Good pensions with controlled risk

– four initiatives that ensure better consumer information and risk management

Insurance & Pension Denmark

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Introduction

Over several years, the pension savings of Danes have been shifting from guaranteed pensions to more or less non-guaranteed pensions, where the customers – fully or partially – bear the risk, for example, that the investment return for the pension savings is lower than expected.

The pension companies have developed the new products to be able to provide customers with the best possible pensions in a situation with low interest rates and changed regulations (risk-based solvency requirement). The non-guaranteed products allow for more investment risk and thus achieve a higher than expected return for the customers.

However, the products also impose new requirement needs for how the pension companies must inform their customers.

When the customer bears the risk, it is particularly important that the pension companies communicate clearly regarding what the customers can expect to have paid out in pension – and what the risk is. This is important in order to enable the customers to make the right decisions concerning their pensions and other financial matters.

In March 2017, Insurance & Pension Denmark therefore launched an openness and consumer plan with four initiatives. According to the plan, industry rules will be in place by the end of March 2018 and will include specific solution models. Therefore, Insurance & Pension Denmark is now releasing the industry rules and solution models for the four initiatives.

23 March 2018

Insurance & Pension Denmark's new consumer initiatives

Pension projections with information on risk and payment profile. The customer must have information regarding both the *expected* pension payments and the *uncertainty* of the expected payment. This is done by not only showing the expected payment, but also a higher and lower payment. The pension that the customer will actually end up receiving will, with great probability (90 percent), fall between the high and low payment.

Identical risk labelling of market return products (in other EU markets generally referred to as unit-linked products). Consistent risk labelling will be introduced for the short-term risk and the risk pertaining to pension payments. In connection with this, requirements will be established concerning how much short-term risk there can be in the pension schemes designated as "high", "medium" and "low" risk, or similar.

Openness regarding portfolio composition. The companies must make public what the customers' pension savings are invested in – organised by the same asset classes on which the projections and risk labelling is based.

Guidelines for the prudent person principle. The prudent person principle implies that the pension companies must invest in the best interest of customers taking into account any disclosed policy objective. Insurance & Pension Denmark has established seven best practice guidelines for how pension companies should comply with the prudent person rules.

The four new initiatives supplement the comprehensive customer information that already exists in the pension market. Among other things, there is full transparency concerning costs and historic returns.

Pension projections with information on risk and payment profile

It is important for the customers to be able to see how much they can expect to receive from their pension – and how well, or how badly, it can turn out. Therefore, going forward, the pension projections must not only show how much the pension companies expect that the customer will receive in pension, but as something new, they will also show the uncertainty – the risk – in the projection.

The pension projections must provide the customer with a tool for evaluating whether they feel confident with the plan, in particular with the potential scenario where the pension will turn out to be lower than expected – or if they need to save up more or switch to a less risky plan.

For customers with annuity pension and life annuity, the projection will also show how the pension payment is expected to develop while you are receiving pension. It must, in the very least, show a projection for the 1st, 5th and 15th year.

Example of projection – customer with 20 years until pensioning and average risk

Per month	1st year	5th year	15th year
Payment at **high** investment return	DKK 33,350	DKK 33,600	DKK 34,100
Payment at **expected** investment return	DKK 25,000	DKK 25,000	DKK 25,000
Payment at **low** investment return	DKK 18,400	DKK 18,200	DKK 17,800

Only a very small probability for higher or lower pension

The projections are calculated with a probability-based calculation method. We want to be able to tell the customer: “Your pension will with great likelihood (90 percent) end up within this interval” – i.e. between the high and the low payment as shown in the projection.

With help of researchers from Copenhagen Business School, we developed a calculation method that enables the quantification of uncertainty for the pension on the basis of uncertainty for the future investment returns. The high payment shown in the projection reflects that there is only a 5 percent chance for *higher* future investment return and thus higher pension payments. The low payment shown in the projection reflects that there is only a 5 percent risk for a *lower* payment due to lower investment returns.

The expected payment is the best estimate for the future pension, based on the assumptions that are described on the next page.

Calculation assumptions

The future pension payment depends on a number of future conditions. The projections are therefore based on assumptions on how these conditions will develop.

