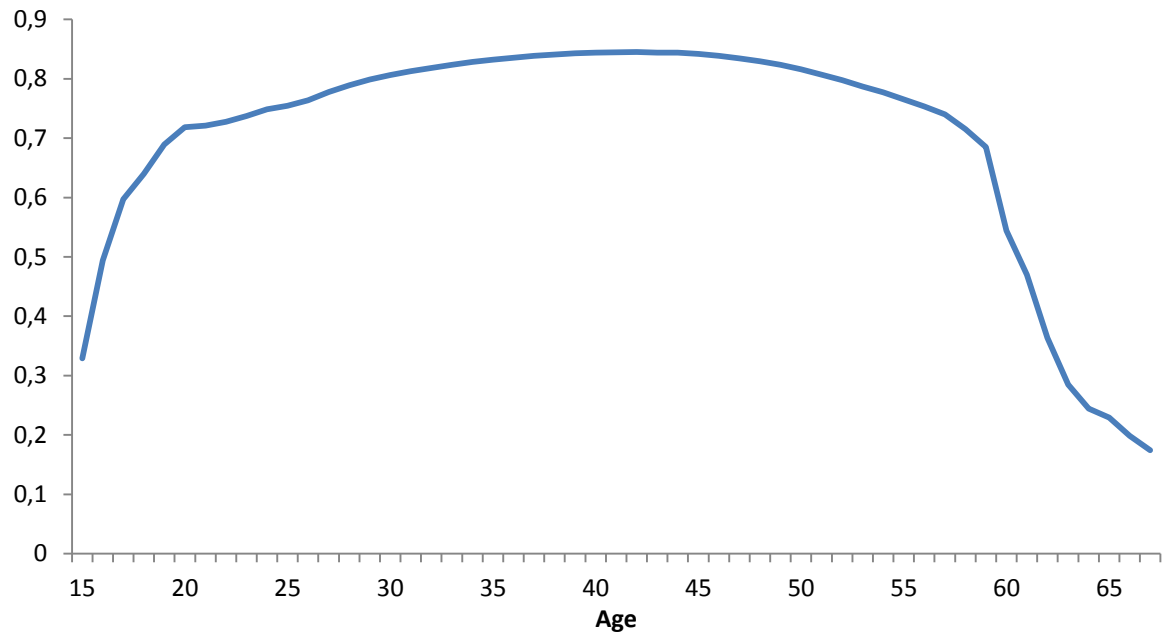
Fundamentally, the pension system is there to ensure a reasonable income after retirement from the labour market. This can be viewed from a life cycle perspective given that earnings are concentrated on the economically active years, whereas the need for consumption exists throughout life. A typical person will therefore want to spread out consumption opportunities over a longer period than the earnings period. This means that young people want negative savings (borrowing for consumption), positive savings when economically active, and again negative savings after becoming a pensioner, see Figure III.1. In other words, through borrowing, savings and equity releases (spending savings), capital markets make it possible to ensure a smoother profile for consumption than if consumption had to equal annual income Consumption during an individual year is not tied to the income for that year but, by using the capital markets, can be adjusted to total lifetime income.

Figure III.1: The life cycle model for income and consumption



Variations in lifetime earnings are reflected quite accurately in the age-dependent participation rates, i.e. the percentage of the population at a given age who are in employment. For the typical Dane, labour-market participation and thus obtaining labour-market earnings is concentrated in the age interval between 20 and 60 years old, see Figure III.2.

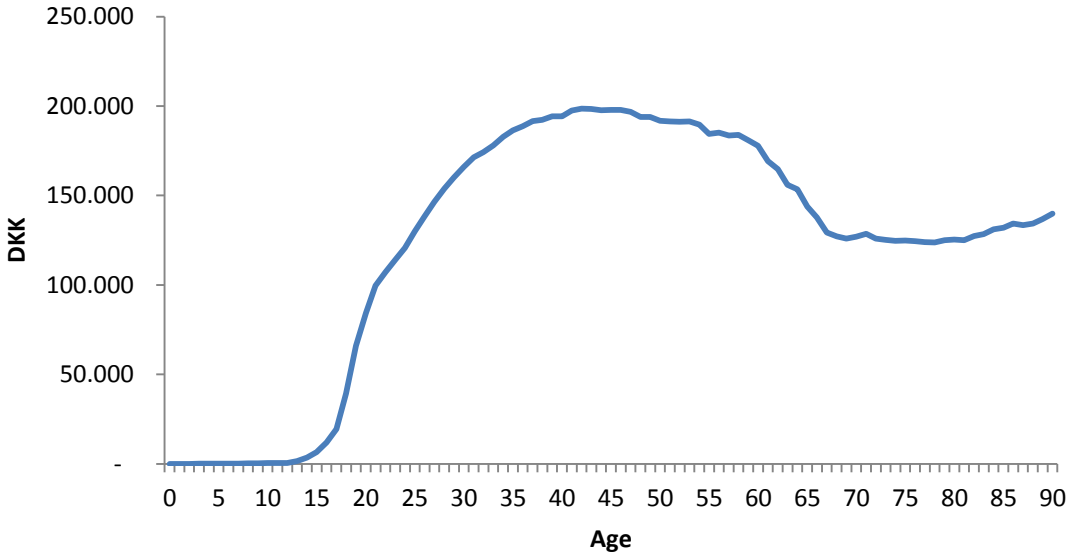
Figure III.2: Age-dependent participation rates, 2010



Source: DREAM

There is a smoothing of consumption opportunities through the public pension system as well as through pension savings. The public pension system is actually an implicit savings/insurance scheme in which taxes are paid while economically active, in anticipation of receiving a pension and other welfare services (e.g. healthcare, elderly care) after ending a career in the labour market. Private savings provide an individual right to the result of these savings, which can then finance consumption after the economically active period. This smoothing is shown in Figure III.3 which shows the average age-dependent disposable income. The disposable income is the direct consumption opportunity in a given age, and Figure III.3 shows how consumption opportunities are smoothed in relation to the concentration of labour-market earnings in the economically active years, see Figure III.2. It is not a given that the entire disposable income is consumed in the individual year, and a higher (lower) disposable income than consumption gives rise to accumulation of wealth (reduction of wealth/debt). Savings/assets provide consumption opportunities that are not shown directly by assessing disposable income, and opposite in respect of debt.

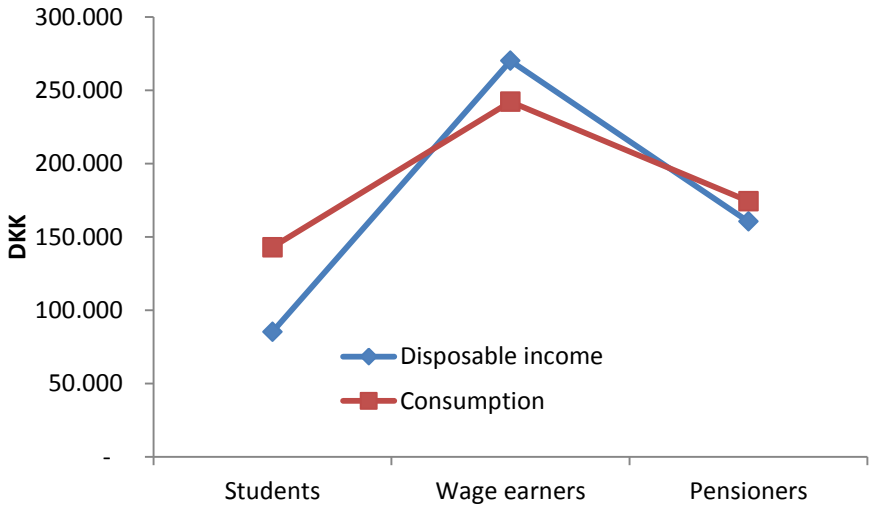
Figure III.3: Age-dependent disposable income, 2009



Source: DREAM

Specifying more precisely the different consumption opportunities (disposable income and wealth) as well as actual consumption is linked to various data problems. The simple illustration shown in Figure III.4 is based on a consumption survey showing that consumption exceeds the disposable income of students as well as pensioners, and vice versa in the economically active age (wage earner). The principle illustration in Figure III.1 is thus reflected in the actual behaviour.

Figure III.4: Life cycle developments for consumption and disposable income, 2007



Note: The numbers are average amounts for the relevant groups in 2007-prices. Wage earner is at medium level. The numbers are equivalent amounts at household level, i.e. per consumption unit in the household. Disposable income includes public transfers, capital income as well as imputed rent for freehold property. Source: Statistics Denmark (Consumption study 2010:1) and own calculations.

III.2 Retirement

It is important to consider when to retire from the labour market. Later retirement from the labour market is tantamount to higher lifetime income and thus also better consumption opportunities as a pensioner. The effect is quite important as just one year's later labour-market withdrawal increases the earnings period by one year, and reduces the retirement period by one year at the same time. A rule of thumb is that retiring one year later increases the degree of pension coverage by 4-7 percentage points. When deciding on when to withdraw from the labour market, people need to consider the value of more leisure time on the one hand, and a smaller earned income (lifetime income) and thus fewer consumption opportunities on the other. This decision concerns voluntary labour-market withdrawal. Retirement due to a loss of ability to work is another issue, see below.

The voluntary retirement decision is affected by the possibilities for early retirement as well as the combined tax rate in connection with changed retirement age. The composite tax rate includes total taxation of increases in income, offsetting pension benefits, etc. Taxation may influence incentives to retire (early) and to save (too little).

However, individuals face great difficulties in determining the financial consequences involved in deciding when to withdraw from the labour market. Later withdrawal from the labour market means higher income and more pension contributions. This, however, should be seen in relation to general taxation of income and pension investment returns, but also in relation to the indirect effects of increased savings on public benefits. The current regulations for this area are extensive and complex. Box III.1 summarises the main regulations. However, the specific regulations are very complicated, and few people are likely to know about them and thus be in a position to make an accurate assessment of the financial consequences involved in deciding when to withdraw from the labour market. As a consequence of these regulations, the combined taxation in the event of later retirement, consisting of direct income taxation, as well as derivative impacts on pension contributions from the public sector may be close to 100%, i.e. there are no financial benefits from postponing retirement. Political goals on supporting later withdrawal from the labour market render it problematic that the schemes are very complicated and difficult to understand, and that certain groups only see moderate financial benefits if they postpone their withdrawal from the labour market.

Box III.1: Taxation and public schemes linked to retirement

Early retirement: The early retirement scheme is based on contributions, and members of an unemployment insurance fund must have paid contributions for early retirement for 25 and 30 years to be entitled to receive early retirement pay. The early retirement scheme is subsidised through taxes, as the scheme is not fully financed through contributions. The early retirement scheme has been changed several times, and as a result, different regulations apply across birth cohorts, both in respect of the age at which it is possible to receive early retirement pay, and in

respect of specific regulations on the amount of early retirement payments. Generally, the size of early retirement pay depends on when a person enters into early retirement, and there is also an offsetting in other pension payments. The regulations on offsetting pensions in early retirement pay were changed in the 2011 Retirement Reform for everyone born on 1 January 1956 or later; now the general rule is to offset all tax-deductible pensions. This applies regardless of whether these pensions are paid out. Offsetting continues for the entire early retirement period.

Currently it is possible to qualify for early retirement at the age of 60. However, the early retirement age will be raised as a consequence of the Welfare Agreement and the Retirement Reform. The early retirement period is now five years but will be reduced to three years in future.

Senior jobs: Unemployed people who are over the age of 55 at the time of expiry of the entitlement to unemployment benefits from unemployment insurance funds, and who meet the conditions for receiving early retirement pay as 60 year-olds, are entitled to a "senior job".

Public pension: The basic amount is regulated if you have earned income of more than DKK 291,200 annually (2012). The public pension age is currently 65 years-old but will in future be raised as a consequence of the Welfare Agreement and the Retirement Reform. In Denmark, payment of the basic amount is subject to requirements regarding period of residence.

Supplement to pension[16]: The supplement to public pension is targeted at the most economically disadvantaged pensioners and is therefore regulated according to personal income in addition to a special basic allowance (DKK 30,000 in 2012). The supplement depends on marital status. For single people the supplement is reduced by 30.9% of income exceeding DKK 64,300 (2012) and therefore lapses in connection with annual income of DKK 294,600 (2012). For cohabitants, the supplement is reduced by 16% in connection with total annual income exceeding DKK 128,900 (2012) and therefore lapses in connection with annual income exceeding DKK 343,900 (2012).

Supplementary pension benefits: Supplementary pension benefits are paid out to public pensioners, and this amount is reduced in relation to income or assets over a certain threshold (2012: for single people the income threshold is DKK 18,500 and for married couples the threshold is DKK 36,600. The asset threshold is DKK 77,700).

Postponed pensions: Postponing public pension means the public pension is raised by the so-called “waiting percentage” when paid out. Postponement presupposes work for a minimum of 1,000 hours annually. Postponement of the public pension by one year increases the pension by 6% the rest of one’s life, postponement for two, three, four or five years generates waiting percentages of 12%, 19%, 26% and 34%, respectively.

Taxation - tax allowance for 64 year-olds: Persons in full-time employment from the age of 60 and

[16] The 2012 Tax Agreement increases supplements to pensions and supplementary pension benefits, whereas the basic amount of state retirement pension is covered by the amended wages/price regulations.

until the age of 64 are entitled to a tax allowance (tax reduction) if they continue to work until the age of 64. The tax reduction may be up to a maximum of DKK 103,500 (2012). The scheme is temporary and comprises persons born in the years from 1946 to 1952. There is a limit for the lowest income as a 64 year-old and there is an upper limit for income from the age of 57 to the age of 59.

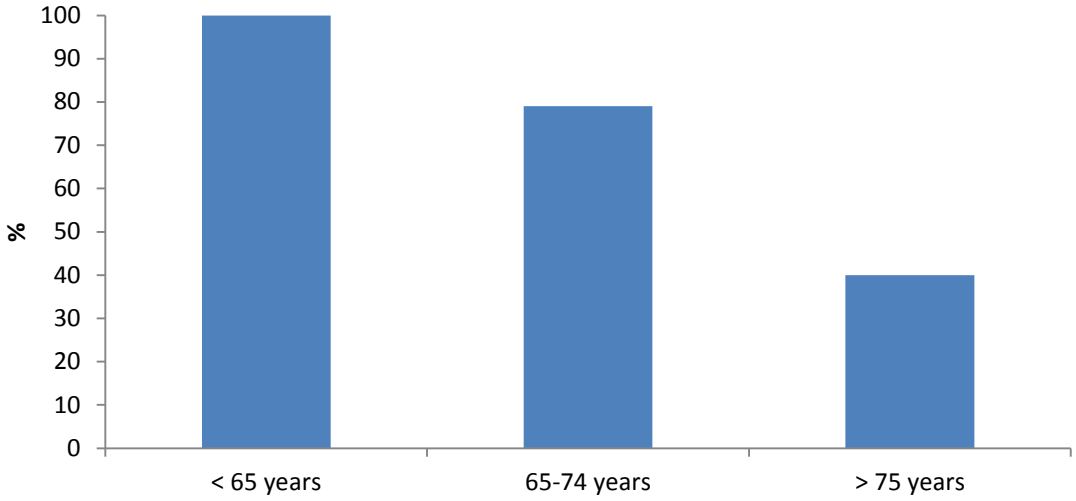
Other age-dependent regulations: Special supplements (health and heating supplements) are given to public pensioners. There are also a number of age-dependent special regulations, including housing allowances, age-related discounts in property value taxation as well as age-dependent discounts on TV licenses and transportation, etc.

In addition to the conditions mentioned above, which are specifically linked to the retirement decision, there is currently very different tax rates on pension savings across different forms of savings, see the Economic Council (2008), Linaa et al. (2010). Total taxation varies in relation to income level, forms of savings and age at the time of saving. Whereas the combined taxation on savings in housing may be negative or close to zero, for annuities, for example, it is between 60% and 80%. Such differences complicate the system and make it difficult understand for the individual, and they also create inappropriate distortions in the composition of pension savings.

III.3 Age-dependent needs and consumption habits

Economic analyses often use the reference framework that the individual wants to maintain the same consumption throughout life, see the illustration in Figure III.1. It is argued that if the preferences are independent of age, it is natural to want the same consumption flow throughout life. If this is not the case, moving consumption from age periods with high consumption to age periods with less consumption makes it easier to meet the preferences. Figure III.5 shows age-dependent consumption, and as can be seen, the age group of 65-74 year-olds and the 75+ year-olds have less expenditure on consumption than the younger group.

Figure III.5: Age-dependent consumption, 2008



Note: Consumption for persons under the age of 65 is set at equal to 100, and consumption is calculated per consumption unit in the family.
Source: Statistics Denmark, ten-year overview 2011.

Figure III.5 does not make it possible to determine on the basis of consumption data whether a smoothing of consumption has taken place. This is because the calculated consumption expenses include both consumer non-durables and consumer durables. Consumer durables are characterised by generating consumption benefits throughout short periods (domestic appliances) or long periods (art). The value of consumption of consumer durables therefore does not coincide with paying the consumption cost. Thus, higher actual expenses for consumption are expected for young people as more consumer durables are acquired during this period. Conversely, older people have a higher consumption than their on-going direct consumption expenditure as they own more consumer durables.

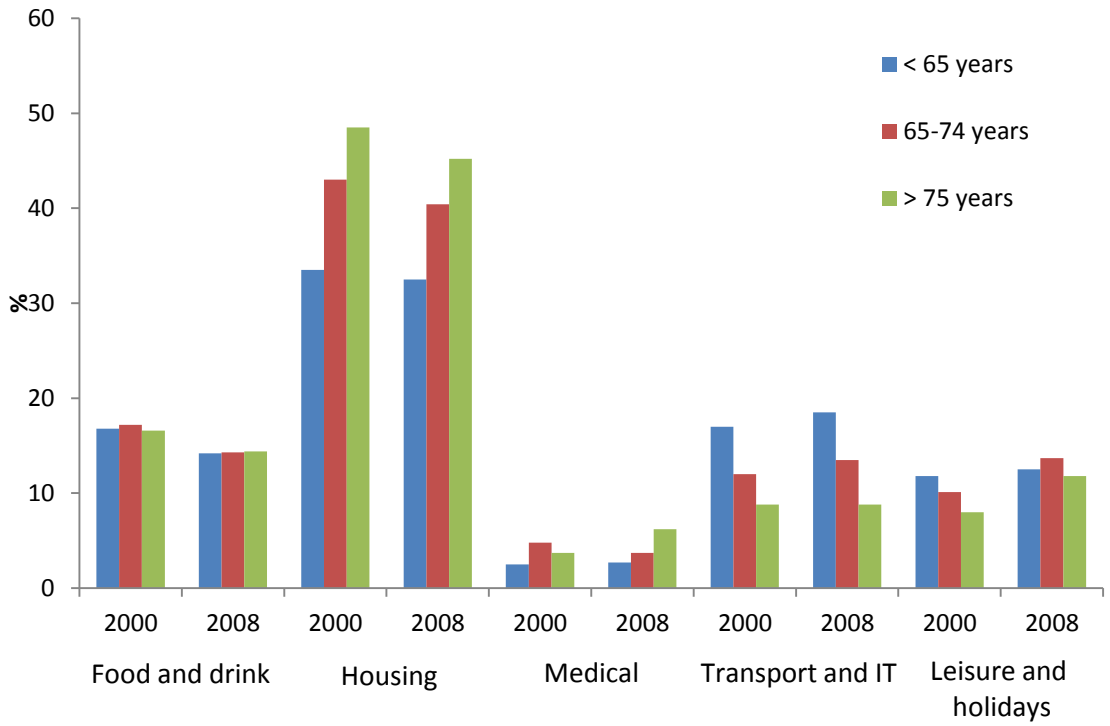
Even though a complete smoothing of consumption is desired, for several reasons, this may be difficult to realise. One obvious reason is that young people do not know what their income will be for the rest for their life. Another reason is that it is not possible to borrow unlimited amounts with collateral in future earned income and thus front-load consumption in relation to earning that income. Older people may also have tied up their wealth in e.g. owner-occupied property. In principle, equity in property is a consumption opportunity, but if it is not released (the property is not sold), much of the consumption opportunity will be tied up (and perhaps result in unintentional inheritance).

