CHALLENGES FOR THE PENSION SECTOR IN A LOW INTEREST RATE ENVIRONMENT

Pension schemes are fundamentally a system for reallocating resources between generations and over time, depending on the system. There are many different setups for facilitating and formalising this transfer of resources. Importantly, the system is built on contracts and trust. Trust that setting aside part of your salary during your working life will be reciprocated by adequate post-retirement income. And trust that price stability will guard against unexpected losses in purchasing power and living standards.

Has this contract and this trust always held up historically? No. An example is the double-digit inflation which substantially eroded the value of pension incomes in the 1970s and early 1980s.

During the following period, stronger mandates for price stability and inflation targeting were given to many central banks. And we now seem to have moved well beyond the risk of high inflation in Europe. In fact, we may even have become a little too successful in this regard. In recent years, there has been a lot of focus on "missing inflation" and a "flattening of the Phillips curve". The challenge has been reaching the 2 per cent inflation target from below, rather than from above.

Thus, the situation today is in many ways the opposite of what it was in the 1970s. However, the trust in the pension system and the contract between generations may again be at risk. Albeit for an entirely different set of reasons.
Today, I would like to focus on some of the current challenges facing pension providers and, ultimately, pension savers. Only by recognising and understanding the environment we are facing, can we prepare ourselves for the consequences and limit systemic risks. The environment I am alluding to is that of low interest rates, low growth, higher life expectancy, and higher dependency ratios. Not a cocktail that many of you dream of, I'm sure.

**Lower growth amid continued low interest rates**

To set the scene, I would like to begin by briefly taking stock of the economic outlook and implications for monetary policy.

Growth rates in Europe and further abroad are set to taper in the coming years. The economic momentum has slowed during 2019. While the likelihood of a recession in Europe may be limited, a slowdown seems unavoidable. Weaker trade growth, investment, and a contraction in manufacturing are starting to spill over to other parts of the economy. Furthermore, high levels of uncertainty persist, including from Brexit and trade tensions between the U.S. and China.

Inflation remains subdued. Wage pressures have increased somewhat during the upswing, as labour markets have tightened. But the pass-through to inflation has not yet materialised. Core inflation in the euro area has fluctuated around 1 per cent since 2015. Part of the explanation for persistently low inflation may be related to globalisation. Global rather than national labour supply is playing an increasing role in domestic inflation.

In the aftermath of the financial crisis, monetary policy played a key role in supporting the recovery with both conventional and unconventional measures. The result is well-known: very low interest rates in many economies and large central bank balance sheets. In Denmark, the key monetary policy rate has been negative since 2012 with the exception of a few months.

Now, the next slowdown may hit the European economy before monetary policy has had a chance to normalise – although our definition of "normal" has also been called into question. In recent months, central banks across the world have once again adopted a more dovish stance. This reflects the weakening of economic activity, increasing risks to growth, and subdued inflation.

I do not subscribe to the view that central banks have run out of ammunition. But considering the starting point, monetary policy may be
hard pressed to play as prominent a role in support of the economy as during previous downturns. In that light, it is even more important that fiscal buffers are built in good times. Higher public debt sustained by central banks is not a long-term solution.

**Structural factors put downward pressure on interest rates**

To further complicate matters, market rates are not only being held down by monetary policy, but also by structural factors. While low inflation is playing a part in keeping nominal rates low, real interest rates are also low.

At Danmarks Nationalbank, we have attempted to estimate the natural real interest rate – called $r^*$ – for Denmark. $R^*$ is defined as the real interest rate when the economy is growing in line with its potential.

These estimates are associated with considerable uncertainty. But it is well-established that $r^*$ has been on a declining trend over the past couple of decades. We find that the natural rate in Denmark has declined by about 4 percentage points since the mid-1990s. It became negative during the financial crisis. We expect that $r^*$ will remain low in the coming years and perhaps decline even further.

This finding leads to a couple of questions. Why is $r^*$ declining? And what are the implications?

As to the "why", several global structural factors are driving the decline. One factor is lower structural economic growth. In many advanced economies, we have to get used to structurally lower growth going forward, due to modest productivity growth.