Some of the assumptions are based on the common assumptions for the returns from relevant asset classes used for calculating projections by both Insurance & Pension Denmark and members of Finance Denmark. The combined set of common assumptions for Insurance & Pension Denmark's members comprises:

- **Investment return.** In the future, the common assumptions will include the expected return and risk assumptions for 10 different asset classes. In the long-term (after the first 10 years), there will only be two asset classes like there are today: Equities and bonds.
- **Inflation.**
- **Investment costs.** Common assumptions for the size of the investment costs will be a new addition from 2019. Thus far, the pension companies have used their own investment costs in their projection calculation.
- **Tax rate** (taxation of pension investment returns). It is assumed that the rate will remain the same as it is currently.

The extension of the common assumptions for returns etc. with more detailed asset classes is intended to better reflect the different risk characteristics of the asset classes. This is important if, going forward, the projections should not only indicate the expected payment, but also the uncertainty (risk). Furthermore, the common assumptions concerning returns etc. must also form the basis of the risk labelling that we will introduce – see page 7.

It is absolutely critical that the choice of common assumptions for returns etc. is as precise as possible. Insurance & Pension Denmark and Finance Denmark have therefore decided to establish an independent advisory board that will determine the assumptions. Insurance & Pension Denmark and Finance Denmark would like to ensure the highest possible confidence concerning the calculation assumptions that form the basis of the pension projections of customers.

Apart from the assumptions concerning returns etc., the individual companies must also disclose their assumptions concerning a number of matters that are more specific to the individual pension scheme, including:

- Investment composition, including planned risk reduction (lifecycle products)
- The size of future payments

Asset classes in the common assumptions for Insurance & Pension Denmark's members

Short-term (year 1-10)	Long-term (year 11-)
1. Government and mortgage bonds	Bonds
2. Investment grade bonds	Bonds
3. High-yield bonds	Bonds
4. Emerging markets government bonds	Bonds
5. Global equity (developed markets)	Equity
6. Emerging markets equity	Equity
7. Private Equity	Equity
8. Infrastructure	Bonds
9. Real estate	Bonds
10. Hedge funds	Bonds

- Insurance prices
- Other costs than investment costs, including costs for administration of associated insurance coverages etc.

For pension schemes with payments for life, the projections must be calculated on the basis of the pension company's expectations for the future lifespan of their customers. From now on, it will be required that all companies include expected future longevify improvements in the projections. This means that they must take into account that the savings – when the customer has reached pensioning age – must cover a longer time than would be the case with current longevify.

Uncertainty factors

The future investment returns are a key factor in the size of the pension payment that the customer will end up receiving. The uncertainty of the expected investment returns is greater than the uncertainty of most other calculation assumptions indicated on page 5.

At the same time, it is possible to quantify the uncertainty of the investment returns using the model we have developed with the aid of researchers from Copenhagen Business School (see page 4). On the other hand, it does not, for example, make sense to attempt to put numbers on the probability that politicians will change the regulation in the future.

Therefore, we have chosen to base the uncertainty we show in the projections on the uncertainty of future investment returns. As mentioned, the uncertainty must be showed as a high and low scenario for the future pension payment. In other words, the three payments shown in the projection – the expected, the high and the low payment – reflect the three different scenarios for the future investment return.

Uncertainty in the other calculation assumptions that form the basis of the projection must be described verbally in the projection. Insurance & Pension Denmark has established a common text that all projections must include. The projections for pension schemes with lifetime payments must also include a text that draws the customer's attention to the fact that if the expectations concerning the average lifespan change in the future, the payments may be lower or higher than what is indicated in the projection.

Same calculation method for everyone

All companies must carry out their calculations using the same method, so as to ensure comparable projections across all companies.

The method must also be used for all types of pension schemes, including
- non-guaranteed and guaranteed products
- market return products and traditional with-profit products.

Having one method for everyone ensures that, for example, customers can use the projections as part of the basis for their decision when choosing between a guaranteed and a non-guaranteed pension product. Often, the *expected* and the *high* payment will be higher for the non-guaranteed product than for the guaranteed product, while the *low* payment will be higher in the guaranteed product. The customer will be able to see this with the new projections. The customer will thus be able to see that the price for a higher expected return is a higher risk of a low return.