Finally, the consumption wishes of a pensioner are obviously not the same as for economically active people. Certain needs are age-dependent. For pensioners, there are two aspects; needs linked to leisure time as a pensioner (travel, hobbies, etc.), and needs linked to health. For many pensioners, the weighting of these two aspects varies with age, i.e. the “leisure time phase” comes before the “health phase”. The leisure time phase may be costly, whereas this is more uncertain

for the health phase. Weak health may be equal to fewer needs (no desire/physical strength/energy to travel, etc.), but needs requiring more expenditure may arise for care-taking, nursing, health (again this depends on public schemes, see below). Note that many people often refer to the “leisure time phase” as an argument for early labour-market withdrawal, stating: "I have to retire early so that there's time to enjoy my retirement and I can be certain that I'm still healthy enough to do so”. The fact that the actual retirement age has been falling, despite increasing life expectancy may, to some extent, be explained by this “leisure time effect”.

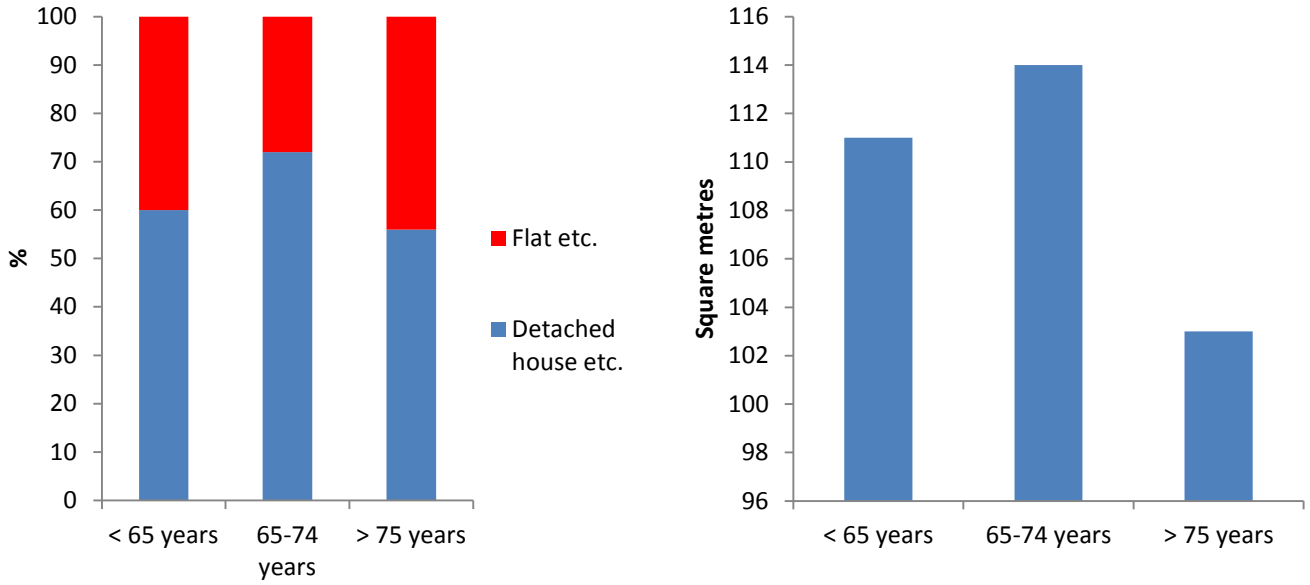
The figure below shows age-dependent consumption for Denmark in 2008. Note that this is a snapshot for a given year, and therefore the life-time profile for one given person is not shown. Consumption of foodstuff (food and drink) is dependent on age. Housing consumption increases rapidly with age and this might indicate either a preference persistence (keeping a large house even though the children have moved out, same neighbourhood, etc.) or a lack of opportunity to adjust the housing situation (tied up wealth). Consumption (private expenditure) for medication and physicians increases with age, whereas expenditure on transportation and IT decreases with age. Consumption on leisure time and holiday is (slightly) higher for 65-74 year-olds on average, in relation to persons under the age of 65 as well as the group above the age of 75.

Figure III.6: Consumption patterns in different age groups, 2000 and 2008



Source: Statistics Denmark, ten-year overview 2011.

Figure III.7: Age-dependent housing status and size, 2008



Source: Statistics Denmark, ten-year overview 2011.

Consumption may be limited by opportunities to release assets tied up in consumer durables (primarily housing). For consumer durables, acquisition is typically a prerequisite for obtaining the consumption benefits, but this also involves tying up wealth. More flexible capital markets make it easier to release a greater part of this wealth but flexible markets do not solve the problem entirely. A view often heard is being "debt-free as a pensioner", which might be interpreted as a corner solution to hedge risks in relation to housing costs (except however variable expenses), but it might also be difficult to release housing assets (in principle, this should be transferable to lifetime annuity).

It is not possible to determine the degree of wealth tied up in private property. Figure III.7.a shows that 65-74 year-olds own their home more often than the younger and older groups. Similar differences apply to the size of housing, see Figure III.7.b. Thus, housing is adjusted according to age; from owner-occupied property to rented property, and in terms of size. However, this cannot fully exclude a tying-up effect as this requires knowledge about the desired age-dependent housing situation. More flexible types of borrowing have helped facilitate equity releases from housing for consumption purposes, e.g. through equity release loans or similar.

III.4 Uncertainty

Pension savings have a very long time-span, and therefore a number of conditions may change from the time of saving until the pension is paid out. As a result, a number of uncertainty factors may need to be addressed. The primary aim of the pension savings is to ensure consumption

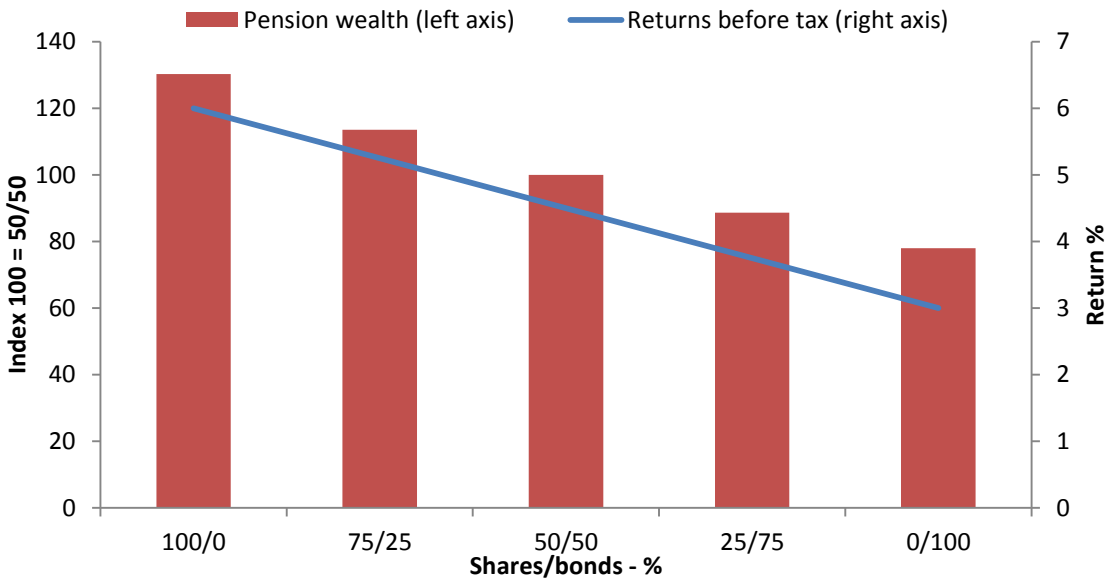
opportunities as a pensioner. Therefore, it is important to ensure a high return on savings. It is also important to secure the purchasing power of the pension which may be eroded by inflation, for example. A fundamental problem is that the pension has to cover consumption throughout life, but life expectancy is unknown. Finally, changes in health and needs may arise and it must be possible to adjust to these changes.

Return and risk:

Ensuring a higher expected return on pension savings usually means accepting greater risk. Naturally, the degree of risk that one needs to assume depends on risk aversion, but wealth and age also play a role; it is easier to accept risks with large pension savings or if retirement is still a long way off. The importance of risk may also be asymmetrical. In particular, large losses may have serious consequences (for example the welfare loss in connection with forced change of housing will for most people be greater than the welfare gains of a couple of extra holidays). For most people, therefore it is important to safeguard against the risk of a very low pension.

More risky assets, typically shares and corporate bonds, are generally assumed to yield higher returns in the long term than less risky assets such as government bonds and mortgage-credit bonds. This is the assumption made in Figure III.8 which shows how the expected long-term return depends on asset allocation and thus risk exposure under given assumptions for the return on shares and bonds.

Figure III.8: Pension wealth after 40 years, given different asset allocations

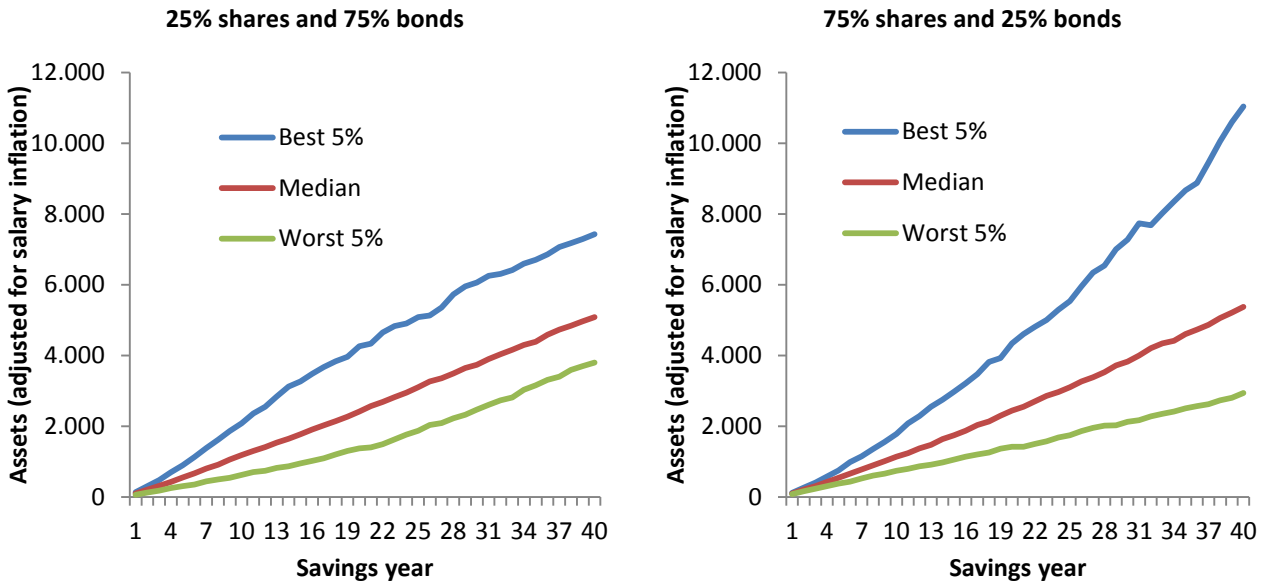


Note: The pension savings are calculated on the basis of an annual contribution of DKK 1 saved throughout 40 years. Contributions follow wage rate developments (3%) and costs of 0.25% have been included. There is no risk contribution linked to the savings. The assumptions on returns are based on shares yielding an annual return before taxes on pension returns of 6%, whereas bonds generate a return of 3%.
Source: ATP 2012.

According to assumptions for the calculations, a more risky asset allocation is reflected in higher expected returns and thus higher pension wealth in the long term. Based on the assumptions made, the figure shows that a more risky asset allocation automatically generates higher total pension assets in the long term.

Such static analyses may, however, not provide a realistic view of the significance of asset allocation and risk. The return on different assets displays large fluctuations, often over rather long periods, and this is an important part of the uncertainty linked to the return. To illustrate this, Figure III.9 shows a variety of calculations corresponding to Figure III.8, though based on 500 different scenarios for market developments over a 40-year savings period. Calculations are made for the two asset allocations; the more risky one with 75% shares and 25% bonds, and the more careful one with 25% shares and 75% bonds. The figures show the development in pension assets over time: 1) on average (median), 2) based on the average of the highest 5% of returns, and 3) the lowest 5% of returns.

Figure III.9: Trade-off between risk and returns on pension savings - alternative asset compositions



Note: DKK 100 from pay is paid in real terms for 40 years, i.e. the contributions are inflated according to wage rate developments. The pension account is calculated in nominal and real terms for wages after 40 years. The 500 scenarios are generated on the basis of ATP's stochastic capital markets model which simulates the simultaneous development in yield curves and the stock market in quarterly steps. Bond yields are the yields from an investment in bonds with 5-year maturity, whereas the return on shares follows a model of expected additional returns in relation to the current interest-rate level. This structure ensures that the two classes of assets evolve realistically in relation to one another. In the simulation, the bond yield (before taxation on pension returns) has an annual standard deviation of just under 6%, whereas the return on shares (before taxation on pension returns) has an annual standard deviation of more than 17%. The correlation between the bond yield and the return on shares is about 40%.
Source: ATP for the Committee.

The figures show how the more risky asset allocation (75/25) not only allows for a higher return and thus higher pension assets in the long term, but it also generates a higher probability of a lower rate of return and thus weak growth in pension assets. The more risky asset allocation results in a far greater variation with regard to the long-term return and thus significantly greater uncertainty about the expected pension results. The median returns for the two asset allocations are remarkably close to one another. In the "worst-case" scenario, assets only increased by about DKK 3,000 with the high-risk composition, against about DKK 4,000 in the poor outcome with low-risk composition. The difference in return and risk is an argument for selecting a mixed asset composition (diversification), and therefore pension funds typically choose a portfolio composition with many different risk assets in order to reduce the significance of one or more asset types under-performing for a long period.

Figure III.9 gives a significantly more subtle picture of the correlation between return/risk and asset composition than a comparison based solely on the average return over a long period. However, even this picture is not sufficient, because it does not analyse the consequences of sudden, significant and unpredictable events, often referred to as "black swan incidents" or "tail risks", which change market conditions significantly at very short notice. In the most recent 10-15 years alone, several such incidents have occurred, including the IT bubble at the end 1990s, the share crisis in 2003-04 and the financial crisis from 2008 and onwards. Yield levels on bonds have

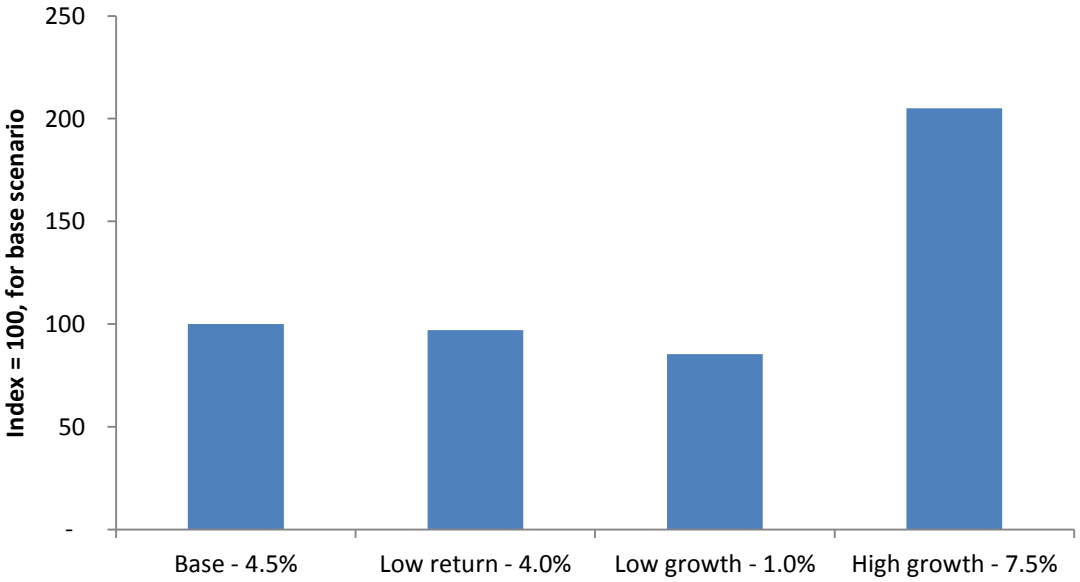
now fallen to below inflation level and pension savings are therefore subject to negative real interest rates.

A high degree of uncertainty in terms of both ordinary market risks as well as the risks linked to "black swan incidents", however, is not compatible with the underlying purpose of achieving a significant degree of certainty and predictability. This applies to labour-market pensions, in particular, where it is extremely important to create certainty for members about future pensions. The opportunities for managing and hedging risks are further discussed in the following Part.

Return on pension savings and total pension

Seen over an entire contribution period, systematic differences in returns naturally have a great significance for total pension assets on retirement. Figure III.10 shows how a stable and sustainable return, which is 3% higher than the reference return of 4.5% per annum over a 40-year contribution period, generates assets that are about 130% higher.

Figure III.10: Total pension assets after 40 years in different macro-economic scenarios.



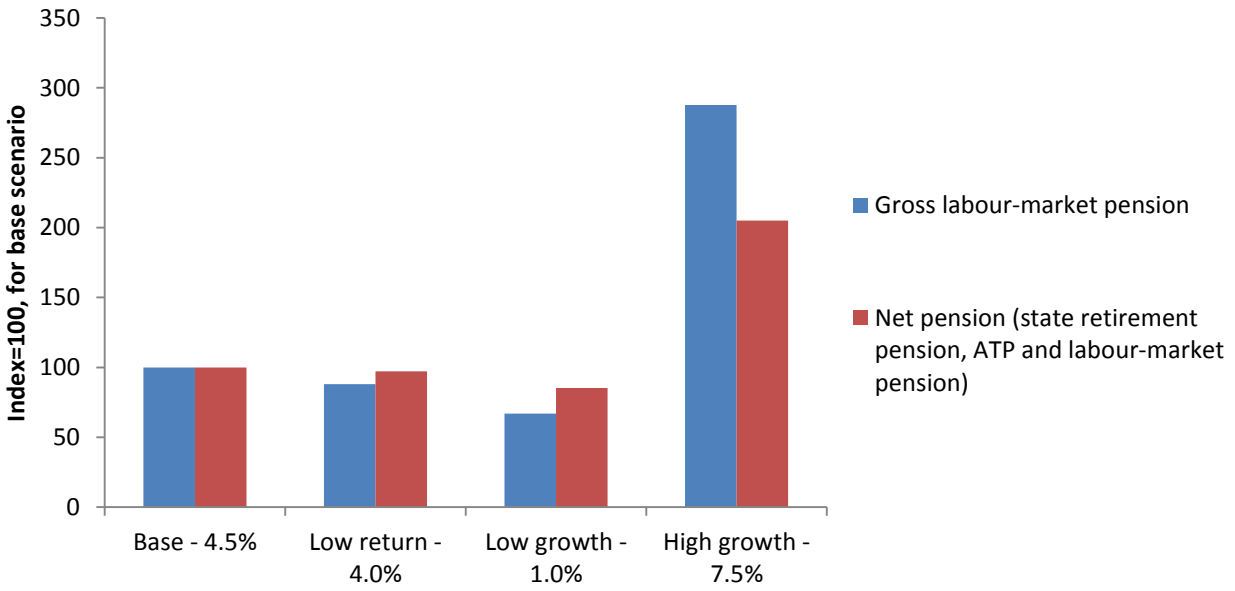
Note: The model calculates the pension savings of a person after having contributed to the scheme for 40 years. The point of departure is a person who in 2012 earns DKK 350,000 before tax and pays 15% of his wage to a pension. The contributions are invested with an annual cost rate of 1.0% with a maximum of DKK 10,000. 25% of the regular contributions are used for risk contributions. The assumptions in the scenarios are as follows: In the basic scenario, inflation equals 2%, wage increases equal 3%, adjustment of rates 2.7% and return on other pension savings equals 4.5%. In the scenario with lower pension investment returns, the return on pension savings equals 4%. In the scenario with lower growth, the assumptions are as follows: Inflation equals 0%, wage increases equal 0.5%, adjustment of rates equal 0.5% and return on pension savings equals 1%. In the scenario with high growth, inflation equals 2%, rate of wage increase equals 4.5%, adjustment of rates equal 4.2% and return on pension savings equals 7.5%.
Source: ATP 2012.