Another factor relates to the global savings glut. When desired saving exceeds desired investment, the interest rate falls to balance the two. If we take a closer look at who is saving, we see that a large share of global savings is concentrated among the richest households in the U.S., China, and Japan.

In countries like China, households have increased their demand for financial assets. Understandably, the incentive to self-insure has increased, as the Chinese have become wealthier and expect to live longer. This incentive is further strengthened by inadequate access to social safety nets.

But demographic changes are also boosting savings in European households, as rising life expectancy leads to higher savings for retirement. This means that ageing populations not only challenge pay-as-you-go pension systems – with fewer workers paying for the retirement of larger
generations. They also present challenges for funded systems by lowering structural interest rates and thus, returns on savings.

This leads to my second question – what are the implications of a lower r*? A number of effects are worth considering. The effectiveness of monetary policy to respond to an economic contraction may be hampered. Real rates will have to be lower than r* to stimulate the economy.

Another key implication is that the structural factors holding down r* are neither expected to be short-lived nor to reverse anytime soon. Therefore, lower rates are probably here to stay for even longer than justified by the business cycle.

Low interest rates and low growth present challenges for pensions
Continued easing of monetary policy and lower structural interest rates will intensify the challenges currently facing institutional investors and the pension system in particular. These challenges are further compounded by the gloomy outlook for growth, as well as demographic developments.

For defined contribution schemes, current contribution levels are likely to produce disappointing and inadequate results, all else equal. Similarly, the costs of defined benefit guarantees will increase. The lower the rate of interest, the higher the present value of liabilities. This weakens long-term solvency and exacerbates challenges of underfunding.

The funding gap is widening and a recent G30 report assessed the global gap at about 16 trillion USD in 2050. Increasing dependency ratios widen the gap from the demand side. And protracted low rates of return add to the gap from the supply side.

It is clear that pension schemes will not be able to meet their obligations to retirees solely based on investment returns from bonds. This year, about a quarter of bonds issued by governments and companies worldwide have been trading at negative yields. At the latest bond auction in Denmark, yields on government bonds and T-bills were negative for all maturities. Many Danish pension savers received negative returns on their portfolios last year.

Fundamentally, pension companies and savers can either choose to take on more risk or adjust expectations and savings behaviour. Some might point to a third option: relax regulation, for example on required funding ratios. This is not really a viable option. Turning to policymakers for regulatory lenience may provide some relief in the short term, but it will not secure sustainable long-term solutions.
That leaves more risk or more realism. Let's turn to risk first.

**Increased exposure to riskier and illiquid assets is... risky**

It follows from simple math that achieving the same expected return target in a low-rate environment requires taking on more risk. Achieving a 7 per cent return when the risk-free return is 5 per cent is much easier than if it the risk-free return declines to 2 or even 0 per cent.

Over the past decade, pension providers have diversified and changed their asset allocation mix. Moving into riskier assets with higher returns may have offset the drop in yields. Strong gains for equities and a tightened gap between yields on corporate and government bonds have provided opportunities. In the past years, the economic upswing has supported these developments. But with the economy set to slow, opportunities will be more limited going forward.

Exposures to alternative and less liquid assets, such as real estate and infrastructure, have also increased. Danish pension funds increased their alternative investments by about 30 per cent over the past two years. In many ways, this makes sense for long-term investors with long horizons. Also, pension funds are playing an important role in providing much-needed investments, for example to mitigate climate change and support the transition to a low-carbon economy.

However, there are several risks to be wary of. First of all, many of these assets are untraded. This makes it difficult to estimate expected return and price risks correctly. They are mark-to-model instead of mark-to-market. To put it bluntly, if my pension is invested in long-term illiquid assets, I would prefer my pension company to be run by a younger CEO. That way, I would be able to hold him or her accountable for how these investments pan out – avoiding moral hazard problems.

