MILLIMAN WHITE PAPER

The pension system of the twenty-first century

The course, observations, analyses, and recommendations

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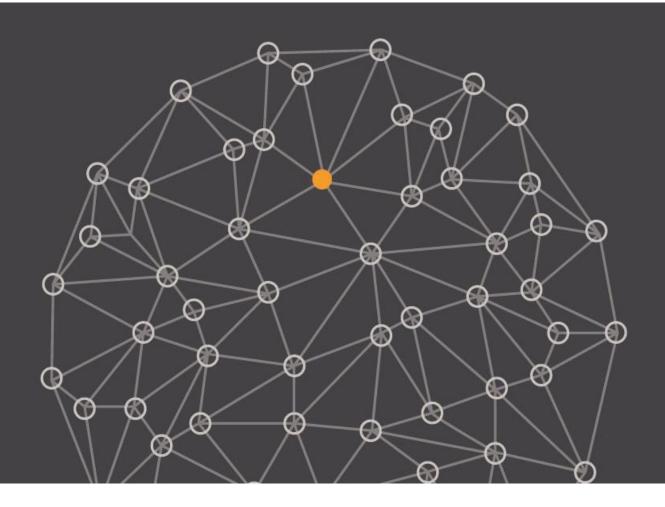






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1. Introduction

Over the years, the Netherlands has developed a strong pension system. The financial crisis of 2008, the many changes in the labor market, increasing life expectancy, and ongoing low interest rates have also exposed various vulnerabilities in our system. Diverse expectations are not being sufficiently fulfilled. There have additionally been debates between generations, and the current system no longer (fully) aligns with the rapidly changing labor market.

During the conversation about pensions over the past few years, broad support emerged in favor of updating the current pension system. Previous reports from the Social and Economic Council (SER; Sociaal Economische Raad) (2015, 2016) has paved the way for a number of recommendations. In reforming the pension system, the newly elected Cabinet under Prime Minister Mark Rutter ("Third Rutte Cabinet") wants to develop the outlines for a new pension system as contained in the reports from the SER. In them, the SER specifically examines the possibility of personal pension assets combined with the preservation of collective risk sharing.

This Cabinet is very clearly looking to cooperate with the partners (i.e., employer and employee organizations) to take steps toward a modernized, future-proof pension system. Innovation must lead to a pension situation that addresses the vulnerabilities in the current pension system mentioned above, where the strong elements (risk sharing, mandates, collective implementation, and fiscal support) are maintained inasmuch as much as possible. Building on that work and reports from the SER, the Cabinet wants to reform the pension system into more-individual, personal pension assets with collective risk sharing, abolishing the average-premium system.

These reforms will have a major impact on the pensions in the Netherlands with many challenges, and they will be relevant to all stakeholders, such as service providers (pension funds, premium pension institutions [PPIs], and insurers), employers, and (former) participants in the pension plans.

The objective of this Milliman White Paper is, using our expertise and experience in the pension fund sector, to clearly explain the division of roles (that we see) among the various groups of stakeholders. Based on a clear overview of our observations and an analysis of each observation, this White paper will provide concrete points to focus on and recommendations for the various stakeholders to further develop the new pension system. This will allow each stakeholder to focus on its own role in this reform process.

The question that we think must remain central is: who, to what extent, runs what risk, and when? Here, our intention is to keep the focus on the changes and possible consequences of them from a wider perspective.

This report will cover the consequences of the changes using the following elements:

- Chapter 2: Summary;
- Chapter 3: Deeper elaboration of essential pension elements in the Coalition Government Agreement;
- Chapter 4: Our observations of the essential pension elements;
- Chapter 5: The consequences of previous choices;
- Chapter 6: Conclusions.

By "pension funds," in this White Paper we mean pension funds in the broadest sense, i.e., corporate, industrial, and professional pension funds as well as general pension funds and, where applicable, PPIs.

We hope that our elaboration of this will help to further shape the new pension system in the Netherlands and make clear which stakeholders are responsible for which elements so that every stakeholder can concentrate on the recommendations we make for them.

2. Summary

The Coalition Government Agreement shows that the Cabinet has chosen a clear pathway toward a future-proof pension system. Although the framework for that pathway is clear, the consequences are great, and many choices still have to be made. There is still a long way to go to achieve a future-proof pension system for the Netherlands. We therefore call on the government and social partners not to spend too much time in "rearguard" battles but putting their energy into concrete contributions that will lead to a good, consistent, and sustainable pension system—a system with acceptable and stable pensions that will give renewed confidence to current and future workers and retirees.