However, differences in total pension assets are not reflected directly in corresponding differences in the overall pension. This is because the private pension is only a partial element in the overall pension package, see Part II.

In order to examine the significance of the return for the individual pensioner's overall income, pension savings must be converted to a regular benefit. This should then be coordinated with the public pension, etc. and taxation must be taken into account.

Supplements to the public pension are regulated according to income from, among other things, private pensions, and this affects the size and composition of the overall pension. To illustrate the importance of differences in rate of return after tax and coordination with public pensions, the private gross pension benefit is compared with the overall pension (public pension, ATP, labour market and corporate pension, as well as other private pensions) after tax for a person with an average income throughout working life. Figure III.11 shows the differences in return in the overall pension assets after 40 years of contributions, as well as the overall net pension in the first year as a pensioner. Both calculations are in relation to the basic scenario with a return on pension savings of 4.5%.

Figure III.11: Pension calculations for the first year as a pensioner with different assumptions for return.



Note: The model calculates the pension savings of a person who has paid contributions for 40 years. The point of departure is a single person who earned DKK 350,000 before tax in 2012 and paid 15% of the wage to a private pension. The private pension is invested with an annual cost rate of 1.0% with a maximum of DKK 10,000. 25% of the regular contributions are used for risk contributions. Contributions for ATP are invested at an annual cost rate of 0.38% and DKK 100 (2012) and are spent on risk contributions annually.
Source: ATP 2012.

As shown in the figure, the return is important in relation to the private pension; however, the effect on the overall pension is greatly limited because of the interplay with public pensions etc. If the return is higher, the pension savings are increased, and this tightens the offsetting in the supplement from the public pension. The offsetting is reduced if the return on pension savings is smaller. Offsetting in the public pension thus reduces the consequences of differences in return for the total income of a pensioner.

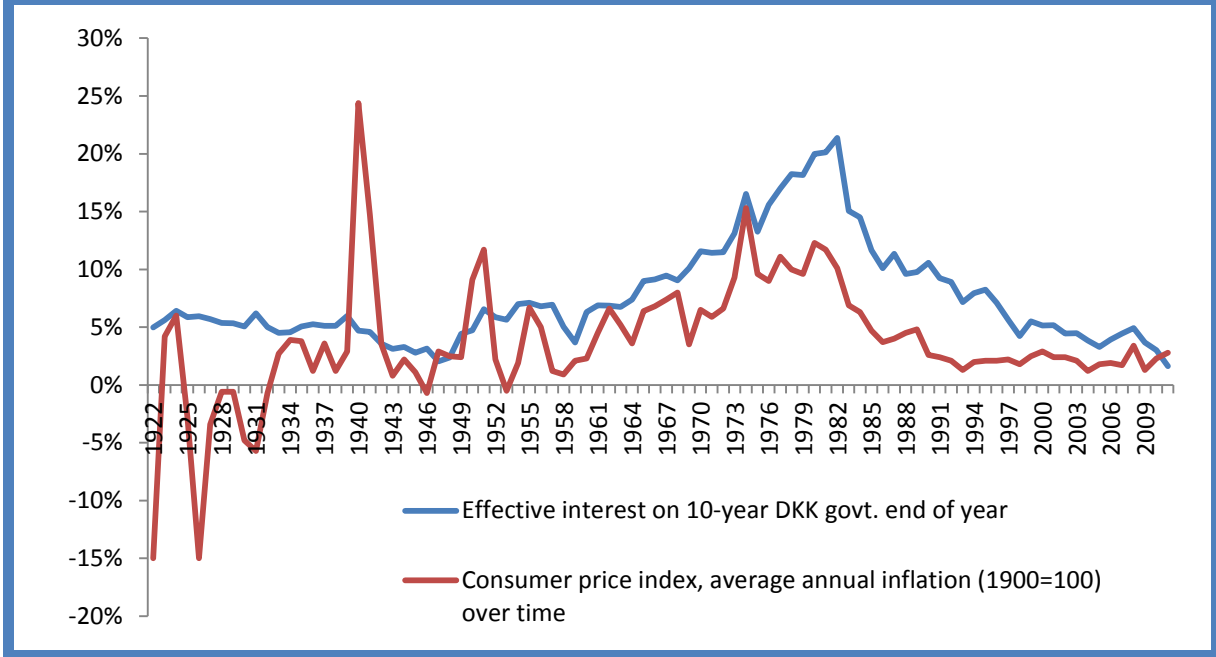
In the same way as the public pension is basically indexed together with wage rate developments, the element of offsetting in the public pension may thus be considered to represent a significant smoothing factor in relation to market-related risks connected with pensions based on savings. As mentioned in Part II this indicates that the design of the public pension, including supplements, establishes an insurance element in relation to fluctuations in private pension savings linked to return risk, among other things. This also minimises the incentive for the individual to save up for pensions.

Figure III.10 is based on calculations for a person earning an average income throughout life. The income level plays no important role for the effects in the case of the private gross pension. However, to some extent the effects on net pensions vary with income, as the public pension makes up a larger or smaller part of the total pension package for lower or higher incomes, respectively. The higher the income, the more directly return differences affect net pensions and vice versa.

BOX III.2: HISTORICAL INTEREST-RATE TRENDS

Since the 1960s, the interest-rate on 10-year Danish government bonds and Danish price inflation have followed somewhat similar trends with a positive real interest-rate (nominal interest-rate higher than inflation). Historically, however, there have been large fluctuations, and the purchasing power of a pension may therefore vary greatly in relation to the total pension savings.

Figure III.12: Historical trends in Danish price inflation and the interest-rate on 10-year Danish government bonds



Source: Nielsen & Risager (2001), Bloomberg (2000-2011) and inflation data from Statistics Denmark.

Trends in purchasing power in the payment phase:

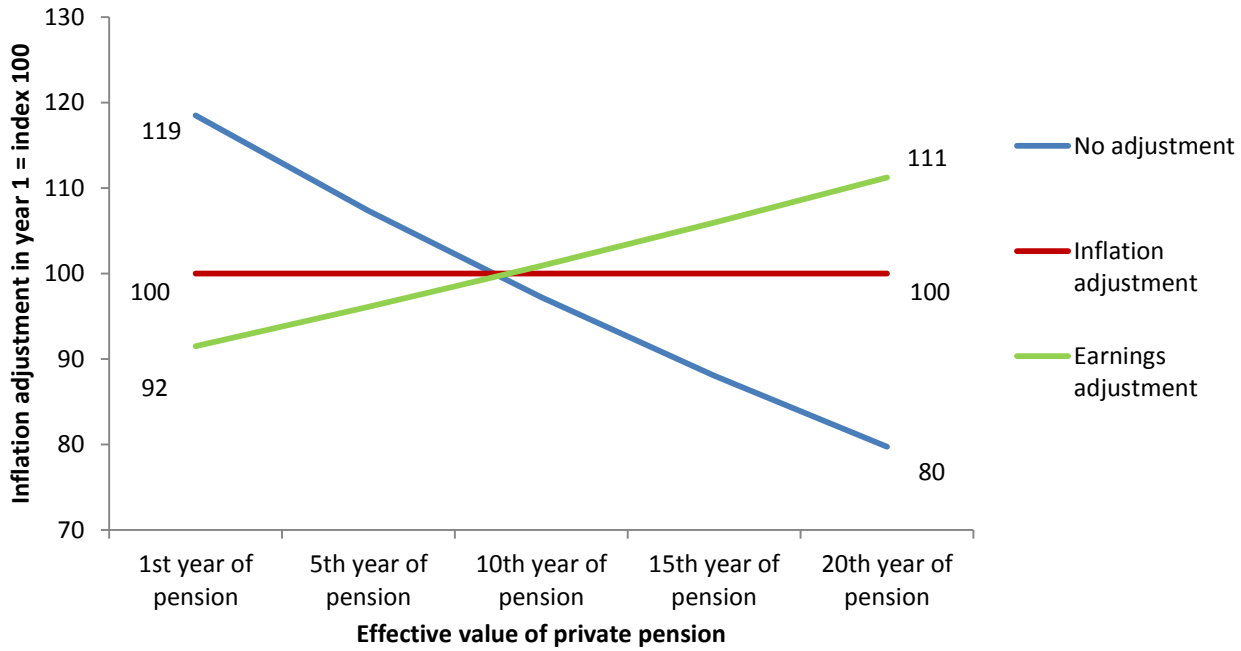
The risk linked to pensions applies not only in relation to the return in the investment phase but also in relation to the possibilities of converting the pension to consumption in the payment

phase. The purpose of the pension is to ensure consumption opportunities as a pensioner. Conversion of pension savings to consumption opportunities also depends on future taxation conditions and inflation. The on-going regulation of pensions also has significance in relation to the level of the pension on retirement. Figure III.13 shows the profile for developments in purchasing power for a gross pension benefit based on savings with different assumptions on the regular adjustment of the benefits: 1) No annual adjustment = 0%, 2) Adjustment following inflation = 2%, and 3) Adjustment following wage rate developments = 3%.

If the gross pension benefits are not adjusted, initially the real value will be very high; after this, it will drop gradually in the years after retirement and will finally be significantly reduced. In the example, the purchasing power of the benefit is reduced by about 33% over 20 years. On the other hand, if the nominal benefits are adjusted in line with earnings, the real value on retirement will be more moderate, whereas it will actually increase in the following years. In the example, the purchasing power of the benefit will increase by about 22% over 20 years.

Figure III.13: The purchasing power of private gross pension benefits with different adjustment assumptions

(Index 100 = first-year benefit for inflation-adjusted payments)



Note: This model calculates the private pension benefits after 40 years at an anticipated remaining lifetime on retirement of just under 20 years. The background is a specific total reserve for private pensions and for ATP on retirement. The benefits are calculated for a number of different payment years based on three different indexing methods.

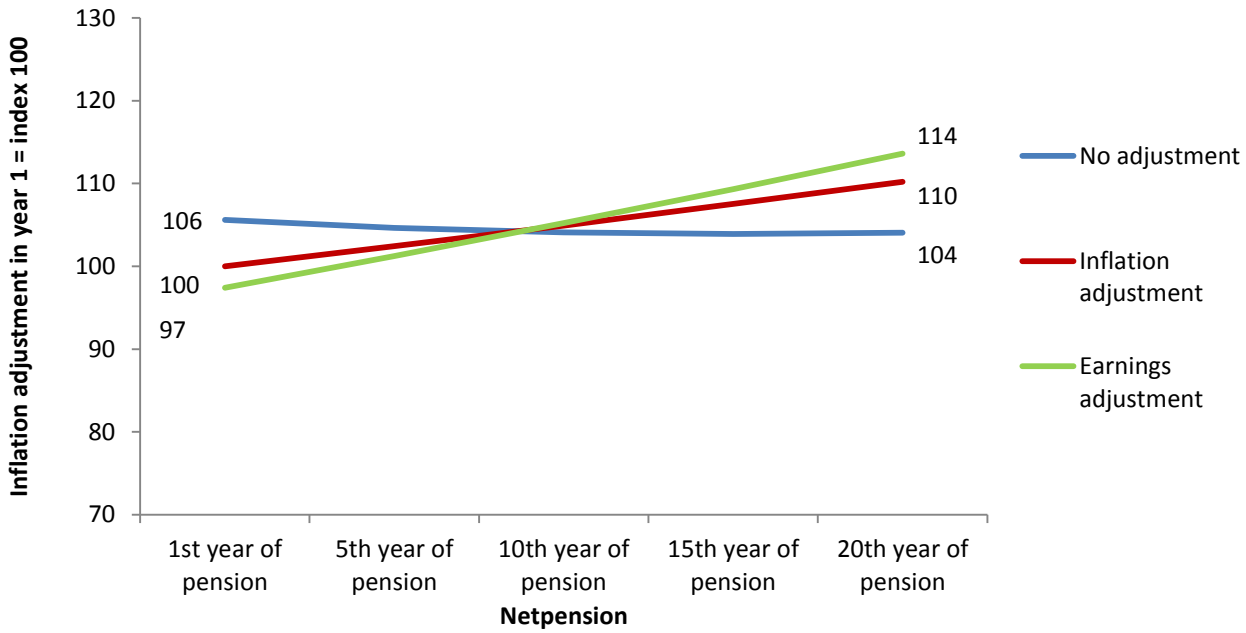
Source: ATP 2012.

The figure only analyses purchasing power trends for private pension benefits. As private pensions are only part of the overall pension package, the net effect on consumption opportunities is much dependent on the interplay with the public pension and income taxes. The public pensions are mainly adjusted in line with wages, and therefore the actual effect of not adjusting private

pensions is considerably moderated. As the public pension is adjusted by income, a relative loss on the development of benefits in private pensions will be significantly compensated for through a relatively higher public pension. Figure III.14 analyses the impact on purchasing power of differences in the adjustment of private pension benefits after coordination with public pensions and taxes.

Figure III.14: The purchasing power of the total net pension benefits based on different adjustment assumptions for private pensions

(Index 100 = first-year benefit for inflation-adjusted payments)



Note: This model calculates the private pension benefits after 40 years at an anticipated remaining lifetime on retirement of just under 20 years. The background is a specific total reserve for private pensions and for ATP on retirement. The benefits are calculated for a number of different payment years based on three different indexing methods. The point of departure is a single person who earned DKK 350,000 before tax in 2012 and paid 15% of the wage to a private pension. The private pension is invested with an annual cost rate of 1.0% with a maximum of DKK 10,000. 25% of the regular contributions are used for risk contributions. Contributions for ATP are invested at an annual cost rate of 0.38% and DKK 100 is spent on risk contributions annually. The private pension benefits and ATP in the three curves are coordinated with the public pension and tax has also been calculated. These calculations have been made according to applicable regulations and provisions on adjustment of rates.
Source: ATP 2012.

The figure shows how the effects of private pension adjustments are moderated greatly in the interplay with public pensions and income taxes. If the private pension benefits are not adjusted, the purchasing power of the benefit, as shown above, will be reduced by about 33% over the following 20 years. However, when taking into account the interplay with public pensions and income taxes, the effects will be much smaller, and the purchasing power of the net pensions will be largely stable.

On the other hand, if the private pension benefits are adjusted in line with earnings, the purchasing power of the benefits will increase by about 22% over the following 20 years. However,

when taking into account the interplay with public pensions and income taxes, the effect will be somewhat smaller as the purchasing power of the net pensions increases by about 17%.

The calculations show how income adjustment and indexing of public pensions largely moderates pension-related implications of actual adjustment practices for pensions based on savings. These conditions are particularly important for the very large group of people receiving low and middle incomes throughout their working life. More private pensions in the overall pension package reduce these effects and vice versa.

Life expectancy:

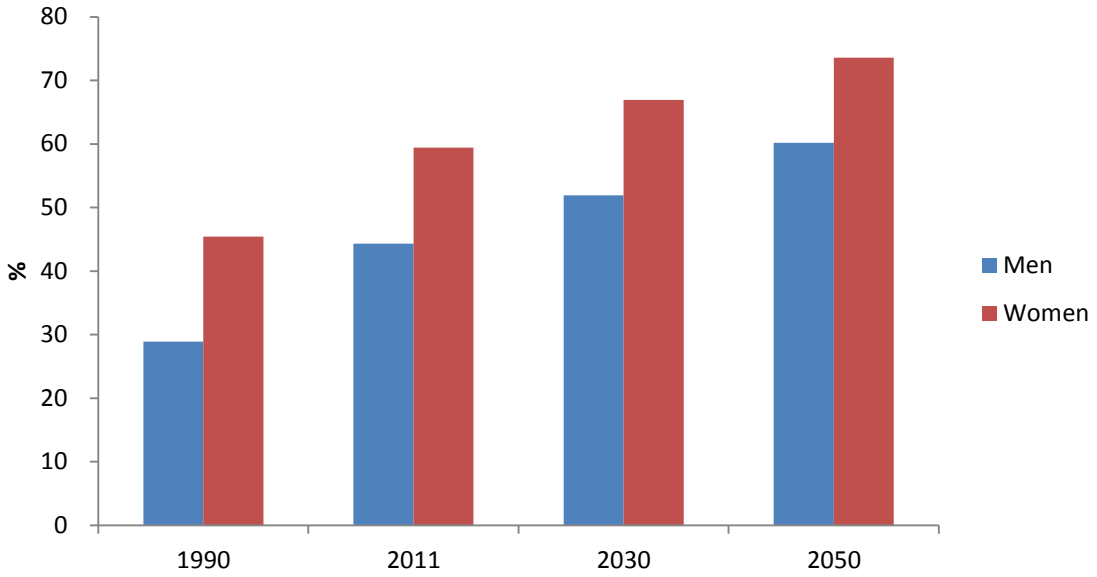
A fundamental risk is linked to life expectancy. Most people would like to live longer, but that would entail the risk of growing old yet poor, i.e. pension savings are not sufficient to maintain living standards throughout life. Situations like this may be insured through annuity products, where benefits are paid throughout the rest of the pensioner's life. This applies to public pensions but a large percentage of labour-market pensions are also paid through annuity products. This is an appropriate yet often misunderstood product. Typically, an insurance policy is taken out to safeguard against accidents, and growing old is typically not considered an accident to insure against. The insurable "accident" consists in growing old but poor. All insurance products involve redistribution between those exposed to the insured incident and those who are not. In relation to annuity products, this means that funds from those who die early are distributed among those who live longer. Annuity products therefore provide insurance in relation to the fundamental uncertainty linked to life expectancy.

Sometimes it is argued that annuity products make inheritance impossible. The primary object of annuity products is to ensure consumption opportunities throughout life. A motive for inheritance may, however, be considered by not placing one's entire pension savings in an annuity product or by incorporating further insurance products (coverage of spouse, child pensions, etc.) in the scheme[17].

Life expectancy has increased significantly in recent decades and life expectancy is expected to continue to increase. Whereas historically, developments were driven by falling infant mortality and later falling mortality among young people and among the middle-aged, today this increase is particularly driven by falling mortality in the older year groups. This is reflected in increasing survival probability of reaching 85 years for 65 year-olds. In 1980, about 1 out of 3 65 year-olds could expect to reach 85. Today this applies to more than every other 65 year-old, and in 2050, it is likely that 2 out of 3 65 year-olds will reach 85.

[17] Many annuity products include protection of a custody account in the savings phase (as a partial element in coverage of death) and/or an option to purchase a 10-year payment guarantee on the annuity product, ensuring an inheritance if the insured dies earlier than 10 years after retirement.