When will the customers receive the new projections?

- From 1 January 2019 *the expected payment* will be based on the external, independent experts' estimate of the future returns for specified asset classes.
- Latest on 1 January 2020, the projections will show *the uncertainty* of the expected payment (i.e. the payment at a high and low investment return).

Identical risk labelling of market return products*

Pension saving is a very long-term form of savings. The customer typically only needs to use the money many years later. Even if you are approaching retirement or are already on pension, you generally only need to use a limited amount of the saved amount here and now.

The pension companies therefore have the opportunity to invest a relatively large part of the customers' savings in risky assets, for example shares and property. This way, the customers can achieve a return that is higher than expected. The return that you can expect to receive – seen over a longer period – depends on how large a risk you take. Assets with higher risk – e.g. shares – have a higher expected return than low-risk assets, e.g. short-dated bonds.

Customers with market return pensions will therefore – quite naturally – experience that the value of their pension savings fluctuates up and down during the savings period. The magnitude of the fluctuations depends on how great a portion of the savings are invested in risky assets. Younger persons will typically have greater investment risk than older persons, as the pension companies will look to scale down the risk as the customer reaches pensioning age.

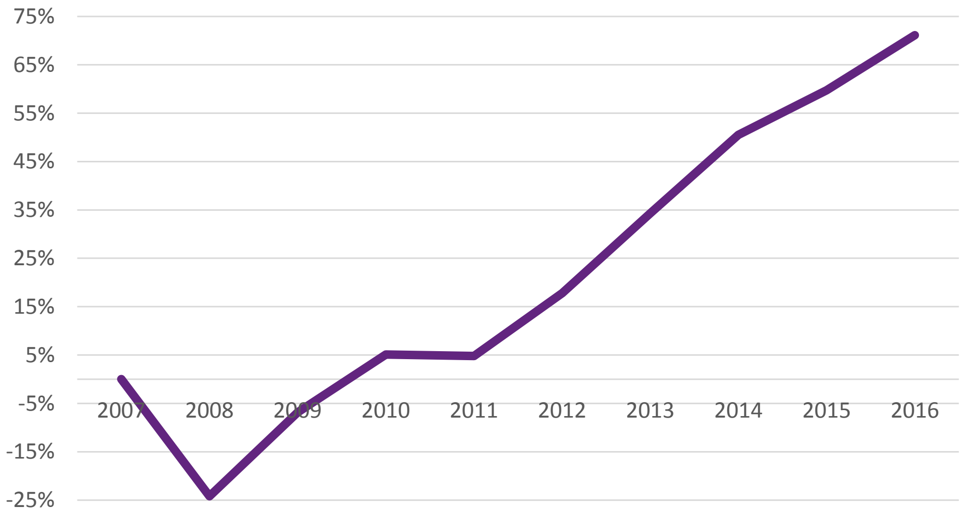
From time to time, there may be smaller or greater dips in the financial markets, which lead to a reduction in the value of the savings of market return customers. However, the financial markets usually recover quickly. And if the customer only needs to use the money many years later, the fluctuations have no real significance to the customer.

The financial crisis in 2008 resulted in big negative returns for non-guaranteed market return products. A typical customer, 35 years of age, lost as much as 24 percent of their savings in 2008. However, as early as two years after, the losses had been recuperated, and eight years after the financial crisis, the pension savings had grown by 71 percent.

The critical element for the customer is how much money is available when the pension is eventually ready for payment – and what risk there is for the payment amount to be lower than expected. This is precisely what the customer will be informed of in the future, via the three numbers in the pension projection: The expected payment and the

* In other EU markets generally referred to as unit-linked procucts.

Accumulated net returns for market return products (typical customer 35 years old, entire industry)



Source: Insurance & Pension Denmark – data from www.faktaompension.dk respective uncertainty (payment at "high" and "low" investment returns, respectively).

However, at the same time, it is of course important that the customer understands that there will likely be a time when the savings will be worth less then and there, even if this will generally only be a short-term setback. And it is important that the customer can also get an idea of *how much* savings can drop.