2.1. ABOLISHING THE AVERAGE-PREMIUM SYSTEM

If the plans of the current Cabinet go through, then every pension plan will ultimately be transformed into a defined-contribution (or DC) plan with a flat rate age- and gender-neutral premium, thus abolishing the average-premium system. We consider a statutory pension obligation, or at least a pension obligation for each sector, to be an alternative solution to the imposition of a large pension obligation. The amount of the premium contribution percentage in the new DC plan will be the **primary** focus of **social partners**. The premium contribution percentage will almost always be business- or industry-specific and result from the social partners' negotiations to find an optimal level for a number of different objectives in employment terms and conditions.

The government will have to provide for the adaptation of tax legislation, where tax facilities are based on the **flat rate** premium. A defined-contribution plan with a flat rate premium contribution percentage will result in every older¹ employee accruing less in the future. Full compensation for this effect makes the overall pension system much more expensive. A possible solution could be to level off the age-based defined-contribution premium schedule annually over a short period of time (e.g., 5 years).

2.2. TRANSITION TO PERSONAL PENSION POTS

By opting for personal pension assets ("pension pots"), the security of a nominal pension **will disappear**. A transition to a system with personal pension assets also means that consideration should be given to the way in which the transition must be handled. A large number of different solutions are possible for this, ranging from fully maintaining the accrued pension entitlements in the current (DB) system to fully transferring the value of the accrued pension entitlements to the new (DC) system.

When transferring to the new (DC) system, further compliance will be needed regarding the way in which the accumulated funds are allocated among the participants. The decisions about this must be made based on the plan/fund. We initially see an important role in this for the **social partners**. This is ultimately their plan, and the interests not only of the various groups of participants but also of the employers are involved during the transfer. Pension providers (especially pension funds) will subsequently have to rebalance interests when accepting the implementation that the social partners request. It is possible that more detailed framework conditions that can be defined by the government or oversight agency or agencies will be desirable, e.g., on the basis of "best practice" research.

2.3. SHARING PENSION RISKS AND BUFFERS

Sharing biometric risks (in particular: longevity risk) will continue to be necessary. Sharing the latter risk could be handled in an overarching way, even by pension fund or pension plan.

Within a single pension system, the risks of interest rates and inflation cannot be optimally hedged at the same time: interest rate and inflation hedging will certainly have an opposite effect on the nominal and real objective.²

It must therefore be possible to have more individually tailored options within a pension plan.

How far and in what way risk sharing (or risk hedging) can take place is a matter primarily for the **social partners**. Based on further study, we will have to consider which areas risk sharing can take place on a more individualized basis. For a number of risks, the public may have to establish detailed frameworks.

Sharing market risk can also easily lead to intergenerational solidarity. The governing parties consider that undesirable. Longevity risk and the other risks often overlap now, but they can very easily be separated.

¹ An older employee is an employee whose pension accrual costs under the current plan are greater than the average-pension accrual costs. This limit will vary by sector/plan/industry and is typically between 45 and 50 years.

² See Ortec Insights at http://insights.ortec-finance.com/nl-nl/2017/05/12/zowel-rentedaling-als-stijging-risico.

Even in the case of a DC plan, various points of view are possible for distributing the investment profits in group plans. Sharing investment profits can be handled within the group plans such that there need be no breaking point in the negotiations about the pension system.

The responsibility **of the Cabinet** is to create the appropriate framework for pension policy. The Cabinet will need to answer a number of important questions about that responsibility:

- What are the maximum fiscal frameworks?
- In the case of a DC plan, this is about the maximum acceptable premium for a "second pillar" (or employer) pension. All quantities in the following formula must be formulated accurately:

(part-time percentage × (pensionable salary - exemption) × premium contribution percentage);

- A low exemption would create leeway for lower-paid workers for an earlier retirement age.
- What is the minimum and maximum pension accrual considered desirable?
- How can we make sure that all workers will be able to accrue a sufficient pension?

The responsibility of **the social partners** is to adequately flesh out the content and implementation of the DC plan. Social insurance partners will need to answer the following questions about that responsibility:

- What is the correct premium amount, considering the company or sector?
- What risks need to be recognized, and how must these be shared among the various groups of participants?
- What is an adequate survivor's pension?
- How can we make sure that the implementation is, and continues to be, close to the wishes of participants?

The responsibility **of the regulatory bodies** (DNB [Netherlands central bank] and AFM [Netherlands Financial Markets Authority]) will also change. The questions that the regulatory bodies will have to answer in the event of a transition to a compulsory DC plan are:

DNB:

- If funds are transferred to a DC system: Are there additional criteria for a distribution of funds like this among the various groups of participants such that all parties are represented in a balanced way? If so, what are they?
- If funds are left in a DB system: What assets must be present and what investment policy is acceptable to secure all nominal pensions, with or without the ambition to grant cost of living adjustments?

