1. Introduction

Thank you for inviting me to present Danmarks Nationalbank's view of the role of the pension sector in the economy.

Some of you will perhaps ask what Danmarks Nationalbank knows about the pension sector? Isn't it a bit like asking women about football?

The women-and-football metaphor is not my own. It is taken from an article in the sector's membership magazine Forsikring (Insurance) from 2002, after Danmarks Nationalbank and the Danish Economic Council had voiced a critical stance on the nominal interest-rate guarantees of the pension sector. In the article it was pointed out that Danmarks Nationalbank and the Chairmanship ("Wise Men") of the Economic Council did not have a comprehensive understanding of the pension system and that we were too partial in our analyses. That is naturally one way of viewing it, which I will not reject outright.

However, even though the pension sector is not a core area for Danmarks Nationalbank, we do have several interfaces.

Before I elaborate on these areas, I would like to present my perspective on the pension sector in Denmark.

2. Perspective on the pension sector

The classical Danish encyclopaedia, Salmons en, from 1923, says: "it was formerly believed that human life should not be the subject of valuation and consequently could not be insured. Maintenance allowances, particularly life annuities, were an entirely different matter. Unlike life assurance policies, such annuities did not put a price on human life, and therefore the sale of annuities was not deemed to be unethical."

Today, both life insurance and life annuities are an integral part of the pension companies’ activities, and the pension sector is an important element of the economy – and its business is not deemed unethical. The sector's transactions have major implications for the individual citizen, not only because of the popularity of pension saving schemes among wage earners and the self-employed, but also due to the volume of the assets managed.

Only 15 years ago, the Danes' total pension savings (via pension companies) amounted to just under kr. 350 billion, equivalent to 40 per cent of GDP. The pension prospects of large groups of the
The population consisted solely of the state retirement pension and ATP (Labour Market Supplementary Pension), plus any private savings, e.g. home equity.

Why has that changed today? Why are pensions no longer a government responsibility?

Back in the 1960s and 1970s, the predominant (but not universal) view was that pensions should at all times be taken from current output. The greater the share to be allocated to pensioners, the smaller the share left for the labour force in the same years, so it did not make sense for society as such to save for pensions. The spending power of the labour force and of senior citizens had in any case to be adjusted to the current consumption potential via fiscal policy.

Naturally, a nation's economic strength, and thus its ability to provide decent pensions, depended on its wealth: what was not apparent was that this wealth depended on savings in the private rather than in the public sector.

Against that background there was a widespread belief that pensions should preferably be based on the "pay as you go" principle, i.e. each generation should finance the pensions of the previous generation via taxation. This also allowed for a certain degree of wealth redistribution between the affluent and less affluent members of society.

This approach to pension financing was also confirmed by the experience with the Social Pension Fund. The latter was conceived in 1970 as a counter-cyclical instrument. For as long as the Fund only received contributions there were no major policy issues, but no concrete proposal for a supplementary pension financed by the Social Pension Fund was ever tabled. Instead, some of the Fund's revenue was used to finance e.g. housing allowances. In terms of communication, it was an impossible task to balance overall economic interests when designing a supplementary pension against senior citizens' expectations of disbursements from the Fund. After some years it was decided to discontinue payments into the Fund.

And then there was the balance of payments. The deficits were a constant barrier to activities, and in the worst years we even sent 4 per cent of our annual output abroad as interest on our external debt.

On the other hand, this meant that if we had external assets rather than debt, we would be able to spend more than we produced. This explains why politicians began to view pension savings as a means of increasing total savings in society, without considering what would happen when the pensions matured.

It was indeed balance-of-payments concerns that led the government in 1987 to enter into the "joint declaration" with the two sides of industry concerning the introduction of labour-market pensions via collective agreements. Four years later, this declaration was implemented in an actual collective agreement between the Danish Federation of Trade Unions and the Danish Employers' Confederation introducing compulsory pension contributions.

There were several reasons why the pensions were privately based. In my opinion, the decisive factor was the tax burden in Denmark, which by the mid-1980s had reached a level of around 50 per cent. There was broad political consensus that a further increase in taxation would lead to unsustainable imbalances in society.

It could also be claimed that a pension system based on individual contributions is more robust to the development in the EU with an increasingly mobile workforce, although I am not aware that this argument was put forward.

So, out of the almost universally acknowledged need for increased savings in the economy and wage earners' wish for pensions that were more in line with the incomes they had grown accustomed to, arose the mixture that became the Danish pension system. In many ways it has served us well, and it has certainly helped to solve the problem of insufficient savings in the economy.