Figure III.15: Percentage of 65 year-olds who reach the age of 85, 1990-2050

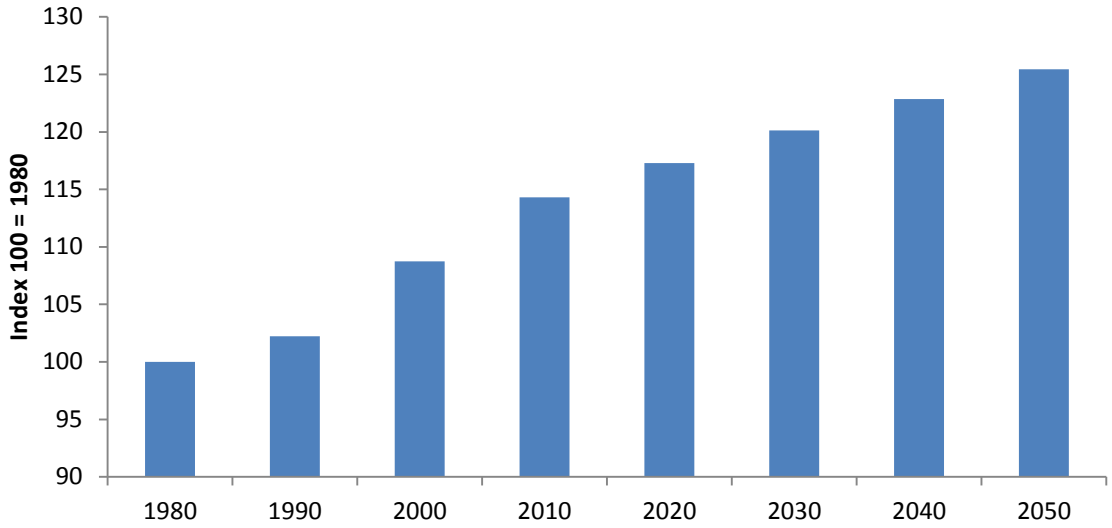


Note: The survival rates are calculated on the basis of actual figures up until 1990 as well as forecasts for future developments based on Danish FSA benchmarks for expected life expectancies for the years after 2010.
Source: Statistics Denmark, Danish FSA and ATP 2012.

Longer life expectancy is a pension-related challenge. For the individual, generally longer life expectancy means pension assets have to cover consumption opportunities for a longer period of time. In principle, this leaves three choices: 1) saving up more, 2) staying longer on the labour market or 3) accepting a smaller pension.

The pension-related importance of life expectancy is quite considerable. The "pension product" simply becomes more expensive when life expectancy increases. Figure III.16 below shows how much DKK 1 in annual lifetime pension will cost compared to 1970 prices. The price will increase over time because life expectancy increases and pension contributions must be paid for more years.

Figure III.16: Price of pensions, 1970-2050



Note: The calculations are based on payment of an annuity of DKK 1. The calculations are made with a discount rate of 4%. The remaining life expectancy is calculated on the basis of actual mortalities up until and including 2010 as well as forecasts for future mortalities from the Danish FSA benchmarks for anticipated life expectancies for the years after 2010.
Source: Statistics Denmark, Danish FSA and ATP.

An annuity pension from the age of 65 taken out in 2050 on the life expectancy expected to apply at that time will be about 25% more expensive than it would have been if life expectancy was still as in 1980. Already today, the price has increased by about 14% compared with 1980.

The importance of life expectancy trends for pensions is often referred to as the "life expectancy risk". If life expectancy is underestimated this means that it will be more expensive to be a member of a pension scheme than anticipated. This means that further funds must be allocated to cover pension costs; funds which can only be taken from the reserves of the pension company and which will therefore make it more difficult to adjust pensions - or alternatively, pensions may have to be reduced.

Therefore, in the end, life expectancy risk for the individual pension scheme goes back to the relevant generation. However, the effects are often moderated by the interplay with the other elements in the pension system; the public pension, ATP and private pensions.

In the public pension, the life expectancy risk is borne collectively and across generations, as pensions are financed through taxes. For public pensions, in terms of adjustment, it may be possible to increase the state retirement age in line with life expectancy, as was envisaged in the 2007 Welfare Reform and the 2011 Retirement Reform, see Part II.

Schemes and opportunities in the welfare society

The discussion above assumes that the existing design of public welfare schemes (including implemented reforms) will continue. This applies to both retirement and pension schemes, but also to public schemes for health and elderly care. Similarly, the current taxation regulations were taken into account.

These conditions are subject to a political risk that the schemes may be changed in future. The fact that the age composition of the population will change makes it more likely that these parameters will also be changed. The most recent reforms, the welfare agreements and the retirement reforms in particular, focused on solving these issues and ensuring welfare schemes for the future. These reforms are far-reaching in their attempt to secure the welfare society in future and ensure confidence in the continuance of central welfare schemes. Assuming that standards are unchanged, the existing welfare schemes are sustainable in relation to economic policy, i.e. over time, the tax system will generate sufficient income to cover expenditure on the current welfare schemes, see the Economic Council (2012) and the Government (2012). However, the underlying budget profile is problematic, and displays systematic budget deficits[18] for about 30 years after 2020. This alone leaves a need for adjustment. In addition, more wishes and needs for public welfare services must be dealt with, either by finding more financing or through streamlining and prioritising public schemes. Solving the challenges linked to financing the welfare society in itself is an important task but it is also instrumental in ensuring the confidence and credibility vital for pension savings.

In addition to these general conditions, individuals may wish to consider supplementing public schemes with private solutions, and this may have importance for the extent of optimal savings. Needs are linked to health (health and care) and depend on expectations of the public sector (social or implicit insurance). Individual wishes beyond this level place demands on private pension savings.

A lack of certainty or confidence in future opportunities may give rise to prudent savings, i.e. a buffer for “a rainy day”. It may be difficult to distinguish this from an inheritance motive. For a purely inheritance motive, in principle, funds can be paid immediately, but by waiting, there is insurance in the buffer, i.e. the savings intended for possible inheritance. If it is needed, the inheritance will become smaller, with the opposite situation if it is not needed. In reality, this is a type of risk-sharing between generations. Such prudent savings may be a buffer in relation to the age of retirement or special needs that may arise (health, care). In relation to retirement, the risk is mainly being “caught in the middle” where one is too capable to work to be able to receive e.g. a disability pension, but has too little physical ability to actually want to work. This would require self-financing (increased due to the Retirement Reform).

[18] For the primary budget. If the policy is not changed this will accumulate debt and increase interest expenses, which will burden the overall budget and produce systematic deficits.

III.5 Compulsory pension savings

Individuals/families have their own interest in consumption smoothing throughout life and thus save up for their pension. However, as in most countries, the Danish pension system is built up around compulsory pension schemes from the public sector as well as labour-market pensions. Even though labour-market pensions are the result of negotiations between the social partners, they are compulsory for the individual.

The most important reason for compulsory pension savings is that if they did not exist many people would fail to save for their pension. This could either be because people are myopic and underestimate their need for a pension or because people assume the welfare society will ensure their standard of living as a pensioner. In order to safeguard against this situation, which can cause problems for the individual in insufficient income as a pensioner, and the public sector in added pressure on the public pension system, compulsory pension savings could be imposed.

Thus, labour-market pensions have contributed to solving an important welfare task in addition to having eased the pressure on public finances, as this pressure could otherwise have been much more profound as the number of elderly people increases.

The life cycle approach in Figure III.1 challenges whether persons under a certain age should save up for pensions at all, as they are in a life phase where borrowing is natural. What speaks against this principle argument is that it will be very difficult in practice to decide when to start saving in a compulsory pension savings scheme. This is because labour market entry happens over a very large age interval.

Compulsory pension savings may, however, have some negative side-effects. If people are obliged to save, the incentive to save voluntarily may be weaker, i.e. total savings will not increase in proportion with increased compulsory savings, as the incentive to make voluntary savings is suppressed. The Danish Economic Council (2008) and Arnberg and Barslund (2012) have examined this issue and found that an increase in the compulsory savings reduces free savings by 0-30%. Despite some uncertainty of the amount, the net effect on savings is clearly positive. Thus, there is no doubt that the societal structure of pension savings has helped strengthen overall private savings.

Compulsory pension savings may also affect people's decision on whether to withdraw from the labour market. If the individual considers total savings to be too high, this may encourage earlier retirement from the labour market. Due to taxation, the individual does not pay the full price for more leisure time and this creates a negative societal impact. Therefore, if compulsory savings are too high, this may have an unintentional negative consequence in relation to the political objective to ensure later withdrawal from the labour market.

IV. Labour-market pensions

A labour-market pension is composed of different single elements in relation to investments, payments and insurance cover. Due to limitations in time and resources, the Committee has not been able to make a detailed analysis of the structure and composition of all labour-market pension schemes in terms of investment policy, savings products and insurance options, as well as any possibilities for members to opt-in and opt-out of these. To create a more specific overview of the situation, a questionnaire survey was carried out among the ten largest pension funds. See Annex II for a list of the participating pension funds and the questionnaire. The purpose of this survey was solely to characterise the current structure and variations therein and not to make a retrospective analysis of results or an assessment of the structure of the individual pension funds.

The following provides an overview of the structure of labour-market pensions organised according to the investment, savings and insurance element. Focus is on identifying the options for an individual member of a pension fund.

For the pension funds included, the contribution rate is between 12% and 17.3% (simple average 14.9%), the annual pension contribution represents between DKK 30,000 and DKK 71,000 (average DKK 52,000) and the median of the pensionable gross wage is between DKK 240,000 and DKK 435,000 (average DKK 341,000). None of the pension funds requires completion of a health form in order to become members, but some funds have restrictions for admission to the scheme or a waiting period in order to qualify for specific cover (between 3 months and ten years).

IV.1 The investment element

The basic elements linked to investments in pension funds are summarised in table IV.1.

Table IV.1: Investment elements in labour-market pensions

	Average interest-rate product	Market interest rate product
Investment responsibility	The company is responsible for the composition of investments.	The company is responsible for selecting investment pools (units). The customer is responsible for choosing between investment pools.
Method of calculating return	Common accrual of interest for everyone; may deviate from the return for the year. This scheme may be with or without guarantees for the return.	Direct return on selected pools. Some products are structured with automatic shifts between units, e.g. life-cycle products where the percentage of high-risk units is scaled down with age.

Individual choices	Usually none. Some may choose an on-account interest rate at the time of payment.	Some market interest rate products only have one unit, i.e. without customer options. Others have the option between risk profiles and others again have free options of units.
Return smoothing	Smoothing over time.	No smoothing. However, some market interest rate products may be smoothed in the payment period.
Guarantees	May be unconditional or conditional guarantees. May also be without guarantees.	Generally without guarantees but may also have the option to purchase certain guarantees e.g. for negative returns.

A central issue is how variations in the return on pension savings are to be managed. Basically, there are two types of pension products; an average interest-rate product and a market interest rate product.

An average interest rate product is a product where savings earn the same interest rate which in the individual year does not necessarily correspond to the interest rate achieved for the year. This is averaged over the years. An average interest rate product may be with or without guarantees.

A market interest rate product is characterised by annual returns, regardless of size, being ascribed to the account of the individual. There may be one or more investment pools, but within the individual pool the same return is ascribed. A market interest rate product may be with or without guarantees, but is typically without. However, some schemes issue guarantees when close to retirement.

Typically, an average interest rate and a market interest rate product are considered very different. However, the difference in pensions experienced by the customer/member need not be that profound. If, in an average interest-rate system, the basic interest rate is low compared with the market interest rate, and if the guarantees are hedged, this system will also produce degrees of freedom in relation to the investment policy. The smoothing mechanisms which are or should be present in both systems imply that developments in the pensions are very similar in practice.

Most of the pension funds covered (see Annex II) offer market interest rate products, whereas some offer average interest rate products. For most of the pension funds covered, members have no influence on investment decisions. In the pension funds that offer members an option, only few members use this opportunity (less than 1%). Note that variations within the two main types are substantial, and that special terms may cause substantial differences across products.

In schemes based on an average interest-rate principle, members assume the risk collectively, whereas in market value schemes, in principle, the individual assumes the risk. However, the individual pension fund may take several measures to diversity risk:

- for pension funds with guaranteed pension products, hedging of pension liabilities through e.g. interest rate swaps is vital. The principle of hedging is to ensure that a specific solvency situation can always be maintained given the pension liabilities of the fund.

- pension funds with pension products based on market value may try to adjust the term of their investment assets by means of interest rate instruments, so that the term of the total assets is adapted to the risk otherwise chosen for the investments.

- effective risk-spreading in the asset allocation of the fund, between both relatively secure assets (e.g. bonds) and risky assets (e.g. shares), as well as within the individual asset categories.

- regular and systematic monitoring of the development of the risk profile and adjustment of asset allocation relative hereto.

- hedging of the risks associated with “black swans”. In principle, the fund insures itself against sudden and extremely negative trends.

- age-dependent adjustment of risk up until retirement, or later, for pension funds using life-cycle products.

For accounting purposes, pension funds must recognise their liabilities (the pensions pledged to members) at current market value. As a consequence, the pension fund is exposed to a substantial interest-rate risk as the risk of a drop in interest-rates will increase the value of the liabilities so that they exceed the value of the assets. In recent years, pension funds with guaranteed products have developed comprehensive hedging strategies in order to manage this risk.

A number of schemes, which were previously based on traditional guarantees, have chosen to leave the guaranteed model wholly or in part. Many of the pension funds which provide relatively high guarantees to certain members have chosen to isolate these guarantee rights in special compartments, or have encouraged members to convert their existing rights to rights with less generous guarantees. This is not least due to the financial difficulties that may be connected with meeting solvency requirements, etc.

Among the schemes based on market value there are a number of different models, of which the majority are life-cycle schemes. These are characterised by a combination of different aspects, including:

i) Systematic reduction of investment risk with age. The model is known, among other things, from the commercial life-cycle products of life-assurance companies (Danica Balance, Nordea Vækstpension, etc.), as well as the closed SP (Special Pension Savings Scheme), which entails a relatively risky asset allocation for pension customers up until a specific age, after which the risk is gradually reduced up until retirement or later.

ii) Use of a smoothing mechanism in the payment phase to smooth out the return between good and bad years. The aim is to achieve a somewhat regular course of events and prevent negative market trends or sudden negative events from having their full effect on pensions which are being paid out. This model is used by PensionDanmark, among others.

Typically the two aspects are combined and aim at ensuring a higher degree of stability and predictability about future pensions and payments. Another option with the same focus is to combine a market-based savings phase with an insurance-based payment phase based on guaranteed lifetime pensions.

IV.2 Pensions

Pension assets may be used to cover actual pensions or insurance products linked to the pension scheme. The pension is paid either as an annuity, or as a pension payable in instalments or a capital pension. Table IV.2 below provides an overview of some of the elements linked to the pension element of labour-market pensions.

In most cases, the basic pension is an annuity (a certain minimum of pension savings is for an annuity product), see Annex II. The percentage of savings used for an annuity varies across pension funds, but in most cases, the annuity represents 50% or more of the total pension savings. A large number of pension funds offer members the option to place some of their pension savings in a pension payable in instalments or in a capital pension. Furthermore, it is usually possible to convert pensions payable in instalments/capital pension to an annuity. However, very few members exercise these options.

Table IV.2: Pension element of labour-market pensions

Type of payment	Term	Options	Tax	Conversion
Life-annuities	Lifetime	Typical minimum percentage in collective agreements	Full deduction for contributions. Income tax on payments	Small amounts for lump-sum payments
on-going (pension payable in instalments)	At least 10 years	Typical maximum percentage in collective agreements (a).	Deductions for contributions up to DKK 50,000. Income tax on payments	For annuities
lump sum (capital pension)	None	Typical maximum percentage in collective agreements	Deductions for contributions up to DKK 46,000, however, not higher tax rates. 40% tax on payment	For annuities or instalments

Note: a) Tax legislation includes provisions on how late it can be initiated in relation to when the final payment is made.

Most funds offer the option to convert pensions payable in instalments to annuities. About half of the pension funds offer optional length of payment period on pensions payable in instalments. In most pension funds payment of capital pensions (from the 60th year) may be made from another age than for payment of annuity pensions and pensions payable in instalments. In connection with retirement, the individual members decide their payment profiles.

IV.3 The insurance element

Insurance elements are often attached to labour-market pensions, see table IV.3. The principle of insurance is that a large group of members share the risk of becoming exposed to the same events. If an insured event occurs, members not affected by the event transfer funds to members affected by the event. The idea of insurance is that the consequences of insured events are smoothed across all members of the insurance scheme. It is straightforward to establish an insurance arrangement when all members are exposed to the same risk beyond their own control, and when it is possible to ascertain easily and at low costs whether the insured event has in fact occurred. All contributors pay a premium, which is used to finance compensation for the unfortunate party exposed to the insured event. If the individual has aversion to risk, the insurance policy will improve welfare for all participants (provided that the premium is set actuarially in relation to the risk that the insured event occurs). In practice, the ideal assumptions for setting up an insurance policy are not necessarily met. Not everyone has the same risk of given events; in some cases, it is possible to affect the probability of whether the event occurs or its

consequences, and there may be different costs linked to administration of the insurance scheme or other conditions that affect the setting of premiums[19].

Taking out an insurance policy across groups with varying probabilities of e.g. loss of ability to work may cause more problems. This may make it difficult to gain support for the scheme as low-risk members are not as interested in the scheme as high-risk members. If the scheme is set up, groups with low probability for event exposure may be redistributed in relation to groups with high probability.

The different types of typical insurance cover are included in Table IV.3.

Table IV.3 Insurance elements in labour-market pensions

Type	Criterion	Award	Type of benefits (typical)
Supplementary disability pensions	Loss of ability to work (generally or job-specific)	Age limit (typically before the age of 60 or 65)	Lump sum or regular benefits until certain age
Critical illness	Diagnosis on certain further specified critical illnesses	Age limit (typically before the age of 60 or 65)	Lump sum
Death	Death	Age limit (typically before the age of 60 or 65)	Lump sum, may be age-dependent
Spouse/cohabitee	Death of member	None	Regular benefits, lifetime or ten years
Child pension	Death of member, invalidity or age reached	Age limit (typically before the age of 60 or 65), perhaps none in the event of death	Lump sum or regular benefits until the child turns 21 or 24 years old
Health	Need for treatment/examination, referral by physician	Age limit (typically before the age of 60 or 65)	Compensation of expenses up to a maximum limit

Disability pensions (invalidity)

Such an insurance scheme is a supplement to the public disability pensions (provided that the award criterion is the same as for the public disability pension). A “double” insurance gives better cover but it may also help make the award of a disability pension more attractive by e.g. changing reservation requirements for the jobs that one is willing to accept. This applies in relation to whether the ability to work is assessed in relation to previous work or more widely in relation to

[19] The conditions mentioned cover adverse selection, ex ante moral hazard (impact on the probability that the event occurs), ex post moral hazard (impact on the outcome if the event occurs), and deviations from an actuarial setting of insurance premium due to administration costs or imperfect competition on the market for insurance products.

the whole labour market. If a “double” insurance cover affects the transition to disability pension this will impact the insurance scheme as well as the public finances.

The extent of these problems depends on the possible benefits. In some schemes, the cover is laid down in relation to wages (a typical default size is 60%) and in other schemes, the cover is set in relation to expected old-age pension.

Supplementary disability pension/invalidity cover is typically a compulsory part of the pension schemes. The price setting is collective. The benefits may either be a fixed amount of e.g. DKK 60,000 or regular benefits corresponding to old-age pension. In schemes with individual price setting, the benefits depend on the contributions. For most pension funds the size of the cover is optional, and in some pension funds, this is an optional supplementary insurance policy. The criterion for this is typically reduced ability to work by two-thirds or more, or public award of disability pension. This cover typically has a protection of savings/contribution exemption, which ensures that savings are maintained in line with members who are still employees, so that the members receiving disability pension, if they choose to join this scheme, can retire with a labour-market pension almost corresponding to the level of an employee.

Death cover

Death cover is a compulsory part of most schemes, although it is optional for some schemes. The benefits are usually a single payment (typically a group-life benefit) or they may be 10-year benefits of an amount proportional to the expected old-age pension. In most cases, the benefits fall, in line with the age of the insured. It will usually be possible to convert the 10-year benefits to a lump-sum payment.

Death cover can and will usually be different before and after qualifying for an old-age pension.

A lifetime spouse's pension is less relevant today than it has been, because of the high participation of women in the labour market, and because of pensions coverage for both sexes.

A children's pension is linked to some pension schemes. In this situation, as not all members have children, there will be a reallocation between members. Cover is relatively cheap and there is a good tax advantage.

Critical illness

This element includes coverage in the event of a diagnosis of a disease which reduces expected remaining life. Originally, this cover was to be temporary cover for loss of earnings due to sickness, but it is increasingly being used for critical illness which means the insured has to leave the labour market. This cover is almost always established as a group scheme.

The majority of pension schemes include cover for critical illness for which a lump sum is paid. In some cases, cover falls with age. In most cases the scheme is compulsory and thus there is no opt-

out. Some pension funds offer freedom of choice and supplementary insurance, but these options are rarely exercised.