AFM:

What criteria should apply to how the amount is estimated of the cumulative balance in the DC plan as of the pension date and of the pensions that can be obtained from this cumulative balance?

2.4. CONCLUSIONS

We conclude that the Cabinet's current pension proposals offer sufficient leads to establish a good, adequate, and future-proof pension system. If the government chooses to take this path, however, there is still much work to be done in setting up. First, the government will need to adopt the frameworks. This is about how a general "pension obligation" is fleshed out in combination with abolishing the average-premium system and what the tax frameworks arising form this will look like. Next, social partners will have to focus on the content of the plan, its optimal implementation, clear communication, and setting an appropriate premium level by enterprise or industry. Last, regulatory bodies will then have to contribute to a process in which expectations are well managed and resources are divided "fairly."

3. Essential elements of pensions

The Netherlands pension system consists of three "pillars": first-pillar or public pensions, second-pillar or employer pensions, and third-pillar or private pensions.³ Depending on one's personal situation, after the pension date a resident of the Netherlands will receive income from the first pillar, from the first and second pillars, from the first and third pillars, or from all three. Self-employed people do not accrue an employer pension (second pillar).

The first pillar is the public pension under the General Old-Age Pensions Act (*Algemene Ouderdomswet*, abbreviated *AOW*). The General Old-Age Pensions Act dates back to 1957 and was introduced as the basis for the retirement provision. This provision is financed from taxes paid, and no pension accrual occurs.

The second pillar consists of the group company pensions that arise under the employment agreement between an employer and employee. These pension plans can be placed with a pension fund, PPI, or an insurer. Financing is handled via full funding (premium payments), and pension or capital accrual occur.

The third pillar is formed by individual bank and insurance products. Employees in general and industries in particular, as well as self-employed people without a pension plan, often make use of these. Anyone can take out a third-pillar product if they wish. This way, people can save for an extra pension, often with tax benefits.

In the Coalition Government Agreement,⁴ the Cabinet made key choices about the pension system in the second pillar. This White Paper focuses particularly on essential elements in the second pillar.

Orientation

In this section, we will look in more detail at the elements of pensions under the Coalition Government Agreement with a significant impact on the current pension system.

1. The average-premium system will be abolished.⁵

The so-called average-premium system will be abolished. For all contracts, an age- and gender-neutral flat rate premium will be required, and the participants will get pension accrual that matches the premium paid in.

2. Pension accrual is based on personal pension pots.⁶

Social partners develop a new pension contract. The SER previously explored a new pension contract with personal pension assets.

This is not a decision, but it does give direction to the further development of a future-proof pension system.

3. The risk-sharing⁷ in the pension system remains unchanged.

People will continue to share risks. A pension remains a lifelong benefit, as a result of which you will not run the risk of running out of money if you live longer than expected.

4. The tax regime will continue to be based on adequate pension accrual at a group level.

It will be examined whether the tax framework alone can still be limited to only the pension premium. In designing the tax framework, the Cabinet will keep an eye on facilitating adequate pension accrual.

We will go into more detail about these elements of pensions below by way of a few observations.

³ Publication of the Foundation for Corporate Pension Funds (Dutch OPF) and the Association for Occupational Pension Funds.

⁴ Coalition Government Agreement of October 10, 2017.

 $^{^{\}rm 5}$ (1) from the Coalition Government Agreement, see Appendix 1.

⁶ (2) from the Coalition Government Agreement, see Appendix 1.

⁷ (3) from the Coalition Government Agreement, see Appendix 1.

3.1. OBSERVATIONS

The choices made by the Cabinet have given a direction for the pension system in the Netherlands to follow. The effect from these choices on guidelines will still raise many questions in the follow-up process. This White Paper addresses the choices made, the consequences of them, and points for further decision-making. We will do this by way of six observations.