A second risk relates to liquidity. A larger share of illiquid assets in portfolios increases liquidity risks. From 2023, pension companies’ liquidity needs will become even larger when the requirement for central clearing of interest rate swaps and other derivatives is introduced. Central clearing reduces the systemic risks of derivatives transactions. But potentially large liquidity needs require sound liquidity management in order to avoid the risk of forced sales of assets.

Setting aside more liquid assets to cover liquidity risks also means fewer funds available to invest countercyclically. Pension funds will then have less flexibility to buy assets traded at distressed price levels. This may also be
unfortunate from a systemic perspective, if pension funds are less able to play a stabilising role in periods of market stress.

As a central banker, I am not – as many of you – burdened with promises of delivering certain levels of return to pension scheme members. However, I am tasked with keeping tabs on the stability of the financial system as a whole. Therefore, I would have serious concerns about investment strategies based on continuously increased risk-taking in the search for yield.

In its recent financial stability report, the IMF also identifies increasing holdings of riskier and more illiquid assets by institutional investors as a key vulnerability in the global financial system.

**Expectations and behaviour should be adjusted to avoid insecurity**

This brings me to my last and most important point today. Going forward, there is no substitute for (1) acknowledging the conditions we face today, (2) increasing transparency about implications for pension plans, and finally, (3) adjusting expectations and behaviour accordingly.

A growing number of pension plans are recognising the impact of the low rate environment and adjusting expected return assumptions. In Denmark, the Council for Pension Projections recently reduced their return assumptions over a ten-year horizon for eight out of ten asset classes.

By reducing the stock of defined benefit plans, pension funds have transferred a large share of the risk from the low yield environment to present and future pensioners. Today, many pension savers have a higher degree of freedom when planning their retirement income. Individuals are better able to match their savings and investment plans with their desired income, as well as their risk temperament. But this assumes that individual savers are well-placed to make informed investment decisions. With options come responsibility and trade-offs.

Allow me to use an illustrative example. A Danish pensioner – let's call him Lars – pays 15 per cent of his real constant salary during all 40 years of his working life to save for 20 years of retirement. With an annual real rate of return at 5 per cent, Lars can look forward to annual retirement payouts at nearly 100 per cent of his annual income as a wage-earner. On the other hand, if real returns decline to 1 per cent, Lars' payout would drop to about 40 per cent, all else equal. Clearly, if yields are declining, something has to give.
Ultimately, pension savers will be faced with the following choice going forward: increase contributions, delay the age of retirement, or accept lower payout. Put simply: pay more now, work longer, or spend less later. Not a popular set of choices.

On the first option, it is clear that increasing contributions to secure future income is an important step. Mandatory savings programs have become widespread. Micro studies from Danmarks Nationalbank show that mandatory programs are a better instrument for boosting pension savings than tax deductions. The latter tend to be inefficient and expensive. From a macroeconomic perspective, it is worth noting that increasing savings may dampen economic growth, as private consumption is reduced. Especially in countries like my own, where savings ratios are already historically high.

Turning to option two: work longer. Increasing the official retirement age has been an important part of labour market reforms in many countries. These reforms are often politically difficult to implement and are constantly under threat of being rolled back in some countries. But they are necessary to maintain long-term sustainability of public finances in the face of ageing populations.

Finally, the third option. Accepting lower post-retirement income is not an easy sell. This has been clearly exemplified in recent developments in the Netherlands. Yet, in some countries it may be necessary to re-evaluate what we can accept as a reasonable standard of living. With more transparency and fewer unrealistic guarantees, it will be easier for pension savers to adjust savings and consumption patterns at an earlier stage.

This leads to a pertinent question: who will pick up the retirement bill for our younger generations? It is not clear that future pensioners will accept lower benefits, even though they are currently taking on more risk. The government – and ultimately taxpayers – may end up as "pension providers of last resort".

The task of bolstering the pension system to withstand pressures from lower rates and higher dependency ratios cannot be delegated to the individual pension saver. These issues are critical for the pension system as a whole, as well as for public finances. Pension scheme design and public policy need to support and incentivise the transition to a more sustainable balance between (1) paying more, (2) working longer, and (3) accepting lower pension income. Kicking the can down the road will only postpone and aggravate the challenges which need to be addressed.