About half of the pension funds examined has cover of spouse as a compulsory element in the overall pension scheme. Cover of spouse can either be limited (usually 10 years) or it can be a lifetime benefit. Some pension funds offer the option to choose this cover, but only few members take this up.

The majority of pension schemes include a compulsory children's pension which, in the event of the death of the member, pays an annual benefit until the child reaches a specific age (usually 21 or 24). The benefit is either a fixed amount or a percentage of the pension.

Insurance cover for health and prevention is not a usual part of the pension schemes. Some schemes include prevention, examination/diagnosis or treatment/sickness insurance, and in these cases the scheme is compulsory.

Insurance cover linked to pension schemes usually applies for a certain period after contributions cease (typically 12 months). In a few cases there is an opt-out clause for this cover and/or it can be extended (e.g. up to 36 months).

In summary, it appears that pension schemes can include insurance cover for many insurable events. The basis for insurance is risk-sharing, and therefore all insurance elements have a collective element with associated redistribution. Redistribution can be both ex ante (characteristics known to condition different probabilities of an event happening) and ex post (when the outcome is known). The most important criteria are gender, age, health, life expectancy and surviving relatives, see Table IV.3.

The insurance cover linked to the pension takes into account the risks for the members, but at the cost of the size of the ultimate pension. Therefore there is the overall aspect of how much you want to save (old-age pension) and how much you want to spend on insurance cover.

Up to now, the more traditional schemes have been characterised by fairly extensive risk cover. For these schemes, it is not unusual that more than 30% of contributions go to risk cover. If cover of spouse is reduced or ceases all together, the percentage of the contributions going to the insurance part will fall, although it is not unusual that the costs of disability-pension cover and waiver of premiums can also take around 20% of the contributions. The cost of disability pensions depends very much on the occupation of the group. The interplay between public benefits also affects insurance cover, and this includes measures to avoid inappropriate double cover. This applies primarily for disability pensions.

Another overall consideration is the extent to which insurance cover is to be established as group schemes in which everyone pays the same for the same cover, irrespective of age. The advantage of group-funded insurance cover is that older members, who would otherwise only be able to

have corresponding cover by paying a higher insurance premium, are included from the start It can also promote job mobility, including for older people in the labour market. Such schemes require redistribution between young and old members of the scheme. Changing jobs poses a special problem for this type of scheme.

In summary, it appears from the above that a labour-market pension has many dimensions linked to investment, pensions and insurance cover. Therefore they are very complex. At the same time, many opt-in and opt-out possibilities are linked to most pension schemes. In general it seems that these possibilities are only exploited by a very small proportion of pension-fund members.

V. Pensions decisions - knowledge and information

Decisions regarding pension savings and retirement are important. The fundamental objective is simply to ensure a stable, safe and reasonable income as a pensioner. However, the practice is much more complex and demands knowledge and active decision-making regarding a large number of aspects.

Even though the basic conditions are determined by the public pensions and benefits, as well as compulsory labour market pensions, the individual still has to consider some crucial questions. The main decisions linked to pensions everyone has to take are:

- Savings while economically active (level, placement and composition)
- Change of residence over lifetime
- Retirement decision
- Pension benefits (type and placement of pension savings)
- Inheritance

Initially, strengthening compulsory pension savings through the labour-market pension schemes could be interpreted as alleviating the need for the individual to be active and take decisions regarding pension savings. However, this is not how things are, and the pensions issue is considerably more complex than merely setting a contribution rate for labour-market pensions (savings rate out of labour-market earnings). Part IV explained the large number of dimensions in a labour-market pension, as well as the options in the system. However, in addition to the many aspects linked to the labour-market pension, there are a number of other issues to address. Should more than the compulsory amount be saved? And if so, how much and how should the money be invested? Even for the compulsory labour-market pension, there are a number of options to decide, see Part IV. Not making a decision is also a choice; one which may have great (unexpected) consequences.

V.2 Knowledge requirements and consequences

Developments in the pensions area place great demands on the individual's decision-making. In a classical public pension system, consumption possibilities are determined by the pension regulations (defined benefits), and individual decisions are not necessary. For other types of pensions savings (defined contributions) a number of decisions have to be made; not only on the level of pension savings, but also on where to place them and how they are ultimately to be paid out.

There has also been a political objective to establish greater freedom of choice for pension savings (see the Ministry of Economic and Business Affairs et al. (2003)) to allow individuals to adjust their

pension savings to their own wishes and needs. A further argument has been that freedom of choice will strengthen competition amongst providers and administrators of pension products, and in so doing help improve conditions for pension savers.

A formal possibility for free choice does not, however, guarantee that this freedom will be exploited and administrated appropriately. It is not just a question of having freedom of choice, but also of being ready to invest the time and energy required to find out about the issues and stay informed in order to make choices on a qualified basis. Keeping up to date to make well considered decisions involves great effort. This not only applies to general issues about market developments and possible returns; it also involves more fundamental balancing between return and risk, including how risk depends on the structure of investment. This also applies with regard to many elements important to the pension paid out. Understanding many financial products and how these can be used to hedge different forms of risk often requires specialist knowledge. There has also been large product development in the area in recent years.

A key issue is how to adjust to changes in life expectancy. In recent years there has been a significant increase in average life expectancy, and this trend is expected to continue. This raises complex questions in relation to adapting annuities products, but also in relation to the composition of pension savings between annuities and other types of pensions/insurance products. Finally, as mentioned above, there is a complicated interplay between various types of pensions/pensions assets (public pensions, labour-market pensions, and voluntary personal savings), retirement options and tax.

There is a recent and growing empirical literature on people's knowledge about economic conditions and the importance of these for pension savings and retirement decisions. In brief, the main results from this literature (see e.g. Banks (2010), Liebman and Luttmer (2011), Lusari and Mitchell (2010) and Jappelli (2010)) can be summarised as follows:

- A large percentage of the population knows very little about financial conditions, products and their importance. There is a great spread in the level of knowledge.
- People often over-estimate their own knowledge/understanding; especially men and older people.
- Those with higher education are better informed than those without; men are better informed than women.
- There is a tendency to have less knowledge about financial aspects in countries with well-developed public-pension systems.
- Knowledge and information about financial aspects is positively correlated to retirement planning (causality can go both ways).

Field experiments have also demonstrated that increased knowledge about the financial consequences of retirement has great significance for the actual age of retirement (more knowledge tends to mean later retirement).

Social norms are also important for savings and retirement age. This could be interpreted as a strong desire for "social conformity", but also that the behaviour of others is used as a signal. This can lead to changes in behaviour in either the "right" or the "wrong" direction. Experiments show that knowledge about "what other people do" can affect behaviour, but it is uncertain as to in which direction this will lead, as it depends on the initial assumption of "what other people do".

Internationally and in Denmark, various projects have been initiated to improve "financial education and knowledge" (for example by Danske Bank and the Danish Insurance Association). These initiatives are very beneficial for people who want to take their own decisions regarding their pension savings. However, it is also clear that it cannot be expected that everyone will take an interest in financial knowledge and improve their ability to make their own choices.

There are several reservations regarding just relying on an education and information strategy. Firstly, there are huge information requirements, and it is a question of the extent to which it is realistic to bring the majority of people up to an appropriate level of knowledge. And it is unclear whether this would be appropriate for society as a whole. There are many advantages in separating responsibilities and specialisation, and this also applies for information, knowledge and decision-taking in the pensions field. In many contexts, we utilise delegation because we cannot cope with everything ourselves, and it is more advisable to allow specialists to deal with a task on our behalf. This can provide large savings in costs and decisions can be made on a more informed and professional basis. Requirements for appropriate delegation include transparency and accountability with regard to decisions so that the basis and assumptions for decisions are open and can be discussed and assessed.

Secondly, recent research within behavioural economics raises questions regarding the assumption that better information and knowledge necessarily leads to better decisions (e.g. see De Meza et al. (2008)). Psychological factors can have an equal or perhaps greater significance for decisions than factual knowledge and information. Socio-economic factors also seem to play a role such that decision-making skills improve with level of education. Decisions in the financial area can be heavily influenced by myopia, loss aversion, status-quo bias etc. The reason labour-market pensions are compulsory for the individual is to ensure that everyone saves up for a pension. If this were left to individuals, the factors mentioned above could mean that they do not save enough. This raises particular questions regarding the built-in freedom of choice in compulsory pension schemes.

This report is based on these aspects from the following perspective. There are some fundamental decisions which can only be taken by the individual him- or herself. This applies for demands regarding living standards as a pensioner, age of retirement, inheritance etc. In these areas it is important to make the information base and the consequences of a choice as clear as possible. This primarily involves information from the public sector in order to understand the interplay between pension, retirement and tax consequences. With regard to technical decisions in relation to the placement of pension assets and benefits, clarity and comprehensibility are important; both

on the options and the consequences for those who want to make a choice. It is extremely important to develop a basic pension for the labour-market pensions. Such a basic pension is a standard option for people who do not want to make choices themselves, but who want to be reasonably sure that the labour-market pension is appropriately composed with regard to most people's needs. Such a basic pension is also a useful benchmark for those who want to make their own choices.

V.3. Studies of financial understanding

For the majority of consumers, pensions account for the largest percentage of their lifetime savings. Despite this, studies show that consumers take very little interest in their pensions.

The Money and Pension Panel has completed a questionnaire survey (Money and Pension Panel (2008, 2009a)), which has resulted in a financial "barometer". Among other things, the barometer shows that:

- 49% have no interest in the information they receive from their pensions provider
- 47% say that the information they receive from their pensions provider means nothing to them
- 39% say that information about pensions is unimportant
- 35% say that the information from their pensions provider is irrelevant.

A study on Danes' pensions habits by Topdanmark Livsforsikring shows that 50% of Danes spend less than an hour a year on their pension (Topdanmark (2007)). And two out of three women spend less than an hour a year on their pension.

The lack of interest of Danes in spending time on their pensions corresponds to the results of US research studies, which show that contributors to pension schemes are likely to do what demands the least effort, i.e. a sort of passive decision by accepting an automatic solution rather than exploiting options (Choi et al.(2011); Beshears et al. (2007))

Studies of the general financial knowledge of Danes

A number of studies have mapped the general financial knowledge of Danes. These studies show that Danes have a relatively low level of financial knowledge.

A study by Danske Bank, for example, shows that 37% of 18-28 year-olds could not answer a question on what interest is, while 56% of 18-28 year-olds could not identify the cheapest of three loans (Danske Bank (2009)).

Similarly, a study from the sector organisation, the Danish Insurance Association (2010), shows that more than one in three Danes have problems calculating interest rates, and they do not know what the APR (annual percentage rate) is on a loan.

The study by the Danish Insurance Association also shows that in general Danes think that they know more about financial topics than they actually do. Of six elementary questions on economics, about one-third could only answer 0 to 2 questions correctly. Despite this, the majority of this one-third thought that they had adequate or even extensive knowledge about private finances. The study shows that people's own opinion of their level is much higher than their actual level of financial understanding.

Knowledge about pensions

A study by PFA Pension shows that two out of five Danish pension savers - and almost half of the women - answer "no" when asked if they know what their pension savings are (Berlingske Business 2011). And a study by SFI - the Danish National Centre for Social Research showed that 11% do not know whether they have a labour-market or private pension scheme (SFI 2008: 133 etc.).

At the same time, figures from a pensions test conducted by Arbejdsmarkedets Tillægspension among 85,000 people showed that Danes are uncertain about their financial situation when they retire. This is also illustrated in that on average 4 out of 10 questions about pensions in the test were answered incorrectly (TV2 Finans, 2008).

Studies also show that knowledge about pension topics is limited. For example Nordea Liv & Pension has conducted a study of the attitude and knowledge of people living together with regard to pensions and life assurance on death. The study showed that 58% of participants could not answer correctly to the meaning of the word ”beneficiary”[20]. The same study also showed that two out of three wanted their partner to receive their pension/life assurance money in the event of their death, but only a half answered that their partner would actually receive the money and almost than 15% answered that they did not know who would receive the money (Nordea Liv & Pension (2008)).

What do people want?

The studies all indicate that pensions are an area of low interest and that knowledge about pensions is generally very low. At the same time the focus group study by the Money and Pension Panel indicates that, with regard to information about pensions, Danes want simplicity, brevity and comprehensibility. In a study of Danes' understanding of the annual cover statement from pension funds, many admit that they find it difficult to understand the content and they would rather have a simpler statement (Money and Pension Panel (2009b)).

The barometer study by the Money and Pension Panel also shows that consumers have relatively high confidence in pension funds (Money and Pension Panel (2008, 2009a)).

[20] The correct answer is "the person(s) who receive my pension or life assurance if I die".

The study indicates that the majority of Danes do not want to spend time on their pensions and therefore, for example, they have no wish to make a decision regarding any choice possibilities. This in turn indicates that, like the US population in the American studies (see Choi et al. (2001) for example) Danes are likely just to prefer a pension scheme which looks after itself and where they can merely have a sensible "default" model. Danes also want just simple and easy-to-read information, probably because they think that the information is hard to understand, and partly because they have confidence that pension funds will do their job properly.

VI Recommendations

The Danish pension system is based on a division of responsibilities into three pillars; Pillar I comprising the public pension and Arbejdsmarkedets Tillægspension (ATP), Pillar II comprising labour-market pensions, and Pillar III comprising other pension savings and voluntary savings. The three pillars in the pension system together deal with a relative complex and involved pensions task, see the discussion in Part II.

The primary task of the public pensions is to secure an income in old age for everyone, while the job of the labour-market pensions is to ensure a total pension in reasonable proportion to earnings when economically active. It is important that the overall pension system provides the individual with security and predictability with regard to life as a pensioner. At the same time the system should underpin incentives to save and to be part of the labour market. The design of labour-market pensions is therefore crucial for the individual, but it is also extremely important for society as a whole. Labour-market pensions have to take proper account of the interests of the individual members, while at the same time being part of society as a whole.

The basic structure of the pension system has been set and it is deemed to be appropriate. The labour-market pensions are still being phased in, as new groups become covered and the contribution rates increase. Therefore many decades will pass before pensioners will be able to retire from the labour market after having paid into a labour-market pension with the current contribution rates throughout a full working life. There are also a number of aspects in the design of the pension system which could be improved. The overall pension system is constantly under change because of changing conditions in society which regularly cause challenges and needs for adjustments for the individual, the pension funds, and the political system.

Among the main issues are adjustments of the pension scheme to continuing increases in life expectancy, a possible long-term low level of returns, and securing a low level of administration costs. Labour-market pensions are collective schemes and therefore it is also important to retain significant solidarity within the schemes.

VI.1 Basic pension

Labour-market pensions have the simple and fundamental task of moving purchasing power from the economically active years to years of retirement as well as offering important and targeted insurance benefits in connection with this. The individual pays a regular contribution rate of earnings stipulated in a collective agreement, but it is a long and complicated journey from here to the pension which can be paid at a future date as a pensioner. The size of pension savings depends fundamentally on the size of contributions over a lifetime, the net returns on investments of the funds saved, the scope of insurance cover, as well as the level of administration costs. The returns

depend on the investment strategy, including risk willingness, as well as the level of investment costs and tax on returns. Total pension savings can either be spent on pensions or on insurance cover.

How the pension assets are to be paid out is not a simple matter either. They can be allocated to pensions or to insurance cover. The pension should be for life and it should be secured against inflation eroding the purchasing power of the pension to such an extent that consumption possibilities become inadequate. A benefit could come from having the payment profile of labour-market pensions such that consumption opportunities are slightly greater as a "young" pensioner than as an "old" pensioner. However, it is important that such considerations are based on a clear picture of income and consumption needs in the long term. If the individual is able to make decisions on the design of the payment profile alone, the consequences of this must be clear and well described for that individual.

Part of pension savings will usually go to insurance products which cover events such as sickness, loss of ability to work and financial security for surviving children etc. This type of cover is a very important part of the security of an individual household. Increased demands for insurance cover reduce the pension, and vice versa. The two requirements should therefore be closely balanced. With regard to insurance cover, the events to be covered and the amount of the cover in these situations are both important. Insurance benefits should be such that they retain the incentives for a sick person to return to the labour market.

It is important for everyone that the overall pensions package secures a reasonable standard of living as a pensioner, and labour-market pensions should be appropriately designed to underpin this goal. However, there are many who take no interest in pensions issues until they are approaching or reach retirement age. There are also many people who assume that, with a labour-market pension scheme, they have delegated these questions and therefore they take it for granted that things are under control. This expectation can be reinforced by labour-market pensions being compulsory for the individual. This is something of a paradox in that there are great expectations and demands for pensions, but people's interest in the area and their willingness to find out more are for most rather limited. This situation puts pension funds under a great responsibility.

Therefore, labour-market pensions should be developed on the basis of the assumption that many members have no wish to spend time and energy on finding out about pensions issues and that they do not want to be actively involved in many decisions. Offering training in the financial area may be part of the communication or PR strategy of an individual pension fund, but labour-market pensions cannot assume that all members have insight or interest in financial matters. This reinforces the requirements and responsibility of labour-market pension funds to develop a basic pension without the need for decisions by the individual member on a number of options. The

basic pension should be a default option for the vast majority of pension-fund members. The product should be transparent and take account of the needs and wishes of the vast majority of members who do not want to be actively involved. Opportunities to develop a basic pension are strengthened by the fact that members of labour-market pension schemes are all somewhat homogeneous. Members who want active influence and options should have these possibilities on transparent terms, including the costs linked to these options, consequences for final pension etc.

A basic pension for a labour-market pension can either be defined on the basis of some general principles, or investment and payment conditions can be specifically described in detail. The Committee has decided to point to general principles for a basic pension, as differences between members of the individual pension funds and their needs may give reason for differences in the specific design of a basic pension. Part of good management for any pension fund is to examine how the basic pension being offered to members reconciles with these principles; principles which should be considered as indicative minimum requirements. There may be reasons to deviate from these principles, but these should be fully explained and justified.

Even if there is a well-defined basic pension for the labour-market pension, the pension will depend on an important choice which only the individual can make; when to retire from the labour market. Therefore it is important to design the pension scheme, and information about the scheme, so that the financial consequences of this choice are clear for the individual member. The financial consequences of retirement from the labour market are set in a complex interplay between all the three pillars in the pension system, as well as the tax system and labour market conditions, and this does not improve transparency for the individual member.

In setting the principles for a basic pension, the Committee has put priority on the overall goal of ensuring that, on retirement, the member can look forward to a pension with reasonable, predictable purchasing power throughout the rest of his or her life. Therefore, priority is on the insurance and smoothing mechanisms which can secure the purchasing power of the pension throughout retirement. At the same time, priority is on the product also containing insurance products relating to loss of ability to work, death etc., and that, when choosing the basic pension, the individual member does not have to take further decisions on a number of specific aspects linked to the pension scheme.

The fundamental principles for a basic pension for labour-market pensions:

- It must be easy for the individual member to understand his/her pension and insurance cover, and the information provided must be easily accessible.
- The investment policy is set by the pension fund, aiming at ensuring high returns balanced against a risk profile linked to the age of the member as well as the predictability of the future pensioner's purchasing power.

- In market-value schemes, the market risk can be managed through an age-related portfolio allocation, smoothing mechanisms when the pension is paid out, and hedging strategies, including hedging of price changes on annuities as a consequence of changes in interest rates as the member approaches retirement age.
- In guaranteed insurance-based schemes based on an average interest-rate principle, the interest-rate risk can be managed through hedging strategies.

- The benefit on retirement should be a lifetime benefit (annuity) to ensure pensions cover for life.

- The design of the lifetime benefits should secure the desired development in the purchasing power of the overall pension. If there are elements which give uneven consumption opportunities over the period of retirement, for example a desire to have higher consumption opportunities as a young pensioner, these and their consequences should be clearly stated and explained.

- Insurance products for disability, illness and death should be included in the basic pension, but not such that they exceed 20% of contributions. This should cover typical risks, and the priority for such cover should be balanced with the expected pensions cover in relation to age, and earnings in relation to occupation.