Therefore, Insurance & Pension Denmark is creating two different supplementary risk labels for the market return pension schemes:

- The risk labelling of the 1-year investment risk
- Risk labelling of the future pension payments.

The two risk labels will make it easier to compare the risk in the pension schemes across products and companies. And, as mentioned, it will be easier for the individual customers to understand their risk – and in particular the connection between short-term investment risk and uncertainty concerning future pension payments.

There is also a requirement of consistent risk labelling, so that if, for example, two companies both name their product "medium risk", this should mean the same thing in both companies. We will therefore:

- Impose requirements for how much investment risk there may be for products designated as "high", "medium" and "low" risk, or similar.

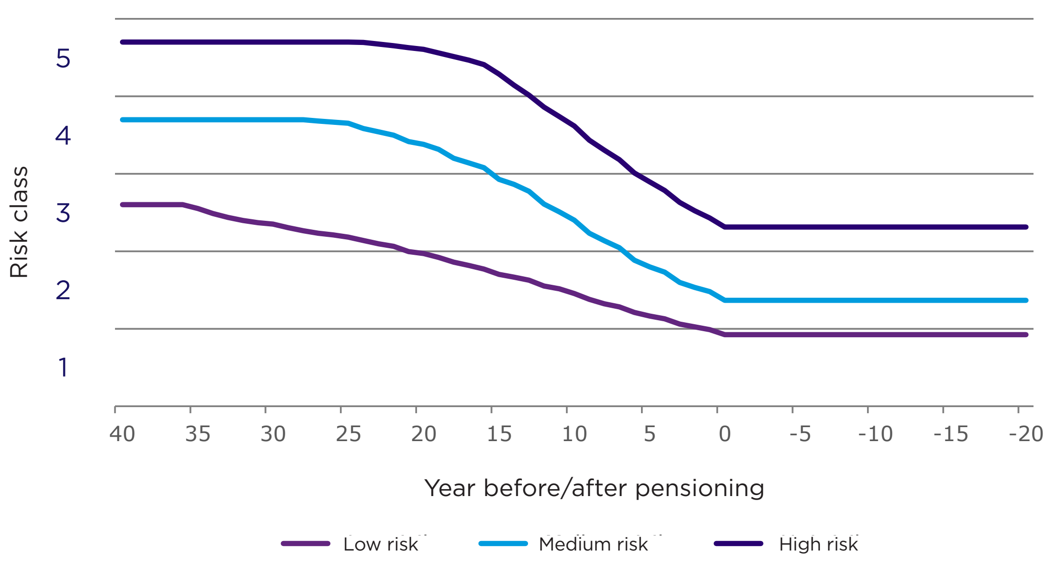
Risk labelling of short-term investment risk

From now on, all market return products must be risk labelled on a scale of 1 to 5, based on the investment risk on a 1-year projection, i.e. the risk that the pension savings will drop in value over the next year due to a dip in the financial markets.

Since many products include an automatic scale-down of investment risk as the customer ages, a labelling of the risk must be formulated at every point during its lifecycle.

If the company offers the customer three different investment plans – high, medium and low risk – all three will have a relatively high 1-year investment risk, while the customer is young. And, in all three plans, the risk will be reduced as pensioning age approaches. Typically, risk labelling will resemble the graph below.

Example of risk labelling in a company's three investment profiles



The companies must show the risk labelling on their websites and refer to it in the pension projections that they provide their customers. The risk labelling must also be displayed on www.faktaompension.dk, where you can compare pension schemes from all pension companies.

The company can also show or link to a figure that "translates" the five risk classes to an actual loss risk. For example, you can see that if you are in risk class 3, the savings can at most drop by 18% in one year (with a certainty of 95%). The customer can thus get an idea of the magnitude of the setbacks in the savings that may typically occur in an individual year when you save up for an entire lifetime.

The table below shows an example of the loss of risk in the five risk classes. The intervals for the risk classes will be finally established when we know the common assumptions for the returns etc. for 2019, and they shall be updated annually. The common assumptions will be indicated latest on 15 September 2018.

Risk class	**The value of your savings over a one year period can at most* drop by...**
5	26 %
4	22 %
3	18 %
2	14 %
1	10 %

* With 95 percent certainty

When should the risk labelling of the 1 year risk take place?