These six observations are:

- The average-premium will disappear: This means that the age-based pension costs, which are characteristic of a defined-benefit (or DB) plan, may no longer be apportioned at an equal premium contribution rate for everyone and that a flat rate contribution percentage must result in appropriate pension accrual. Because of this, every pension plan will ultimately become a defined-contribution plan (referred to as a "DC plan" hereinafter), with an age- and gender-neutral premium;
- 2. **Personal pension pots:** By opting for personal pension assets, the guarantee of a guaranteed nominal pension will disappear.
- 3. Level of the DC premium: The amount of the DC premium is not determined by the system but a choice by the social partners;
- Transitional problems: A DC plan with a flat rate premium contribution percentage will result in every older⁸ employee accruing less in the future⁹;
- Risk sharing: Whether risks will continue to be shared requires further elaboration. A distinction must be drawn between biometric risks (risk sharing is then necessary) and market risk (this type of risk sharing is under heavy discussion);
- 6. **Need for buffers:** Risk sharing in the case of market risk may not result in intergenerational solidarity. The issue here is whether a pension system with buffers is possible and, if so, in what way?

Below we will briefly address each of these observations.

3.1.1. Observation 1: Average-premium will disappear (turned into a DC plan)

A system where the pension entitlement (especially in the accrual phase) will take the form of a personal pension pot and where the pension entitlement will be determined by the premiums paid in and the yield on it is a "premium agreement," to use the terminology of the Pensions Act, or a defined-contribution premium or DC plan in everyday language.

Opting for an age- and gender-neutral premium is not a specific element of a defined-contribution plan but a very important decision in the Coalition Government Agreement (see the first choice from the previous section).

3.1.2. Observation 2: Disappearance of security in connection with participant's own pension pots

Opting for a personal pension pot was inspired above all by the assertion that unmet pension security specifically has undermined confidence in the pension system. With personal pension pots where the pension is calculated based on the accrued pension capital, including yield and the pension price around the pension date, the Cabinet is in fact getting a large portion of the provided securities from the current pension system. The expiration of the security will present a transition problem. If the basis of the new pension system means accruing pension assets in lieu of accrued nominal pensions, then that will also result in the need for an investment policy that must be provided at all times in order to drop the safeguarding of the nominal value.

3.1.3. Observation 3: Amount of the DC premium

Nothing (rightly) has been settled about the amount of the DC premium. The Cabinet has indicated that there will remain a focus on adequate pension accrual with tax facilities.

With a flat rate premium contribution percentage that applies to participants of different ages and sex, it is impossible for the premium percentage contribution rate to be equal and the pension objective to be achieved by everyone to the same degree. The question that still must be answered is which group should then serve as a reference. A flat rate premium-contribution percentage at the sector level (as a result of consulting with the social partners) seems an obvious choice.

⁸ An older employee is an employee whose pension accrual costs under the current plan are greater than the average pension accrual costs. This limit is typically between 45 and 50 years and differs per sector/plan/industry.

⁹ 15. Netspar, publication about degressive accrual.

3.1.4. Observation 4: Transitional problems

For every employee who is "older" NOW,¹⁰ the pension outlook will be lower.

A flat rate age- and gender-neutral DC premium, together with accrual based on the (equal) DC premium paid, will ensure the degressive accrual of pensions. We note that the Cabinet has set money aside to compensate¹¹ today's older workers, because in the past they made contributions toward the pension accrual of older employees at that time but will not benefit (any longer) from the current pension system.

3.1.5. Observation 5: Risk sharing will require further elaboration

Risk sharing is emphasized as a tool to contribute to a lifelong distribution. We then also consider of notable importance the need for clear agreements about the question of when who bears what risk.

We distinguish¹² the following risks in this context at the pension system level.

- Biometric risks;
- Interest risk;
- Market risks;
- Inflation risk.

The manner of dealing with these has to be defined (by the government and social partners) for each risk.

3.1.6. Observation 6: Need for a buffer

Buffers: Market risk may not result in intergenerational solidarity

Because of the stipulation that market risks should not be allowed to result in intergenerational solidarity, specific buffers are being proposed. At issue is what risk is relevant to a participant (see also Observation 5).

In Section 4 we looked in more detail at the consequences of the observations listed above.

¹⁰ "Now" means the moment of transition. Compensation will be accrued for younger people more or less automatically.

¹¹ From the Coalition Government Agreement: The Cabinet will contribute financially to the recovery of the costs for abolishing the averagepremium system and transitioning to a new means of pension accrual by temporarily extending the tax frameworks. A stipulation is that the extension will have no effect on the long-term sustainability of public finances. This is about 1 billion euros.*

¹² There are many more risk categories to be distinguished at the service provider level.

4. Consequence of choice

For the choices that the Cabinet has made, we have described a number of observations. This section will go into more detail about the possible consequences of this for each observation.

4.1. OBSERVATION 1: THE AVERAGE-PREMIUM WILL DISAPPEAR: CONVERSION TO DC PLAN We have concluded that the Cabinet decisions will result in the introduction of a single large DC plan to the pension system based on a flat rate premium-contribution percentage (Observation 1).