- The terms of allocating and paying pensions and insurance cover should be in line with the terms for allocating and paying similar public benefits (e.g. disability pensions, ATP and public pension), such that the benefits can only be paid at the earliest from the same date as the corresponding public benefits. This increases transparency and the legal rights of the individual member, it improves the consistency between the public system and the labour-market pensions, and it simplifies administration.

- As the labour-market pensions are compulsory and collective, they should have much lower costs than corresponding individual and voluntary schemes.

- Reporting regarding investment results, insurance cover costs as well as other costs should be understandable for clients.

VI.2 Labour-market pensions in a societal perspective

The labour-market pensions are an important part of the pension system and therefore they are an important part of the welfare society. The labour-market pensions relieve the public pension system, and the design of labour-market pensions is therefore extremely important to secure the future welfare society. Labour-market pensions are an important supplement to public benefits, but they are only part of the overall pensions scenario.

Labour-market pensions must primarily satisfy the interests of the individual member, but they should also take into account the societal implications of the labour-market pensions. This means observing the overall consequences of changes in the labour-market pensions for the public welfare systems. An important societal balance-point is to ensure reasonable pensions and well developed welfare programmes for all the elderly at the same as encouraging later retirement from the labour market. The macro-economic consequences of later retirement are significantly more important than the consequences for private finances, and therefore later retirement in line with increased life expectancy is extremely important in securing the economic basis for the welfare society. This has also been a central element in recent years' economic policy.

The interplay between labour-market pensions and public pensions is complex; both for the individual and at society level. Public pensions (public pension and supplements) have an important function in economic distribution policy. At the same time the earnings-dependent and wealth-dependent supplements in the public pensions are also important for insurance and incentives. For those earning less than a certain level, variations in labour-market participation and thus contributions to labour-market pensions are significantly absorbed by changes in the public pensions (supplements). Similar effects apply if the private pension ceases fully or in part, if it is not indexed in line with earnings, or if it does not develop as expected for other reasons. In this way, in interplay with the labour-market pensions, the public system comprises an "insurance scheme", which contributes to stabilising the overall pension.

Adjusting supplements in the public pension according to earnings and wealth also means that there is only a modest net effect on the pension from increased participation in the labour market in large earnings and savings intervals, and this has an unfortunate incentives effect in relation to both the supply of labour and savings. However, the consequences for savings are countered to a certain extent by the labour-market pensions being compulsory for the individual. The financial incentives linked to retirement are therefore determined in a complex interplay between the public schemes for early retirement and public pension as well as the labour-market pensions.

The 2006 Welfare Agreement and the 2011 Retirement Agreement mean an increase in the age of retirement and in the long term this will be indexed in relation to life expectancy. This will reduce the "window for early retirement via public schemes" and make it less attractive and accessible. In the slightly longer term, these reforms will affect retirement patterns and labour-market participation by the elderly will probably increase. When the age of retirement is increased in this way, it may, however, give a need for more flexible types of retirement and possibilities to

combine pension and work, including possibilities for part payment of pensions. To a large extent, these possibilities involve labour-market pensions.

From the perspective of society, absence of labour-market pension savings, and to a certain extent the associated insurance cover, will significantly weaken the economic basis for the current public pensions and welfare programmes. Therefore the labour-market pensions have a social responsibility to underpin political goals of lifetime pensions cover, labour-market retention, and later retirement in line with increasing life expectancy. For larger changes in the terms for pensions, the parties to the agreement and the pension funds should therefore also incorporate the consequences for society and the possibilities to maintain the public schemes, although taking into account that, on behalf of their members, funds always seek to optimise their schemes in relation to the relevant regulations on public benefits etc.

All choices relating to using pension savings for either pension or insurance cover, composition of products, degree of redistribution, solidarity within and between generations, the interplay with Pillar I, and so on, should be well grounded, and available in a well-documented form suitable for the typical member, the more demanding member, parties to the collective agreement, as well as society in general, including not least politicians and the media.

The labour-market pension schemes comprise a very large percentage of a member's income and stretch over very long time-scales, so regularly reconciling expectations with members is vital for establishing and maintaining support and understanding for the design of the pensions.

The Committee has the following general recommendations for the design of the labour-market pensions:

- When establishing products and services in the labour-market pensions, it should be ensured that cover does not result in an inappropriate incentives structure in relation to retaining people in the labour market. Moreover, it is important that people who do not have significant additional costs in retirement do not receive a higher disposable income on retirement than they would otherwise have as economically active.

- Products (both pension and insurance products) and services should be designed in relation to the public benefits from public pensions and disability pensions. This will give members of labour-market pension funds a balance between the tax-funded welfare schemes and the savings-based labour-market pensions, and it will ensure that pension schemes underpin high job mobility and a large supply of labour. Assessments of ability to work should therefore take a broad approach across skills and sectors, while preventive measures and initiatives to strengthen ability to work should have high priority in relation to more passive benefits.

- The design of labour-market pensions should underpin job mobility in the labour market. This involves excluding admission requirements for health information and waiting periods so that, even when they are older, wage earners can change job (and thus also pension company) without risking losing insurance cover.

- Products and levels of cover should be constructed on the basis of the level of job mobility within the respective sectors/work functions as well as average pay levels (and the spread in these). This should ensure appropriate levels of insurance cover (in combination with the public benefits) in relation to the earnings members accumulate in work. It is especially important to avoid negative incentives by setting cover for loss of ability to work, for example, at such a level that the public disability pension and supplementary disability pension from the pension scheme together remove the incentive to take part in rehabilitation/job tests and schemes with less demanding jobs on special conditions (flex jobs).

- Transfer of pension assets between pensions funds should support job mobility by ensuring that, for all types of products, the market value of the pension savings is transferred in connection with a job change.

- The pension funds should actively advise their members on the possibilities to take their savings with them when a change of job involves changing pension fund. Advice should be based on minimising the total costs of the member and ensuring clarity regarding the member's pension savings. Transfer of pension savings when changing job should be without charges or other costs.

- Recent years' developments in the financial markets have illustrated the challenges with guarantees that it is difficult to hedge in financial markets. Given the forthcoming solvency regulations, it will be crucial that new average interest-rate products with some type of nominal guarantee can be hedged suitably using common financial instruments. The alternative is market interest-rate-based life-cycle products in which the risk is reduced towards retirement age, with smoothed payments in retirement based on relevant interest-rate curves and market conditions.

- Products from the labour-market pension funds (both insurance and savings products) should constantly be adapted to changes in public regulations. This applies for regulations and qualification criteria (e.g. age limits) for public benefits, tax rules, as well as nominal rates etc. It means that the rules for pension benefits etc., which require active acceptance from the individual on a change in the regulations and terms, are inappropriate and should be avoided. Classical insurance policies secure the insured against unilateral changes by the insurer. Application of this principle in a labour-market pension scheme can be expensive

for the collective if it has to pay for the rights of a special group and ultimately this may affect support for the scheme.

- As labour-market pensions and the majority of firm specific schemes in the commercial pensions market are compulsory for the individual member, the pension funds should design their products and services so that, after taking into account the differences in services, the administration costs of the labour-market pension schemes are kept at a low level (and at all events significantly under what is observed in companies with acquisition costs).

- If a member wants to acquire more information on his or her pension scheme and actively make choices, the pension schemes should offer a limited number of well thought out options, for example in relation to risk cover and savings, so that members can adjust their pension scheme to their own needs, family situation etc. Pricing of these options should reflect the costs of making the choices and the extra risk assumed by the pension funds. However, at all events (within reasonable cover) the costs should be considerably lower than the alternatives offered in Pillar III schemes.

VI.3 Political framework

The overall framework for the Danish pension system is relatively clear, and the Welfare Agreement and Retirement Reform secure a significant robustness in coping with changes in demographics and in particular in coping with increases in average life expectancy. The long-term economic viability of the system is reasonably assured, even though the budget profile of public finances leaves systematic budget deficits for a period of approximately 30 years after 2020. The reforms in recent years have therefore come a long way in establishing security and credibility for welfare-society programmes and thus the entire pension system. Therefore there is no need for larger and more extensive reforms of the Danish pension system. However there are some aspects which the Committee believes require initiatives and adjustment:

Through their savings in labour-market pensions, people with a stable attachment to the labour market will be assured a good supplement to the public pensions. However, there remains a residual group of people without pension savings or with very modest pension savings. These are primarily wage earners outside of collective agreements, people without or with very weak attachment to the labour market, as well as many self-employed. It should be noted that the residual group has become smaller in recent years.

- Securing a specific level of pension for all is better achieved through a compulsory pension scheme than through more targeted public pensions. More targeted public pensions will increase overall marginal taxation and thereby reduce incentives to save and work. This may also affect support for the labour-market pensions. A compulsory pension scheme

ensures that everyone saves for a pension. The scheme can therefore ensure that everyone who is not covered by a labour-market pension saves for a certain level of pension.

- Recent years' enhancement of pension savings, including in particular the labour-market pensions, means that the incomes of the pensioners of the future will deviate significantly from previous incomes and a rather large group of people will receive a reasonable pension. The public welfare programmes and schemes include a number of special age-related schemes and subsidies. These arise from a time when reaching retirement age was often associated with a significant deterioration in financial circumstances. This situation will be increasingly rare in the future and unlike illness and loss of ability to work, age should not automatically trigger a special subsidy or benefit. Maintaining these schemes will not be well targeted in terms of distributional policy, and changes should be considered.

- There is a political desire to encourage later retirement. The existing schemes, including in particular the interplay between the public pensions, labour-market pensions and the tax system, are complicated and they often leave just a modest financial incentive to retire at a later age. There is a need for simpler rules and more transparency, and in the longer term there are issues in an incentives structure which does not underpin the political desire to increase the age of retirement.

- The age limits in tax regulation should be adjusted to the changes in ages for early retirement pay and public pensions and therefore increase in line with these.

- Differentiated, effective taxation of all types of savings (different types of voluntary savings (including in housing), labour-market pensions etc.) make the system more complicated and can create unfortunate effects on incentives.

- The possibilities in the pension system to secure members reasonable pensions depend on continuity and stability in the regulations relevant for pension funds. This also includes the interplay between tax regulation and social benefits. Predictability is a vital factor for the individual and therefore continuity in policy for the area is important. Notice of any changes should be in good time and there should be a phasing-in period.

- Regulation should ensure that the labour-market pension schemes are designed so that they can easily be adjusted to new rules and frameworks in labour-market legislation or in other relevant areas. For example, it should be ensured that the lowest age for receiving a pension is adjusted immediately in line with changes in the statutory ages for early retirement pay or a public pension, and this applies for new as well as existing contracts.

This will ensure clarity regarding the overall rules, while the need for transitional schemes, which often undermine the political motives behind legislative changes, will either disappear or be significantly reduced.

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Annex I Terms of reference

The Committee of the Money and Pension Fund has established a committee of experts (hereafter "the Committee") composed of the following persons:

Torben M. Andersen, Aarhus University (Chairman of the Committee)
Cristina Lage, Managing Director, Unipension.
Peter Melchior, Executive Director, PKA
Torben Möger Pedersen, Managing Director, PensionDanmark
Lars Rohde, Managing Director, ATP - Arbejdsmarkedets Tillægspension

The Committee was tasked to write a report before spring 2012 with recommendations for the content of a generic pensions and life-assurance product.

The Committee was to focus solely on collective-agreement-based labour-market pension schemes and overall answer the following question:

How should a generic pension and life-assurance product be designed if it is to sustain the purchasing power of the members, ensure relevant insurance cover to members in different life situations, and be suitable for members who do not want to spend much time on pension choices, but who want a transparent product which "takes care of itself"?

Some pension schemes are currently facing a number of challenges. These include longer lifetimes, guarantees and (unintentional) redistributions between groups of insured persons. In addition to the direct problems for the companies, these challenges also affect how members perceive the pension schemes in terms of fairness, security and credibility. Therefore, the Money and Pension Panel wants the Committee to consider these problems at both member and company levels.

The Committee is free to make its own interpretation of the task (see below), but in its preliminary work the Money and Pension Panel has identified the following important topics in relation to the task.

Securing purchasing power

The fundamental objective of a pensions and savings product is to move purchasing power, i.e. to secure the savings of the individual in relation to changes in inflation and income. Ensuring this is a great challenge for the investment policy. How can a pension scheme best ensure these overall objectives?

The principle of solidarity

There is a solidaric element in collective pension schemes, meaning that people with smaller or greater risks pay the same for the pension benefits. Similarly there is a (solidaric) redistribution of investment returns in pension schemes on the basis of the averaging principle. But how far should this solidarity go? Many seem to agree that solidarity should cover the good life and the bad life, but should it also include children and cover of spouse etc.? And should generations with large investment returns contribute to generations for whom returns are more modest?

Pension guarantees and how members perceive the fairness, security and credibility of the product.

Guarantees are not free. They must be paid for by the members who receive the benefits. Furthermore there is a number of more specific and fundamental issues regarding guarantees in general. Do guarantees have a role in meeting the fundamental objective to secure purchasing power and income in a collective scheme? If so, what is the role of guarantees in managing the future pension benefits in the saving and payment phase respectively? And again, if so, should guarantees be legally binding?

Insurance cover and life cycle

What insurance cover should be included in the pension product? And what insurance cover should there be for each individual member, given that members will change life-phase several times during their lives? Should life assurance, annuities, spouse pensions and child pensions be a fixed component in a standard pension product or merely an option?

Option versus default

What choices are the most appropriate to leave to members and what is best to give members by default? For example, the insurance and cover mentioned above for family members. Other choices can also be by default or by active choice. For example investment profile (risk profile), average interest-rate/market interest rate. Should adjustment to different life phases be incorporated (by default) in the product, or should it require an active choice by the member?

Product characteristics - interest, guarantees and term

What is the relevant mix between annuities, lump-sum payments and pensions payable in instalments. Issues regarding freedom of choice should be incorporated here. If the Committee recommends an annuity product, the Committee should also make recommendations regarding longer life expectancy. Who should bear the risk of unsystematic and systematic life expectancy risk respectively? What should happen in the event of significant medical advances which in the short term increase life expectancy significantly?

Members' risk/risk measurement

Moving purchasing power is a pivotal element in a pension product. The members' risk is linked to the benefits process in the pension period and risk measurement should be linked to this. Traditional risk measurement based on investment results should take second place and is more linked to the company's risks, in particular if guarantees have been issued. How can the relevant risk be made clear and measured for the individual member?

Investment strategy for a generic product

How should investments be organised? To what extent should guarantees be utilised as a disciplinary factor for investments in order to ensure better risk discipline and management? To what extent should a possible free choice of investment strategy be replaced by a life-cycle product with more or less automatic adjustment of the investment profile for the individual over time?

Transparency

Experience shows that members of labour-market pension schemes do not spend much time on pensions issues. They find the subject difficult, especially younger members, and not particularly relevant. Therefore a new standard product should be simple and transparent. An independent goal should be that members can easily understand the overall options, principles and risks involved.

The report should describe/define/outline each of the above topics and provide a recommendation for each of the points.

The work of the Committee

The Committee is at liberty to stipulate and define the task itself, within the framework of the Terms of Reference. The Committee is at liberty to deal with other issues than those mentioned above, if it deems this to be relevant. However, the report should state the limitations made and why these have been made. At its own discretion, the Committee can recommend further studies of specific areas.

The Committee should agree on a deadline for submission of the report in collaboration with the Chairman of the Money and Pension Panel.

The Secretariat of the Money and Pension Panel liaises between the Committee and the Panel and may assist the Committee in various practical tasks.

Target group and contents

The target group for the standard pension product the Committee is to describe, is ordinary members of a labour-market pension scheme who do not want to spend time on their pension but who merely want a product which "looks after itself", ensures good insurance cover, and ensures that they can preserve their purchasing power as pensioners.

The Money and Pension Panel would like the report to encourage debate, but they would also like the report to make clear recommendations on how a future generic pension product could be designed.

The social partners should also be able to read the report, as well as decision-makers, the sector, the media and the public in general with an interest in pensions issues.

Publication

The report should be submitted to the Chairman of the Money and Pension Panel. Before final publication, the Chairman may decide to ask for comments (peer-reviews) from another party. The comments will be sent to the Committee. At its own discretion, the Committee may incorporate these comments in the final report.

The final report will be published at the conference on pensions held by the Money and Pension Panel in spring 2012. The report will be sent to the Panel on the morning of the date of publication.

After this the report will be on the agenda for the next meeting of the Money and Pension Panel.

In connection with publication, the report will be published on the Money and Pension Panel website at www.ppp.dk.

The Money and Pension Panel expect that the Panel of Experts will be available for a public debate for a period after publication to be agreed at a later date.

Annex II Schedule of the labour-market pensions (structure, options etc.)

No.	Table 1 Question	**Industriens Pension**	**JØP**	**Lægernes Pensionskasse**	**Lærernes Pension**	**PBU**	**Pensam**	**PensionDanmark**	**PKA**	**Sampension**	**Unipension**
1.01	Collective agreement area	Collective agreements for industry and associated areas as well as foodstuff (NNF)	Danish Confederation of Professional Associations (AC) collective agreement	Younger physicians	Physicians and teachers	Municipalities	FOA (public employees)	Transport and logistics	Public employees, primarily in the health and social sectors	HK/Kommunal (municipal employees)	Central government, regions and private undertakings
1.02	Collective agreement parties	Primarily the Confederation of Danish Industries and the Central Organisation of Industrial Employees, NNF (foodstuff), DS Trade & Industry, the Danish Metalworker's Union and Blik- og Rørarbejderforbundet (plumbing and piping).	The state and DJØF (academics)/Danish Confederation of Professional Associations	Younger physicians and Danish Regions	Local Government Denmark and Confederation of Teachers Unions	Danish National Federation of Early Childhood Teachers and Youth Educators (BUPL) and Local Government Denmark	FOA - Trade and Labour, Local Government Denmark	United Federation of Danish Workers and ATL (employers' organisation for transport)	Local Government Denmark, Danish Regions, Sundhedskartellet (health), HK, Danish Association of Social Workers, National Federation of Social Educators	HK/ municipalities, Local Government Denmark	Danish Confederation of Professional Associations area
1.03	Pension contribution - %	12% (for most members)	17.1%, availability supplement 9%	0.1579	0.173	0.1377	Typical member 12%-15%	0.12	13.13-17.7% of pensionable salary	0.155	15-17.8%
1.04	Pension contributions (median) before social security contributions	DKK 41,800 (approx. annual)	DKK 71,490	DKK 68,828 per year	DKK 4,844		DKK 30,000 per year	38,000	DKK 3,700 per month	3,987.52 incl. social security contributions	5,745.25 per month
1.05	Gross pay (median)	DKK 348,000 (approx. annual)	No information	DKK 435,894 per year	DKK 28,000	DKK 323,000	DKK 240,000 per year (pensionable)	DKK 317,000 before social security contributions	DKK 420,000 per year	DKK 308,564.76 (pensionable)	No information
1.06	Other remarks:			The example is a registrar without transitional allowance			Some private employers		Many members have elements in their pay which are not pensionable	In the new product, 2/3 of the premium is for group life and lifetime old-age pensions. The remaining 1/3 of the premium is for insurance cover, savings and/or unit link according to the employee's own wishes. If the employee does not exercise these options, the premiums go to a pension payable in instalments.	-
No.	Table 2 Question	**Industriens Pension**	**JØP**	**Lægernes Pensionskasse**	**Lærernes Pension**	**PBU**	**Pensam**	**PensionDanmark**	**PKA**	**Sampension**	**Unipension**
2.01	Does the company use health forms on admission?	No	No	No	No	No	No	No	No	No	No

2.02	Is there a waiting period or similar linked to some insurance cover?	No	Yes	Yes	No	No	Yes	No	Yes	Yes	Yes
2.03	If yes, state period		2 years	5 years			3 years		3 months	10 years	2 years
2.04	Other remarks:			Full contributions in accordance with the collective agreement must be paid for 5 years.	Members receiving disability pensions or on schemes with light jobs on special conditions (or have been within the past 3 years), are not covered for disability, but have full death cover.		Health clause for people on schemes with light jobs on special conditions			There is no right to benefits/exemption from premium payments if ability to work on admission is reduced by 2/3 or more. This limit no longer applies 10 years after the employee's admission to the pension scheme.	Health certificate required on admission outside a collective agreement. Members over 60 admitted without risk cover.
No.	Table 3 Question	**Industriens Pension**	**JØP**	**Lægernes Pensionskasse**	**Lærernes Pension**	**PBU**	**Pensam**	**PensionDanmark**	**PKA**	**Sampension**	**Unipension**
3.01	Applies guarantees	No	Yes	No	Yes	No	No	No	Yes	No	Yes
3.02	Describe:		0%, 2%, 3%, 3.7%, 4.25%	Applies for members joining after 1 July 1999	Conditional guarantee (life expectancy) with 0% guaranteed benefits				Guaranteed benefits	The product is a life-cycle product at market interest rates.	Conditional guarantees are used.
3.03	Lifetime old-age pension	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
3.04	Type of savings	Market interest rate, life cycle	Average interest rate	Lifetime annuity	Lifetime annuity - basic type 211	Market interest rate	Annuities - compulsory/voluntary	Market interest rate	? Lifetime annuity	Expires at 67 years	Annuities
	-Percentage of savings for typical member[1)] (%)	About 71%. In future it will become 45%	0.91	1	0.8	0.54	Minimum 20%	0.5		2/3 of the premium (see point 1.06)	1
3.06	Protection of savings for lifetime old-age pensions	No	No	No	No	Yes	No	Yes	No	No	No
3.07	Describe:		-			Protection of custody account		Group life cover on death pays at least the custody account less charges			
3.08	Pension payable in instalments	Yes	Yes	No	No	Yes	No	Yes	No	Yes	Yes
3.09	- type of savings	Market interest rate, life cycle	Average interest rate			Market interest rate		Market interest rate	Term policy, 10-year annuity	10-year pension payable in instalments with/without insurance on death. Expires at 67 years old.	Pension payable in instalments and term annuities
3.10	-Percentage of savings for typical member[1)] (%)	About 20%. In future it will become 45%				0.36		0.5		1/3 of the premium (see point 1.06)	Optional up to 1/3, if collective agreement, otherwise free choice
3.11	Capital pension	Yes	No	No	Yes	Yes	Yes	No	No	Yes	Yes
3.12	- type of savings	Market interest rate, life cycle	-		Basic type 125	Market interest rate	Voluntary	Market interest rate	Tax 1 - lump sum	Age sum with/without insurance on death. Expires at 67 years-old.	Capital pension and age sum
3.13	-Percentage of savings for typical member[1)] (%)		-		16.67% of the premium	0.1	0-40%	0	9.5% of contributions	0	Optional up to 1/6, if collective agreement, otherwise free choice For age sum, typically 10% of payment for annuity.