From 1 January 2019.

Labelling of the risk concerning the pension payment

As mentioned, the customers must first use the savings when they retire, and therefore, in most cases, there is a lot of time to recuperate the losses of a large drop in share value, for example.

Therefore, Insurance & Pension Denmark will also create risk labelling of the risk for the *customer's future pension payment* – i.e. the risk that the customer ends up getting a different payment than expected, including possibly a lower payment.

This risk labelling is directly connected with the uncertainty that must be indicated in the projection – see above. The projection will show a high, low and expected payment amount. The labelling of the risk of the pension payment translates the three amounts into a key figure, so that the customer can easily compare the risk with that of other customers. If the customer has several different pension schemes, the customer can also use the risk labelling to compare the risk of the different schemes.

By contrast to the risk labelling of the 1-year investment risk, the risk labelling of the future pension payment is specific to *the individual customer* with a given age. Therefore, each individual customer must be informed of their own key figure for the payment risk. The key figure must be specified in the projection.

When should risk labelling of future payment risk take place?

From 1 January 2020. Risk labelling of the payment risk is calculated on the basis of uncertainty of the customer's projection, which must be indicated in the projection no later than 1 January 2020.

Requirement for risk content in products designated as “high”, “medium” and “low” risk

Many pension companies offer their market return customers the choice between different investment profiles: “High risk”, “medium risk” and “low risk”. Thus far, the companies have been freely able to define the risk content of the profiles, with the result that, for example, “medium risk” does not necessarily mean the same thing in all companies.

Insurance & Pension Denmark believes that it should be possible for customers to be certain that “medium risk”, for example, means roughly the same thing in one company as it does in another. Therefore, we are now introducing common requirements for the risk content of the market return products with names that include “high”, “medium”, “low” or something similar.

For example, if a product that is called “medium risk” has a higher risk than the maximum allowed level, the company must either reduce the risk of the product or change the product’s name to “high risk”. As it is expensive for the company and customers to change names and/or risk content often, the companies will be allowed to exceed the limits slightly for a brief period of time.

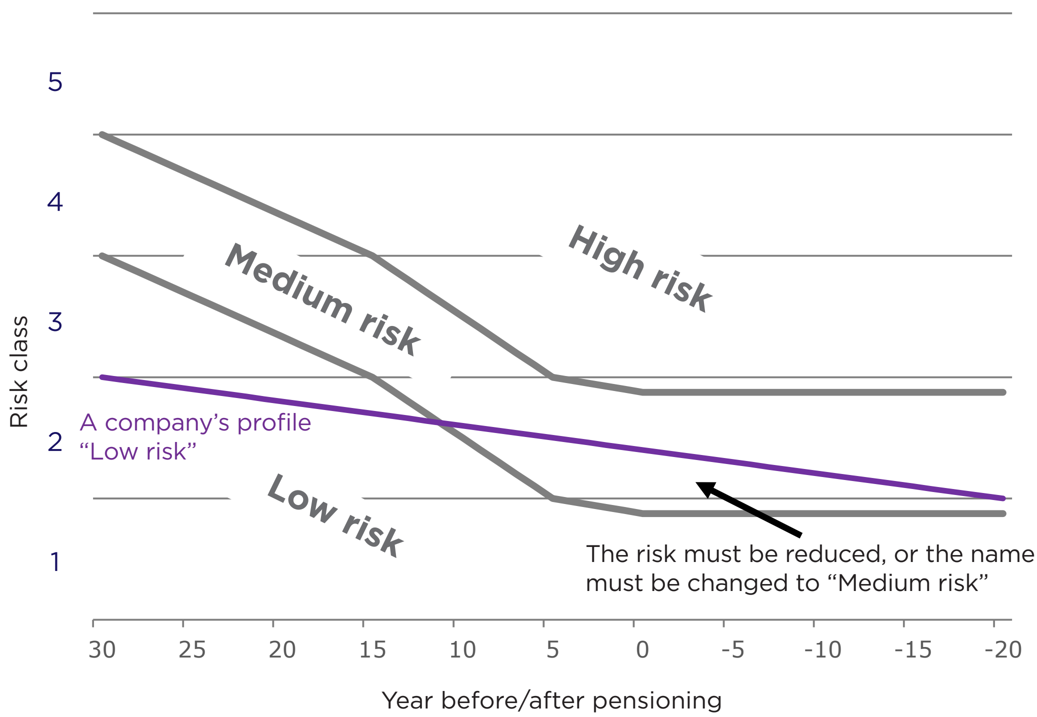
As mentioned, most market return products are set up such that the investment risk is gradually reduced as the customer approaches pension age and often also after the pension payments have started. This means, for example, that a simple interval for the level of risk permitted in “medium” risk cannot be defined. The interval must necessarily depend on the customer’s age.