In fact, multi-pillar pension systems such as the Danish system are often singled out in international contexts as a good benchmark for countering the demographic challenges that we will face in the coming decades as the population ages.

Our pension system is based on three pillars: firstly, the state retirement pension and ATP; secondly, the compulsory labour-market pensions; and finally, private pensions, including capital pensions. To this should be added equity in homes and summer cottages, as well as other savings. The system is also based on three financing pillars: financing via taxes, compulsory savings and voluntary savings. Consequently, the individual citizen's risk in relation to the size of future pension disbursements is diversified, which makes the system robust.
Pension savings have boomed throughout the 1990s and into the new millennium. It all started with the collective bargaining in 1991, when the two sides of industry agreed that 0.9 per cent of wages should be paid into a pension scheme. Wage earners were to pay one third, while employers were to pay two thirds. Since then we have seen a continuous increase in pension contributions in connection with subsequent collective bargaining.

Today, the pension contributions of many wage earners constitute more than 10 per cent of their basic wages, and the labour-market pension funds – i.e. excluding ATP, LD Pensions and the Special Pension Fund – manage assets of approximately kr. 1,300 billion, equivalent to almost 85 per cent of GDP.

As Chart 1 shows, this figure has almost quadrupled in 15 years. For comparison, deposits in Danish banks have doubled in the same period.

The prevalence and building up of labour-market pension schemes also mean that more people now have pension savings besides the state retirement pension and ATP. In 2002, 85 per cent of all wage earners working full time contributed to a labour-market pension scheme. For the entire labour force, the figure is approximately 75 per cent.
The percentage of wages paid into pension schemes varies considerably, however, but as the Chart shows, it is increasing.

This is good news for the individual citizen, who can look forward to having more money to spend after retirement, but also for Danish society.

In the longer term, demographic trends, i.e. a rising number of retired people in proportion to the labour force, will mean that disbursements from the pension funds will gradually catch up with and probably exceed payments into the pension funds. Viewed in isolation, this will strengthen government finances since pension contributions are tax-deductible while pension disbursements are taxed. We have thus seen a swelling of the balance sheet, as some of the assets managed by the pension companies are merely deferred tax, and the trend towards positive net disbursements entails the gradual realisation of the government's tax asset.

On the other hand, this trend will increase spending power as a ratio of production output from today's level. Whether that will lead to actual balance-of-payments problems remains to be seen.

But just imagine a situation where we had not succeeded in increasing pension savings, with pensions mainly based on current tax revenue!

3. A safe and secure currency system

Section 1 of the Danmarks Nationalbank Act from 1936 states that:

Low inflation is a precondition for a safe and secure currency system. Since 1982, Denmark has pursued the target of low and stable inflation via a fixed-exchange-rate policy.

Consequently, maintaining a stable exchange rate is now one of Danmarks Nationalbank's principal responsibilities. The fixed-exchange-rate policy is a cornerstone of Denmark's economic policy. Danmarks Nationalbank has a declared objective of keeping the krone stable vis-à-vis the euro.

Danmarks Nationalbank has two exchange-rate instruments at its disposal. These are intervention using the foreign-exchange reserve, and the short-term interest rate. The foreign-exchange reserve is used to manage small fluctuations in the supply of and demand for Danish kroner, while the interest rate is only used in connection with imbalances of a more sustained nature.

As players in the international capital markets, the pension companies may influence the exchange rate by purchasing and selling securities. It is therefore important for Danmarks Nationalbank to keep abreast of developments within this sector.

In connection with major portfolio restructuring we sometimes see large inflows and outflows of currency. If Danmarks Nationalbank does not act in such a situation, the result could be inappropriate exchange-rate fluctuations. On average, capital imports of kr. 10 billion strengthen the Danish currency by kr. 0.12 per 100 euro.

Our analyses show that the pension sector's trading in foreign securities contributes to explaining changes in the exchange rate of the krone. It is interesting to note that the significance of this sector to the exchange rate appears to have increased in recent years.
Our analyses also show that portfolio investments to and from the euro area have a greater impact on the exchange rate of the krone than equivalent portfolio investments to and from the rest of the world. This indicates that market participants are less inclined to hedge the exchange rate on investments to and from the euro area due to Denmark’s fixed-exchange-rate policy vis-à-vis the euro.

Portfolio restructuring by pension companies is not problematic. It is a natural element of the free movement of capital, which is a precondition for a well-functioning capital market. Fortunately, Danmarks Nationalbank has competent employees who monitor the day-to-day fluctuations in the foreign-exchange market and are therefore ready to act if the krone strengthens or weakens too much.