3.14	What are the options for members to decide for themselves the allocation of savings between savings products, describe:	Members can opt-out of paying for capital pension, and they can transfer capital pension and/or pension payable in instalments to an annuity on retirement.	None	Not available	Can opt-in and opt-out of capital pension	None	Can decide for about 50% of contributions	Can choose 100% payment to annuity Alternatively the percentage for capital pension can be chosen up to 10% or 50% with corresponding reduction in the instalments pension percentage.	Opt-out for contributions for a lump sum	1/3 of payments are used for optional insurance cover, savings and/or unit link If the employee does not exercise the option, the premium is used for a pension payable in instalments, see point 1.06.	If collective agreement there is an option for 1/3 to go to pension payable in instalments and capital pension together, but max. 1/6 of capital pension. Opt-out of age sum possible
3.15	Percentage of members who have exercised the options mentioned (%)	Less than 1%	-				Max. 10%	0.02	Few	Not possible to state this percentage If the employee does not exercise the option, the premium currently goes to pension payable in instalments. Previously it went to lifetime old-age pensions. It is not possible to separate those who have actively opted for a savings type and those who have been set up automatically according to either the old or the new rules.	2.4% for pension payable in instalments, term annuity and capital pension alone.
3.16	What are the options for members to themselves influence the composition of their investments - if at all, describe	None, it is a life cycle product without options	None	None	None	None	None	Members can choose high/medium/low risk. Alternatively there is free choice of composition between PensionsDenmark's pools and the 10 external share funds. These options only apply for pensions payable in instalments and capital pensions.	None	The member can choose unit linked for 1/3 of payments.	None
3.17	Percentage of members who have exercised the options mentioned (%)	-	-				-	0.003		Less than 1%	
3.18	Possibility for private supplementary savings?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
3.19	- If yes: costs of supplementary private savings	DKK 2 per month for administration, if there are contributions in the month, plus DKK 2 per month in custody-account costs.	Main scheme: 1.3% of contribution, max. DKK 2,160 in scheme 1 and DKK 1,080 in scheme 2	Currently 1.5% of contribution	2.25% of contributions		Same as AMP scheme	0	As in pension fund	None	0.55% for pension payable in instalments and capital pension, and 0.8% for annuities.
3.20	Percentage of members who have exercised the option for private supplementary savings (%)	0.04	No information	0.02	0.01	1. Via Weekendpension - about 1300 members, 2. Via collective agreement - new possibility	Max. 5%			Less than 1%	Cannot be calculated

				The 2% stated under question 3.20 only includes the members who pay supplements privately. We cannot calculate how many have asked their employer about paying extra.							
3.21	Other remarks:	The life cycle product was introduced from 1/6 2012									Members admitted before 2008 have child pensions on retirement.
No.	Table 4 Question	**Industriens Pension**	**JØP**	**Lægernes Pensionskasse**	**Lærernes Pension**	**PBU**	**Pensam**	**PensionDanmark**	**PKA**	**Sampension**	**Unipension**
4.01	Regular benefits	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
4.02	Regular benefits (size of cover)	DKK 60,000/yr. (typically)	DKK 295,000	Individual	Same as old-age pension	DKK 87,000 per year	Min. DKK 20,000 per year	DKK 48,000 per year	Depends on contributions	20/10/0% depending on age on admission	Standard 100% of old-age pension at 67 years.
4.03	- Solidaric or individual pricing?	Solidaric	Solidaric	Solidaric	Individual pricing	Solidaric	Collective	Solidaric	Individual	Solidaric	Individual
4.04	Protection of savings	Yes	No	No	No	Yes	No	Yes	Yes	Yes	Yes
4.05	Solidaric or individual pricing (or, e.g. asset interest with exemption from premium payments on disability)	Exemption from contributions calculated via asset interest with exemption from premium payments on disability	-	Solidaric		Individual asset interest	-	Solidaric Price per DKK cover is identical for regular benefits and savings protection		Individual	Individual
4.06	Criteria for qualifying for possible regular benefits, describe:	When the ability to work of the insured is deemed to be reduced by 2/3 or more of the full ability to work because of illness or accident. Loss of ability to work is assessed by Industriens Pension taking account of the person's health on the basis of a purely medical assessment.	2/3 disability	Ability to work as a physician must be reduced to 1/3 or less, and the disorder must be deemed to last for at least 6 months.	Disability pension = qualifying for public disability pension; Temporary disability pension = resigned, receiving sickness benefits, unemployment benefits or rehabilitation benefits	Disability pension	The ability to work criterion (public ruling)	Qualify for public disability pension.	Qualify for public disability pension.	The employee has a right to exemption from contributions/premiums for loss of ability to work when the general ability to work is permanently reduced by 2/3 or more of the full ability to work, and - the ability to work in the insurance period is reduced for health reasons because of illness or accident which was not caused intentionally, and - the employee has resigned, and - salary payments have ceased.	50% disability pension for loss of 50% of ability to work in his/her profession (profession-specific) and 100% for loss of 2/3 ability to work in profession (profession-specific).
4.07	Expiry of insurance cover	60 years	65 (67) years	67 years	65 years	Early retirement age	65 years	62 years	65 years	67 years	½ disability pension must be awarded before 60 years and full disability pension before 67 years.
4.08	Expiry of pension benefits	67 years	Lifetime	None	65 years	Old-age pension/public pension age	65 years	62 years	65 years	67 years	67 years, after which payments for old-age pension start
4.09	Limitations of claims	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	Yes

4.10	Describe:	Ordinary regulations under Danish law	Only disability pension from date of application	Ordinary regulations under Danish law	According to relevant law on limitations	5 years	Ordinary FAL regulations on limitations (years), but only for new policies/plans between taken out 50 and 60 years			Usually no limitations.	Limitations according to time limits set in legislation, with following exceptions. If on the application date the member continues to meet the requirements for payment, the right to regular benefits will never be limited. Only the benefits older than 3/10 years will be limited.
4.11	Is there opt-out for cover?	No	No	No	No	No	Yes	No	No	No	No
4.12	If yes: -Percentage of members who opted out of cover (%)		-				Max. 30% in the group aged between 50 and 60 years.				
4.13	Is the size of the cover optional?	No	No	No	No	No	Yes	Yes	No	Yes	Yes
4.14	Describe:		-				But min. DKK 20,000 per year.	Option to increase or decrease the regular benefits by 50%		The product contains a basic cover , see point 4.02. The employees themselves can choose the amount of the supplementary cover.	Between 40% and 500% of the old-age pension at 67 years can be chosen.
4.15	If yes: -Proportion of members who have exercised the options regarding cover amount (%)		-				Max. 10%	0.002		0.3	0.003
4.16	Pricing of optional cover		-				Collective	Same solidaric price per DKK cover for optional higher/lower cover.		Individual	
4.17	When can a choice be made, and when does it take effect?		-				Must be actively paying. May change at any time under 60 years - applicable from the next 1st of the month.	Option for less cover takes effect from the month after. Opting up takes effect six months later. Both require that the member is actively paying contributions both when making the option and when cover takes effect. For option for more cover, the member must not also have received benefits for critical illness.		The employee can change at any time.	Can be changed from admission and takes effects from the next first of the month (see 4.13)
4.18	Percentage of members actively choosing optional cover (%)		-				Max. 10%	Not relevant		0.3	
	Lump sum payments	Yes	Yes	No	No	Yes	Yes	No	Yes	Yes	Yes (via solidaric group insurance)

4.20	Lump sum payment (amount of cover)	DKK 100,000	See annex 1				DKK 130,000		DKK 148,000	DKK 200,000	DKK 400,000 graduated by age
4.21	Gradual reduction in cover?	No	Yes	No		No	No		No	No	Yes
4.22	Describe		Reduced from 40-60 years				Group sum				DKK 400,000-100,000 lapses at 60 years
4.23	Criteria to qualify for possible lump-sum payment	When the ability to work of the insured is deemed to be reduced by 1/2 or more of the full ability to work because of illness or accident. Loss of ability to work is assessed by Industriens Pension taking account of the person's health on the basis of a purely medical assessment.	Awarded disability pension			Disability pension	The ability to work criterion		Qualify for public disability pension	See point 4.06	Qualify for permanent full disability pension
4.24	Expiry of insurance cover	60 years	67 years in scheme 1 and 65 years in scheme 2			Early retirement age	60 years		60 years	67 years	60 years
4.25	Limitations of claims	Yes				Yes	Yes		No	No	Yes
4.26	Describe:	Ordinary regulations under Danish law				5 years	Ordinary FAL regulations on limitations (3 years), but only for new policies/plans between taken out 50 and 60 years			Usually no limitations.	According to statutory regulations.
4.27	Is there opt-out for cover?	No				No	No		No	No	No
4.28	If yes: -Percentage of members who opted out of cover (%)										
						No	No				
4.30	Is the size of the cover optional?	Yes	No						No	No	No
4.31	Describe:	It is possible to choose between cover of DKK 100,000 or DKK 150,000.									
	If yes: -Proportion of members who have exercised the options regarding cover amount (%)	0.003									
4.33	Pricing of optional cover	DKK 50,000 extra in invalidity cover costs up to DKK 44 more per month after bonus (2012), depending on the age of the insured.					Solidaric			Option not possible for invalidity cover	

4.34	When can a choice be made, and when does it take effect?	If contributions have been paid the option is open. If cover is raised, it takes effect after 12 months. If cover is reduced, it takes effect after 3 months.									
4.35		0.3%, same reply as in 4.32 as the only option is extra cover.									
	Child pension	No	Yes		Yes	No	Yes	No	Yes	No	Yes
4.37	Describe:		20% of own pension		For children under 21.		In some schemes cover min. DKK 5,000		25% of old-age pension	There is no payment of child pensions for loss of ability to work.	Standard 20% of the member's old-age pension. Optional in interval 0-20% of the highest old-age and disability pension.
4.38	Other remarks:					½ disability amount for schemes with light jobs on special conditions					
No.	Table 5 Question	**Industriens Pension**	**JØP**	**Lægernes Pensionskasse**	**Lærernes Pension**	**PBU**	**Pensam**	**PensionDanmark**	**PKA**	**Sampension**	**Unipension**
5.01	Lump sum payments?	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
5.02	Size of cover	DKK 100,000	DKK 124,000	Currently DKK 115,000 - DKK 150,000		DKK 100,000	DKK 100,000	DKK 100,000	DKK 148,000	DKK 100,000	DKK 100,000
5.03	Expiry of insurance cover	67 years	67 years	65 years		Public pension/old-age pension age	65 years	65 years	65 years	70 years	67 years
5.04	Gradual reduction in cover?	No	No	Yes		No	No	No	No	No	No
5.05	Describe:		-	Up to and including 59 years DKK 150,000 and from 60 up to and including 64 DKK 150,000.							
	Is there opt-out for cover?	Yes	No	No		No	No	No	No	No	No
5.07	If yes: -Percentage of members who opted out of cover (%)	0.001	-								
5.08	Is the size of cover optional?	Yes	No	No		No	No	Yes	No	No	No
5.09	Describe:	There is a choice between DKK 0, 50,000, 100,000 and 150,000.	-					Option to increase or reduce cover by 50%			
5.10	If yes: -Proportion of members who have exercised the options regarding cover amount (%)	0.002	-					0.002			

5.11	Pricing of optional cover	Cost to increase cover to DKK 150,000 is DKK 61 more per month after bonus (2012), depending on the age of the insured.	-					Same solidaric price per DKK cover for optional higher/lower cover.		Option not possible for cover for certain critical illnesses.	
5.12	When can a choice be made, and when does it take effect?	If contributions have been paid the option is open. If cover is raised, it takes effect after 12 months. If cover is reduced, it takes effect after 3 months.	-					Option for less cover takes effect from the month after. Opting up takes effect six months later. Both require that the member is actively paying contributions both when making the option and when cover takes effect. For option for more cover, the member must not also have received benefits for critical illness.			
5.13	Percentage of members actively choosing optional cover (%)	0.001	-								
5.14	Collaboration with Landspatientregistret (the national patient registry) on identification?	Yes	No	Yes		Yes	No	Yes	Yes	Yes	Yes
5.15	Limitations of claims	Yes	Yes	Yes		Yes	Yes	No	No	No	Yes
5.16	Describe:	Ordinary regulations under Danish law	Statutory regulations for limitation. On exit from the scheme, 3 months.	Ordinary regulations under Danish law		5 years	3 years			Limitation not usually applicable.	According to statutory regulations.
5.17	Other remarks:		Collaboration with Landspatientregistret (the national patient registry) on identification expected to be introduced in 2012								
No.	Table 6 Question	**Industriens Pension**	**JØP**	**Lægernes Pensionskasse**	**Lærernes Pension**	**PBU**	**Pensam**	**PensionDanmark**	**PKA**	**Sampension**	**Unipension**
6.01	Lump sum payments?	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
6.02	Size of cover	DKK 300,000	DKK 1,099,000 up to 45 years-old. DKK 806,000 45-54 years-old. DKK 510,000 55-66 years-old.	Individual - corresponds to 2.4 years' old-age pensions at 67 years-old.		DKK 1,275,000	DKK 425,000 (compulsory) + voluntary	PensionDanmark pays out the custody account after tax - but at least DKK 500.000. See point 6.05, however.	DKK 596,000		DKK 1,100,000 graduated by age
6.03	Expiry of insurance cover	67 years	67 years	67 years		Old-age pension/public pension age	65 years	Qualify for old-age pension (see 6.05, however)	65 years	70 years	67 years
6.04	Gradual reduction in	No	Yes	No		Yes	No	Yes	No	No	Yes

	cover?										
6.05	Describe:		See 6.02	Lump sum only paid if pension scheme 2 is chosen. In pension scheme 1 the unmarried sum is paid, however (also on 2.4 years' old-age pension at 67 years), if a married pension does not have to be paid.		Reduced each year by DKK 51,000 from 41 years.		Minimum amount falls to 76% (375,000) at 45 years, 50% (250,000) at 55 years and 0 at 65 years.			DKK 1,100,000 - DKK 200,000
	Is there opt-out for cover?	Yes	No	Yes		No	No (for the compulsory part)	No	No	No	No
6.07	Is the size of the cover optional?	Yes	No	No		No	Yes	Yes	No	Yes	No
6.08	Describe:	Choice between cover of DKK 0, DKK 300,000 or DKK 600,000 (tax-free)	-				Option of a voluntary lump sum on death of min. DKK 200,000.	Minimum amount before gradual reduction can be chosen from DKK 0 to 1 mill. in five optional steps.		The product contains a basic cover, see point 6.02. The employees themselves can choose the amount of the supplementary cover.	
6.09	If yes: -Proportion of members who have exercised the options regarding cover amount (%)	0.005	-				Max. 10%	0.006		Less than 1%	
6.10	Pricing of optional cover	Cost to increase cover to DKK 600,000 is DKK 56 more per month after bonus (2012), depending on the age of the insured.	-				Solidaric for the compulsory part + for the voluntary	The same solidaric price per DKK covers for optional increased/reduced cover.		Individual	
6.11	When can a choice be made, and when does it take effect?	If contributions have been paid the option is open. If cover is raised, it takes effect after 12 months. If cover is reduced, it takes effect after 3 months.	-				Must be actively paying. Can choose at any time under 60 years - applies from the next 1st of the month.	Option for less cover takes effect from the month after. Option for more cover takes effect six months after. Both require that the member is actively paying contributions both when making the option and when cover takes effect. For option for more cover, the member must not also have received benefits for critical illness.		The employee can change at any time.	
6.12	Percentage of members actively choosing optional cover (%)	0.002	-				Max. 10%			Less than 1%	
6.13	Spouse pension	No	Yes	Yes	Yes	No	Yes	No	No	Yes	Yes
6.14	Type		Annual pension	Lifetime annuity	10-year death pension		10-year or lifetime (voluntary)			Term policy or lifetime spouse pension	Regular

	Size of cover		40% of own pension	Individual - corresponds to 60% of old-age pensions at 67 years	50% of own pension		Optional, but min. DKK 10,000 per year.			Optional cover	0-60% of the benefits (highest of old-age or disability pension) the member is entitled to on death. Standard option for a new member today is 60% ten-year cover of spouse.
6.16	Expiry of insurance cover		Lifetime	Lifetime. Spouse pension is only linked to pension scheme 1	After 15 years on old-age pension		Lifetime			67 years	Never
	Term of spouse benefits		10 years / lifetime	Lifetime	Up to 10 years (with gradual reduction from old-age pension age)		10 years or lifetime			Term policy to when spouse reaches 67 years, or lifetime	10 years or lifetime
	Is there opt-out for cover?		Yes for scheme 1, no for scheme 2	Yes	Yes Opt out for death cover when the member starts receiving old-age pension.		Yes (must opt in)			Yes	Yes
6.19	If yes: -Percentage of members who opted out of cover (%)		5-10% for scheme 2				Max. 10% have opted in			The cover is not compulsory. It must be actively chosen.	Cannot be calculated
6.20	Is the size of the cover optional?		No	No	No		Yes			Yes	Yes
6.21	Describe:		-				Yes, but min. DKK 10,000 per year.			The employees themselves choose the size of cover.	0-60% of highest of old-age or disability pension
6.22	If yes: -Proportion of members who have exercised the options regarding cover amount (%)		-				Max. 10%			0.02	Cannot be calculated
6.23	Pricing of optional cover		-				Collective			Individual	
6.24	When can a choice be made, and when does it take effect?		-				Must be actively paying. Can choose at any time under 60 years - applies from the next 1st of the month.			The employee can change at any time.	Can choose from admission and no later than 60 years. Takes effect from the next first of the month (re, 6.13)
	Percentage of members actively choosing optional cover (%)		-				Max. 10%			0.02	
6.26	Child pension	No	Yes	Yes	Yes	Yes	Yes, in some schemes	No	Yes	Yes	Yes
6.27	Size of cover		20% of own pension	20% of own pension at payment date	25% of own pension	DKK 32,000 per year for children less than 24 years	Optional, but min. DKK 5,000		25% of old-age pension	DKK 12,000 per year to child's 21st year.	20% of highest of old-age or disability pension
6.28	Expiry of insurance cover		Child's 24th birthday	Paid up to child's 21st year	21	Public pension age / child's 24th birthday				21/70	Child's 21st year
6.29	Is there opt-out for cover?		No	No	No	No	No, can opt in		No	No	No