We therefore define some age-dependent limits between high, medium and low risk – i.e. some “restrictions” where the risk is gradually reduced with age. The restrictions will be finally determined on 15 September 2018, when we will know the common assumptions for returns etc. for 2019.

When do the companies need to comply with the requirements of the risk content?

From 1 January 2019.

Example of requirement for risk content of “high”, “medium” and “low” risk



Openness on portfolio composition

The risk of the pension products depends on what the pension savings are invested in. The two risk labels will therefore be based on the investment composition of the products and on the associated expectations for returns and risk as determined by external, independent experts.

The companies must display the investment distributions on their website, organised by investment profile (high, medium, low risk, etc.) and for selected ages (30, 15 and 5 years before pensioning as well as 5 years after pensioning).

The investment distributions must also be shown for the average interest products. Here, distribution for each interest group must be shown.

The information must be displayed by 31 December and updated annually.

Both the strategic investment distribution, which has been established as a goal by the company's board, as well as the actual investment distribution must be shown. The actual distribution can, for shorter periods, deviate slightly from the strategically-decided distribution, in part due to rebalancing, exploitation of market opportunities, etc.

The portfolio information will also be displayed on www.faktaompension.dk, where you can compare pension schemes from all pension companies.

When must the companies display portfolio information?

From 1 January 2019.

Example of portfolio information – customer with 30 years until pensioning.

	High risk		Medium risk		Low risk	
31 December 2018	**Strategically**	**Actual**	**Strategically**	**Actual**	**Strategically**	**Actual**
Government and mortgage bonds	0 %	0 %	4 %	6 %	20 %	24 %
Investment grade bonds	0 %	0 %	1 %	1 %	5 %	5 %
High-yield bonds	6 %	5 %	7 %	7 %	6 %	6 %
Emerging markets government bonds	5 %	6 %	4 %	4 %	3 %	3 %
Global equity (developed markets)	60 %	57 %	47 %	45 %	33 %	29 %
Emerging markets equity	11 %	14 %	8 %	7 %	6 %	5 %
Private Equity	9 %	8 %	7 %	6 %	5 %	4 %
Infrastructure	3 %	4 %	6 %	8 %	6 %	8 %
Real estate	5 %	6 %	13 %	14 %	13 %	14 %
Hedge funds	1 %	0 %	3 %	2 %	3 %	2 %

Common industry guidelines for compliance with the prudent person principle

There are comprehensive regulatory frameworks that ensure that pension companies administer pension funds in the best interests of the customers. The regulations impose requirements for very extensive internal control measures in the companies. At the same time, the regulations grant certain power to the public authorities when they carry out inspections of the companies.
The regulations are risk-based. The regulations focus on that the management of the companies must understand the risk that they take on behalf of the company and the customers. And the requirements for the pension companies depend on the nature and magnitude of the risk.

Comprehensive regulations and effective inspection instruments

- **Capital requirements**. Risk-based solvency requirement where the requirement for how much capital the company should have depends on the risks that the company assumes. All else being equal, the capital requirement is greater if the company has guaranteed the customers a certain minimum payment.
- **Information and conduct of business rules** require pension companies to communicate with the customers, so that the customers have the necessary information to be able to make good decisions. New rules are coming concerning the new insurance distribution directive (IDD).
- **Prudent person rules** regulate the investment strategy used by the pension company to invest the customer's pension money. The prudent person principle implies that the pension companies must serve customer interests as best possible, and thus be qualified to ensure that customers can receive the pension they were expecting. The companies must also know and understand the investment risk and to be able to control it.
- **Governance rules** impose requirements that the companies have the various risks in their business under control. Companies must have established four key functions: Risk management, compliance, actuary and internal audit.
- **Reporting rules** ensure that the Danish Financial Supervisory Authority has the necessary information for being able to carry out effective inspections of the pension companies.
- **Fit and proper rules** impose requirements that the companies have the necessary competences to invest in alternative investments, among other things.
- **The Danish Pension Tax Act** includes rules that establish frameworks for the payment profile for life annuity and annuity pension.
- Furthermore, the Danish Financial Supervisory Authority has the **general authority** to, simply put, "ask about everything, be provided with everything and gain access to everything."