We also appreciate the credibility enjoyed by Denmark’s fixed-exchange-rate policy – nationally and internationally.

Let me take this opportunity to explode a myth. The fact that the Danish economy is fundamentally sound, with declining government debt and a savings surplus, is not problematic in relation to maintaining the fixed-exchange-rate policy. Any exchange-rate fluctuations arising from portfolio restructuring will only be of a short-term nature. The opposite situation – i.e. a weak economy – might constitute a problem, however.

4. Macroeconomic development – from debtor to creditor nation

Danmarks Nationalbank cannot take full credit for the faith in Denmark’s fixed-exchange-rate policy. Part of the explanation is that up through the 1980s Denmark managed to get its fiscal policy under control, and slowly, with a few obstacles in our path, a structural current-account deficit was turned into a surplus.

Sustainable fiscal policy and a clear distribution of responsibilities in relation to economic policy make it easier for the central bank to meet its objectives. In Denmark, this distribution of responsibilities has been explicitly formulated: monetary policy is aimed at ensuring a stable exchange rate vis-à-vis the euro, while any specifically Danish need to stabilise cyclical fluctuations is handled via fiscal policy.

As regards the favourable development of the balance of payments, it is obvious that the pension sector has also played a role, primarily through increased savings.

As I have already mentioned, the increasing pension savings via e.g. labour-market pension schemes have influenced the economic development in Denmark in recent years. While the economic debate was previously focused on the lack of savings, with current-account deficits and government deficits, we now have a savings surplus.

One of the drivers of this development has been the increase in pension savings.
However, we should not forget that net savings would hardly have been positive if the real interest rate after tax had not also – in most cases – been positive, thus creating an incentive to save. The fixed-exchange-rate policy has played a vital role since it has helped to keep inflation at bay.

Whether overall savings in real terms increase when compulsory pension contributions are introduced naturally depends on whether such contributions replace other savings. Calculations by the Ministry of Economic and Business Affairs indicate that the increased pension contributions have had a full impact on total savings. This means that other savings have not been supplanted by higher pension savings.

The trend towards increased savings meant that by the end of 2005 Denmark had become a net creditor vis-à-vis other countries for the first time since World War II.

5. Pension companies and financial stability

At Danmarks Nationalbank we have defined financial stability as a state that exists:

In other words, the focus is on the functioning of the financial system – on the smooth provision of money in our society.

The pension sector is part of the financial system and can influence financial stability in Denmark.
Unlike banks, pension companies have a more indirect impact on financial stability, however. Pension companies are characterised by long-term obligations which cannot be terminated overnight. This means that the risk of a "run" – i.e. a situation where all policyholders simultaneously seek to redeem their savings at short notice – is virtually non-existent.

Let me emphasise that financial stability cannot merely be defined as the lack of "runs". This is an essential precondition, but not sufficient in itself. As I have already said, the focus is on the functioning of the financial system, and in that respect confidence is of paramount importance.

It is essential that pension savers trust the pension companies, i.e. that they feel confident that the money will be there when it is pay-out time. The best way to ensure that is for the assets of the pension companies to fluctuate in step with the liabilities when the economic assumptions change.

"Traffic lights"

Today, pension companies focus more on risk management and risk hedging than they did 5-10 years ago.

The Danish Financial Supervisory Authority has prepared risk scenarios – known as traffic lights – which are "snapshots" used to test the robustness of the pension companies to negative market development.

The principle behind the traffic lights is to visualise the pension companies' investment and insurance risks so that the pension companies have time to react to a changing risk scenario before it is too late.

This has undoubtedly helped to make the Danish pension sector more robust to financial and insurance risks.

This has also been necessary in an increasingly more globalised world where external shocks are also reflected in the Danish economy. The introduction of new, more complex financial products makes great demands on the pension sector, but also on the authorities.

It is important that the boards and managements of the pension companies understand the underlying risks in relation to a given investment or liability. Otherwise they may be in for a nasty shock one day.

A case in point is the failure of LTCM in 1998. Long-Term Capital Management was a large US hedge fund specialising in building up large geared positions across several markets, financed via loans from numerous US and European financial institutions. LTCM sought to exploit imperfections in the market. The success of the strategy depended on a number of assumptions concerning the underlying market correlations and volatilities. However, with the Nobel Prize winners Myron Scholes and Robert Merton on board things could not go wrong!

Nevertheless, they did. The underlying assumptions proved not to be valid in the face of turbulent market conditions, and in 1998 LTCM folded after losing 4.6 billion dollars in less than four months.