6.30	If yes: -Percentage of members who opted out of cover (%)		-								
6.31	Is the size of the cover optional?		No	No	No	No	Yes		Yes	Yes	Yes
6.32	Describe:		-				Follows proportionally cover on disability			The product contains a basic cover , see point 6.27. The employee chooses the amount of supplementary cover, but the max. total child pension is 25% of pensionable salary.	Can be reduced to 14% of the highest of the old-age or disability pension.
6.33	If yes: -Proportion of members who have exercised the options regarding cover amount (%)		-				Max. 10%			Less than 1%	0.049
	Pricing of optional cover		-				Collective			Individual	
6.35	When can a choice be made, and when does it take effect?		-				Must be actively paying. Can choose at any time under 60 years - applies from the next 1st of the month.			The employee can change at any time.	
6.36	Percentage of members actively choosing optional cover (%)		-				Max. 10%			Less than 1%	
6.37	Other remarks:	On death before retirement an amount is paid in instalments corresponding to the expected pension payable in instalments, if the contributions (average over the past 3 months) would have continued unchanged until the member's 67th birthday.	-	The child pension is paid when the member qualifies for old-age pension or disability pension, or on death.	The child pension is paid on death, disability or retirement						It is possible to choose a lump sum on death of up to 240% of old-age pension at 67 years.
No.	Table 7 Question	**Industriens Pension**	**JØP**	**Lægernes Pensionskasse**	**Lærernes Pension**	**PBU**	**Pensam**	**PensionDanmark**	**PKA**	**Sampension**	**Unipension**
7.01	Preventive treatment, guidance in use of the health service etc.	Yes	No	No	No	No	Yes for some schemes	Yes	No	No	No
7.02	Is there opt-out for cover?	No					No	No			
7.03	If yes: -Percentage of members who opted out of cover (%)										

7.04	Examination/diagnosis?	No			No	No		Yes	No	No	
7.05	Is there opt-out for cover?							No			
7.06	If yes: -Percentage of members who opted out of cover (%)										
7.07	Treatment / hospital insurance?	No	No		No	No	Yes	No	No	No	
7.08	Is there opt-out for cover?						No				
7.09	If yes: -Percentage of members who opted out of cover (%)										
7.10	Other remarks:	Health scheme is not part of the ordinary scheme. Includes only apprentice plumbers under training.					7.07 not hospital insurance	Examination/diagnosis includes 30,000 members as at 1/3 2012			
No.	Table 8 Question	**Industriens Pension**	**JØP**	**Lægernes Pensionskasse**	**Lærernes Pension**	**PBU**	**Pensam**	**PensionDanmark**	**PKA**	**Sampension**	**Unipension**
8.01	Insurance cover after cessation of contributions?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
8.02	Length in months	Up to 12 months	12 months	12 months, but no more than the number of months in which pension contributions have been paid.	12 months	12 months	12 months + 48 months for continuous illness	12 months	12 months	12 months	12 months
8.03	Is there opt-out for cover?	Yes	No	Yes	Yes	Yes	No	Yes	Yes	Yes, partly	Yes
8.04	If yes: -Percentage of members who opted out of cover (%)	4-5%	-	0.67%					Few	Less than 1%	Cannot be calculated
8.05	Can cover be extended?	Yes	Yes	Yes	Yes	Yes	No, but yes with continuous illness	Yes	Yes	No	Yes
8.06	If yes: Percentage of members who have extended cover (%)	Unknown	-	0.27					Up to 36 months		Cannot be calculated
8.07	Possibility to be a self-pay member?	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes

										Transfer must be no later than 12 months after retirement. There may be requirements for minimum premium, allocation of premium between insurance and savings, as well as health information.	
8.08	Describe any restrictions	None	-	Max. contributions corresponding to the contributions to date.							Must state health when transferring to self-pay member, if the risk amount increases by more than 25%.
	Other remarks:	Extension of period of cover exempt from contributions from 1/6 2012	-	The reply to question 8.04 states that the percentage of members who have ceased contributions and who are not covered 11 months after cessation of contributions. As cover is only possible for a maximum of the number of months in which contributions have been made, but max. 12 months, the percentage also includes the members who have utilised their max. period with cover and where this is less than 12 months because of a short period of contributions.						No opt-out from group life covers on cessation of contributions. On other pensions respite is offered for up to 12 months. Opt out from respite cover and the employee can choose to change to a premium-free insurance policy.	
No.	Table 9 Question	**Industriens Pension**	**JØP**	**Lægernes Pensionskasse**	**Lærernes Pension**	**PBU**	**Pensam**	**PensionDanmark**	**PKA**	**Sampension**	**Unipension**
9.01	Option to repurchase?	No	Yes	No	Yes	Yes	Yes	No	No	Yes	No
9.02	Describe:		For those not employed under a collective agreement		But very limited: Only for custody account of less than DKK 9,700 (2011) and dormant. For emigration only if the custody account is less than DKK 20,000. (1997 - adjusted in line with state pay levels)	Custody account - limit set by the board of directors and other criteria in the regulations.	No sooner than 1 year after resignation and not employed in pensionable position and must not be entitled to a pension.			Member 1 and 2 years after resignation, when premiums have not been paid for more than a total of 5 years and the employee will not be admitted to a pension scheme with a new employer. In addition to this, if the reserve is less that DKK 20,500, can be annulled 24 months after resignation.	Schemes less than a triviality limit can be repurchased.

9.03	Other remarks:	May, however, be repurchased on emigration. Dormant custody accounts less than a triviality limit are paid if the insured does not transfer it to another company.	-	No							
No.	Table 10 Question	**Industriens Pension**	**JØP**	**Lægernes Pensionskasse**	**Lærernes Pension**	**PBU**	**Pensam**	**PensionDanmark**	**PKA**	**Sampension**	**Unipension**
10.01	Annual costs in DKK and % for a typical member (46 years) in 2011 - divided between administration and investment costs	(costs measurer 2012)		Risk return: Annual costs: DKK 7,274, 0.48%	custody account: DKK 500,000, premium: DKK 60,000	Risk return = DKK 4,739, = 0.73%			We do not calculate annual costs in DKK per "typical member"	According to the Sampension costs measurer (member 46 years, custody account DKK 600,005, premium DKK 50,334)	
	Annual costs DKK	DKK 2,065		DKK 21,713	DKK 4,234	DKK 10,792	DKK 2,650	DKK 1,623		DKK 4,537	
	Administration	DKK 384	DKK 1,930	DKK 2,544	DKK 1,242	DKK 1,468	DKK 1,150	DKK 396		DKK 552	DKK 7,012
	Investment	DKK 1,681	DKK 5,449	DKK 11,895	DKK 2,992	DKK 4,585	DKK 1,500	DKK 1,227		DKK 3,985	DKK 3,549
	Annual costs %	0.0087		0.0143	0.0068	0.0165	0.0127	0.0042	0.0066	0.0067%	
	Administration			0.0017		0.0022		0.001	0.002		0.0127
	Investment			0.0078		0.007		0.0032	0.0046%		0.0064
10.02	Annual costs in DKK and % for model member[1] in 2011 - divided into admin. and inv. costs	(costs measurer 2012)	See above.	Risk return: Annual costs: DKK 2,618, 0.48%		Risk return = DKK 4,120 = 0.75%				According to the Sampension costs measurer	
	Annual costs DKK	DKK 4,408		DKK 8,649	DKK 3,727	DKK 9,369	DKK 5,817	DKK 2,200		DKK 3,862	
	Administration	DKK 384		DKK 1,750	DKK 828	DKK 1,398	DKK 1,840	DKK 396		DKK 552	DKK 6,930
	Investment	DKK 4,024		DKK 4,281	DKK 2,899	DKK 3,851	DKK 3,977	DKK 1,804		DKK 3,310	DKK 3,369
	Annual costs %	0.0081		0.0159	0.0068	0.0171	0.0105	0.0039		0.0069	
	Administration			0.0032		0.0025		0.0007			0.0126
	Investment			0.0079		0.007		0.0032			0.0061
10.03	Additional administration costs from exercising options in the scheme (yes/no and describe)?	No	No	No	No	No	Yes Costs for other insurance cover can be included in the client's individual annual costs. This could be costs for group insurance.	Only for utilising optional choice of pool (investments)		No, additional costs are not demanded for exercising options between savings and insurance cover. There are extra costs from using unit link, in that 0.15% of savings is collected annually as well as charges and price spread for purchases and sales of units in the funds.	No

10.04	Other remarks:		-	In question 10,01, the calculation is for a consultant employed under a collective agreement with annual contributions of DKK 123,252 and a custody account of DKK 1,375,989.			Annual costs DKK and % are based on the costs measurer.	For a typical member in 10.01 a custody account of DKK 330,000 and contributions before social security contributions of DKK 38,000 have been used.			The low figure excludes additional returns on equity capital and special bonus provisions. As we are owned by our members, this money comes to members in the form of higher pensions.
No.	Table 11 Question	**Industriens Pension**	**JØP**	**Lægernes Pensionskasse**	**Lærernes Pension**	**PBU**	**Pensam**	**PensionDanmark**	**PKA**	**Sampension**	**Unipension**
11.01	Smoothing mechanisms on annuities payments where relevant?	Yes	No	Yes	No	No		Yes		No	No
11.02	Optional smoothing mechanisms where relevant?	No		Yes	No	No		No			No
11.03	If yes: Percentage of members who actively exercise the option.			0.075							
11.04	Option to start payments at a higher payment rate?	No	Yes	Yes, see question 11.12	No	No	Yes	No	Yes	No	Yes
11.05	Conversion of savings for pension payable in instalments to annuity savings?	Yes	Yes	-	Yes	Yes	No	Yes	Yes	Yes	Yes
11.06	Optional length of pension payable in instalments?	Yes	Yes		No	No	No	Yes	No	Yes	Yes
11.07	Describe:	Period can be extended with the framework of the act on taxation of pensions	Max. 25 years					10, 15 or 20 years		Instalments period can be extended at the start of payments and subsequently every year as at 1/1.	Optional between 10 and 25 years.
11.08	If yes: Percentage of members who have actively chosen the length of payment of pension payable in instalments.	0	New product - less than 5 members have started payments.					Less than 1%		Less than 1%	Cannot be calculated
11.09	Option to start payments of different savings/tax classes at different times?	Yes	Yes	No	Yes	Yes	Yes	No	Yes	Yes	Yes
11.10	Describe:	Capital pension can be paid separately, while pension payable in instalments and annuities must start at the same time.	Reduced working hours, payment of individual out of several schemes.		From early retirement age the capital pension and annuity can be paid independently of each other.	Capital pension can be initiated alone.	Capital pension and annuity do not need to start at the same time.	Capital pension can, however, be paid independently of annuity/instalments.	Sum can be paid from 60 years and when leaving the labour market.	The employee can opt to have all the old-age pensions paid from the same date or that payment starts at different dates.	Optional within the legislation.

	If yes: Percentage who actively chooses to initiate payments of different savings/tax classes at other dates than the dates for the "default solution".	About 94% initiate pensions at other dates than the 67 years default.	No figures available							80-90%	Cannot be calculated
11.12	Other remarks:	Applied from 1/6 2012		It is possible to opt for an age-defined supplement which is calculated on the basis of a conversion interest rate of 3.5%.						The percentage in point 11.11 has been calculated on the basis of the current allocation of the new product between employees of normal retirement age and employees who elect to take their pension before normal retirement age. It is not possible to give a more accurate percentage.	
No.	Table 12 Question	**Industriens Pension**	**JØP**	**Lægernes Pensionskasse**	**Lærernes Pension**	**PBU**	**Pensam**	**PensionDanmark**	**PKA**	**Sampension**	**Unipension**
12.01	Use of cohort mortalities	From 1/6 2012 cohort mortality has been used in price setting.	No	Yes, see question 12.06	Yes	No	No	Yes	No	No	No
12.02	Remaining life at 1/1 2012 normal mortality (born 1/1 1971), for products with negative risk of death for the member	44 years	Policy basis: Scheme 1 men: 34 years, Scheme 1 women: 38 years, Scheme 2 unisex: 44 years, Best estimate unisex: 42 years.	47.05 years is the remaining life of a 40-year-old in the policy basis.	46.66 years (women)	40 years	44.52 years	43.2 years		43.5 years	44 years
12.03	Remaining life at 1/1 2012 normal mortality (born 1/1 1946), for products with negative risk of death for the member	19 years	Policy basis: Scheme 1 men: 14 years, Scheme 1 women: 17 years, Scheme 2 unisex: 21 years, Best estimate unisex: 19 years.	24.06 years is the remaining life of a 65-year-old woman in the policy basis, and 21.26 years for men.	22.05 years (women)	18 years	21.74 years	17.7 years		20.7 years	22 years
12.04	Remaining life at 1/1 2012 normal mortality (born 1/1 1946), for products with negative risk of death for the member	No	No	No	No	No	No	No	No	No	No
12.05	Describe:		More restrictive mortality or disability tables are not used. Instead, the pension is reduced on admission on more restrictive terms for disability within a waiting period of 7 years.					The savings of disabled members apply normal mortality. The technical provisions for disability pensions and to protect savings apply mortality rates for the disabled.			

12.06	Other remarks:		-	The policy basis does not include improvements in expected life, but these are included in the basis for market value.		Model mortality/cohort applied in the basis for provisions					Information is for the policy basis.
No.	Table 13 Question	**Industriens Pension**	**JØP**	**Lægernes Pensionskasse**	**Lærernes Pension**	**PBU**	**Pensam**	**PensionDanmark**	**PKA**	**Sampension**	**Unipension**
13.01	Calculation interest rate for payment of lifetime old-age pensions as at 1/1 2012.	We are considering 0% from 1/6 2012, when new payment profiles will be introduced.	3.5%, 4%	We have basic interest rates of 1, 3, 3.5 and 4%. For interest rates of less than 3.5% an age-dependent supplement can be elected.	Guaranteed 0% and unguaranteed 2.25%	0.016	0	0.025	Policy interest rate or the recognised conversion interest rate.	0.03	0.0425
13.02	Calculation interest rate used for payments of pensions payable in instalments, as at 1/1 2012	We are considering 0% from 1/6 2012, when new payment profiles will be introduced.	3.5%, 4%	-	Guaranteed 0% and unguaranteed 2.25%	0.016	-	0.025	Ditto	0.03	0.0425
13.03	Are unguaranteed supplements (retirement supplements) from equity / special bonus provisions used on lifetime old-age pensions?	No	Yes	Yes	No	Yes	No	Yes	Yes	No	Yes
13.04	How much in 2012?		8-22% / 5%	12% the LPUA scheme 13% in the LP scheme	about 6%	0		5.88% before taxation on pension returns (PAL)	Depends on savings and value added		About 30% is unguaranteed for an average pensioner. The percentage falls with rising age.
13.05	How much does a 65-year-old (born 1/1 1946) receive in annual pension in the first year with a custody account of DKK 1 mill. in savings for a lifetime old-age pension, excl. any unguaranteed supplements, assuming retirement on 1/1 2012?	Cannot currently reply because of transfer to new payment profile from 1/6 2012.	oldest policy basis: DKK 96,000, newest policy basis: DKK 45,000.	DKK 54,662	DKK 58,990	DKK 63,700, provided the full custody account is spent on lifetime old-age pension.	DKK 44,306	DKK 61,190 without pension protection		DKK 67,642 per year	Cannot be calculated without unguaranteed supplement.
13.06	How much does a 65-year-old (born 1/1 1946) receive in annual pension in the first year (10-year instalments) with a custody account of DKK 1 mill. in savings for a pension payable in instalments, excl. any unguaranteed supplements,	Cannot currently reply because of transfer to new payment profile from 1/6 2012.	DKK 100,000	-	DKK 0	DKK 108,100 provided the full custody account is spent on pension payable in instalments.	-	DKK 144,314		DKK 115,506 per year	Cannot be calculated without unguaranteed supplement.

	assuming retirement on 1/1 2012?										
13.07	What would the benefits be in year 10 (nine years after retirement), provided the company's interest-rate assumptions applied at the start are realised, excl. any unguaranteed supplements?	Cannot currently reply because of transfer to new payment profile from 1/6 2012.	Annuity: oldest policy basis: DKK 96,000, newest policy basis: DKK 69,000.	DKK 75,793	DKK 70,499	Benefits increased by expected interest bonus	DKK 56,835				Cannot be calculated without unguaranteed supplement.
	Instalments:		DKK 159,000.			DKK 133,500		DKK 144,314		DKK 124,130 per year (tariff pension)	
	Annuity:					DKK 78,600		DKK 70,547		DKK 75,319 per year (tariff pension)	
13.08	What would the lifetime old-age pension benefits be in year 10 (nine years after retirement), provided the best estimate of remaining life (the Danish FSA benchmark) is realised, excl. any unguaranteed supplements?	Cannot currently reply because of transfer to new payment profile from 1/6 2012.	Annuity: oldest policy basis: DKK 96,000, newest policy basis: DKK 71,000, instalments: DKK 159,000.	The Danish FSA benchmark for improvements in life expectancy and mortality give a lower remaining lifetime than the pension fund's policy basis, which therefore will still give a risk bonus in year 10. In the figure below we have estimated the reduced risk bonus. DKK 74,863	DKK 70,499	DKK 59,300. Risk premium paid annually in line with the benchmark for mortality.	DKK 45,405	DKK 65,488 (calculated on the Danish FSA assumptions for mortality with gender ratio 75:25)		We cannot make calculations using the Danish FSA life expectancies in our system.	Cannot be calculated without unguaranteed supplement.
13.09	Other remarks:	Vale of special bonus provision transferred to pension savings on retirement.	-				Part 13.07: Conversion interest rate of 2.0%				Calculation interest rate includes unguaranteed supplement and special bonus provisions.
							The benefits stated exclude bonuses. As there is generally a very certain policy basis in Fleksion, it is very important for the benefits that bonus assumptions are not included.				
No.	Table 14 Question	**Industriens Pension**	**JØP**	**Lægernes Pensionskasse**	**Lærernes Pension**	**PBU**	**Pensam**	**PensionDanmark**	**PKA**	**Sampension**	**Unipension**
14.01	Payment guarantee for annuities?	No	No	No	No	No	No	Yes	No	No	No

14.02	Length of this							10 years			
14.03	Is there opt-out for cover?						No	Yes			
14.04	If yes: -Percentage of members who opted out of cover (%)							0.06			
14.05	Is the length of cover optional?					No	No	No			
14.06	Describe:						Lifetime				
14.07	If yes: Percentage of members who have exercised options re. length of cover.										
14.08	When should a choice be made and when does it take effect?							Election on retirement with effect from this date.			
14.09	Other remarks:										We have introduced a new annuity with payment guarantee for 10 years. However this is not a standard product. The product is aimed at members whose contributions to pensions payable in instalments exceed the ceiling for tax-free contributions.