Market discipline

Apart from the requirements that the regulations impose, there is also another important control mechanism that restricts how much risk the pension companies assume on behalf of the customers. The companies and their managements are measured by their ability to generate returns for their customers. The interest of the media is particularly focused on the size of the return that the pension companies provide their customers. There is full transparency concerning the returns, and the companies are constantly compared according to returns. This creates a strong incentive for the pension companies to control risks and avoid losses.

The prudent person principle

With the introduction of the risk-based regulatory framework, legislation no longer sets strict limits for how much a pension company can invest in shares, bonds, etc. It is the responsibility of the individual pension company to ensure that it invests in the best interst of the customer taking into account any disclosed policy objective. This is called *“the prudent person principle”.* Apart from the prudent person rules, there are, as indicated, a number of other rules that impose requirements for how pension companies administer the customer’s money.

For many customers, the pension projections are the most specific estimates for the payments they can expect from their pension savings. The projections are therefore often the factors that most influence customer expectations. The projections are prepared based on assumptions that include future investment composition. It is therefore natural that there are requirements for consistency between the actual investment and the investment composition on which the projection is based.

Insurance & Pension Denmark has established seven guidelines that establish best practice for pension companies, so that they can ensure compliance with the prudent person principle.

Among other things, the guidelines establish a best practice for the governance that the companies should have established when they invest in unlisted assets. The investments in unlisted assets can often be substantially more complicated than traditional investments. The guidelines therefore specify which procedures for identifying, measuring, reporting, etc. of risk the companies should have established before investing in unlisted assets.

Insurance & Pension Denmark would like for there to be no doubt that the industry invests with the clear goal of generating the best possible return for the customers, has the risks involved under control and complies with the prudent person principle.

Insurance & Pension Denmark’s 7 best practice guidelines

1. **Consistency with projections**
It is best practice that the assumptions for asset composition upon which the projections are calculated correspond to the strategic asset allocation that the company uses.

2. **Clear guidelines for risk taking**
It is best practice to establish clear guidelines for the extent to which risk taking as part of tactical investment adjustments can deviate from the risk taking that is part of the long-term strategic investment planning. Guidelines should be based on any projections or guarantees which have been given to the customer.

3. Stress analyses
To ensure that the pension customers can receive the services they are entitled to expect, it is best practice to prepare stress analyses to assess the robustness of the portfolio relative to fluctuations in the financial markets. The company should decide on how much may maximally be lost in the portfolio given the individual stress scenarios.

4. Illiquid assets
It is best practice to establish limits for how much illiquid assets may maximally constitute relative to liquid assets. It is also best practice to formulate guidelines for categorisation of assets as liquid and illiquid, consisting of a liquidity scoring model.

5. Expected vs realised returns
It is best practice to establish your own expectations for the investment result and risk in the medium term, which is typically 3-5 years. It is also best practice to deconstruct the realised return and analyse how the generation of returns was driven by different strategic and tactical decisions relative to random and unforeseen events.

6. Risk distribution
It is best practice that the investment policy in the individual companies includes

- limits for concentration risks and
- requirements for distribution of investments.

7. Unlisted assets
Prior to investment in unlisted assets, it is best practice that the company establish relevant procedures to ensure that the company can identify, measure, monitor, administer, control and report on the respective assets, as well as to properly consider the assets in the company's ORSA process.

When should the companies comply with the guidelines?

From 1 January 2019.

Insurance & Pension Denmark

Philip Heymans Allé 1, DK-2900 Hellerup, Denmark

Tel. +45 41 91 91 91, www.forsikringogpension.dk