Danish pension companies are scarcely likely to make equally risky investments, but the case illustrates that what does not seem very risky beforehand may subsequently prove to be so.

However, stress tests such as the traffic lights do have a downside. Under turbulent market conditions such as those seen in the autumn of 2001, all pension companies are compelled to undertake major portfolio restructuring at the same time in order to observe the Danish Financial Supervisory Authority's traffic lights.

This entails a risk of exacerbating a negative spiral. And players in a falling market never obtain the best prices for their assets.

The solution is naturally not to abolish the traffic lights, but to seek to avoid situations where they may be inappropriate. More specifically, this means that the companies must adjust their reserves to match their risks.

The responsibility of the sector

The growth in Danish pension assets makes demands of the sector in terms of accountability in relation to investment behaviour, as well as product range and marketing.

Both the commercial pension companies and the labour-market pension funds have increasingly encouraged customers to choose market-rate products, i.e. products where the return is more directly
linked to the developments in the financial markets. In this way a larger part of the investment risk is transferred to the individual policyholder.

An argument often used by the pension companies when selling "market products" is that the return is typically higher than for traditional pension savings. That may well be the case, but there is usually no "free lunch". Higher expected returns invariably involve greater risk. If the customer understands and accepts this correlation, there is no problem. The problem arises in cases where advertising and "clever" marketing make customers opt for products for which they do not understand the related risk!

It is therefore important that the pension companies are aware of their responsibilities as advisors.

We cannot say for sure how interest rates and share prices will develop in the future. The pension company may entertain certain expectations, but no-one knows what will actually happen. So what seemed like sound advice ex ante may prove not to be so ex post. The same applies to advice based on taxation aspects. No-one knows what our tax system will look like in 20-30 years' time in relation to the structure of individual incomes.

The pension sector crisis in the wake of the plummeting share prices in 2000-2002 obviously gave many companies rather a shock. Falling share prices combined with lower interest rates and rising life expectancy was a potent cocktail.

One of the challenges to the sector has therefore been to avoid a similar situation in the future. Many companies have opted for solutions based on individual products, i.e. the policyholders themselves bear most of the risks.

This is a remarkable development. To put it bluntly, insurance companies seek to avoid selling insurance – both insurance in relation to market developments, and in relation to life expectancy (I am thinking of the great prevalence of annuity pension policies). In this area the companies surely ought to have a comparative edge in terms of pension savings compared to the rest of the financial sector.

6. Conclusion

I have spoken of the pension sector as a unified sector, which is by no means the case. Overall, it can be divided into two subsectors of almost the same size: the labour-market pension funds, which are owned by the customers, and the commercial pension companies, which are typically part of a larger financial group.

The commercial pension companies compete for customers in more or less the same way as other financial enterprises, i.e. they basically seek to convince customers that they offer the best product in relation to price.

The labour-market pension funds live a more quiet life. In many cases, their members have no choice of pension fund; this has been laid down in a collective agreement.

When analysing market shares in the Life and Pension sector, it only makes sense to consider the part of the sector where policyholders or enterprises have a real choice of provider.

Based on this approach, the five largest pension companies accounted for approximately 90 per cent of the market at end-2005, in terms of both gross premiums and total balance sheet.
Competition is a good thing!

Turning to the costs of the pension companies, the Danish Financial Supervisory Authority states in its 2005 report on market developments for life-insurance companies and professional pension funds that the average costs of the pension schemes based on collective agreements are lower than those of the market-oriented companies. This is an interesting observation since competition should increase efficiency and thus drive costs down. I am sure that the market-based companies can list a number of good reasons explaining why this is not the case, so I will not go into further detail.

I will merely point out that, unlike returns, costs can often be predicted with relatively great certainty on the basis of historical observations. Empirical studies have thus shown that costs are characterised by a considerable degree of persistence.

In plain language, this means that a company that has high costs today is also likely to have high costs tomorrow. The same applies if a company has low costs.

Over a working life, even small differences in cost ratios can amount to several hundred thousand kroner in savings for the individual policyholder at the time of retirement.

This emphasises the importance of focusing on costs, but also the need for transparency so that customers can see what they are paying and what they are paying for.

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Today the pension sector is an important part of the Danish economy, and there are no indications that this will change in the future.

As the large wartime generation retires, and the life expectancy of the population increases, Denmark will see a number of structural changes, and the need for a well-functioning pension sector will be very obvious. It is therefore positive that the pension sector has increasing focus on risk management and risk hedging, and that a growing number of Danes are saving up for their retirement.