At **this time**, many of the current laws and regulations still come from plans with DB characteristics. Consideration can be given here to:

- a. assuming time-prorated pension entitlements for pension accrual. This starting point results in age- and gender-neutral pension costs.
- b. In practice, however, an age- and gender-neutral premium is asked for the majority of employees (the average-premium).

We will explore two elements in this context in more detail: premium solidarity and mandates.

Premium solidarity

In the current legal and regulatory framework, the combination of issues mentioned above will result in premium solidarity at the following levels:

- a. Employer level: employers with workers who are young on average will subsidize employers with employees who are older on average; and
- b. Employee level: young employees will contribute to the pension accrual of older employees.

Premium solidarity was necessary to be able to offer a DB plan in the current setting and at the same time to prevent competition from undermining the employment position of older workers in the pension as a term of employment.¹³

Within a single large DC plan with a flat rate contribution rate, it is **no** longer a question of solidarity, and pension costs for older people are no higher than those for younger people. This consequence can have major implications for what the pension system might look like **in the future**. Examples of the consequences are how to ensure that the greatest possible number of employees accrue a pension and how pensions are facilitated fiscally.

Mandates

In order to enforce premium solidarity, there currently exists the "legally mandated participation in an industry/occupational pension fund," or the so-called "large mandate."¹⁴ This mandatory participation complies with European legislation on the right to competition, because of the solidarity elements and the common goal of ensuring that every employee (within a given sector) must be able to accrue a "good" pension at an acceptable cost.

Transitioning to a single large DC plan means that competition for a pension as a term of employment will be determined more by the fact that an employee is already saving for a pension or not than by the level of the premium corresponding to equal pension accrual. An employee's own contribution must be tied to a maximum so that the employer costs reach a secure minimum level but can be increased.

However, the Cabinet sees the mandate of the current pension system as an achievement that must be maintained.¹⁵

We wonder whether this large mandate is the right tool at this time to achieve a future-proof pension system in which enough Dutch can accrue an acceptable pension at acceptable costs. This mandate was originally a

¹³ In the *Financieel Dagblad* (*Financial Daily*, or *FD*) of October 19 and 23, 2017, industry pension funds indicate that the abolition of the averagepremium system is necessary. An alternative solution was not indicated. In addition, in the *FD* of December 4, 2017, PwC proposes a pension subsidy for older employees. It is not specified who will finance this and whether this is reasonable in relation to employees without pension accrual.

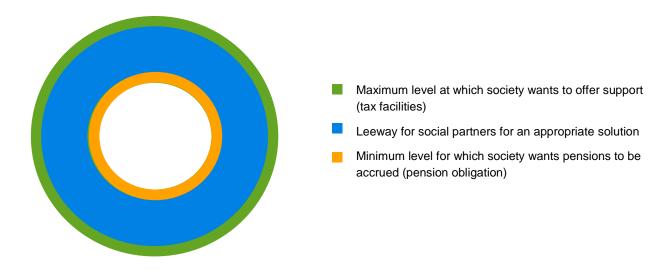
¹⁴ The "large mandate" means the mandatory participation by all employers in an industrial pension fund. Premiums and pension entitlements are then set at sector level. The "small mandate" obligates employers that are parties to a given collective labor agreement to grant minimum pension entitlements, but the premium and service provider are not fixed (e.g., under the Collective Labor Agreement for Banks).

¹⁵ See point 4 in Appendix 1 to the Coalition Government Agreement.

suitable solution because one earner usually entered into an employment relationship with one employer for an indefinite period of time, because many employees were organized via a trade union and usually kept working in one sector, and because society was organized by sector.

With modern career paths, employment relationships are usually temporary or short in nature, and they involve a lot of variation and cross multiple industries, which creates a series of pension shortfalls. New Industries are also emerging, e.g., information and communication technology (or ICT), which have little to no organization. In addition, work that used to be performed within an employment relationship—think of taxi drivers, mail delivery, construction—is now often performed through "quasi" self-employment. Because of this, the large mandate does not (currently) offer, or does not always offer, a suitable pension solution, while there is still a need to accrue a pension at an acceptable cost.

A general statutory pension obligation for all employees (including the self-employed), or at least a pension obligation per sector where there is leeway about the content and implementation of the pension plan, is something that we consider better suited for achieving the desired goal. In combination with the Cabinet plans mentioned above to allow the average-premium system to be dropped, this kind of general statutory pension obligation may be a good alternative for a "large mandate" that is seen as an Achievement within the current pension system.



4.2. OBSERVATION 2: ABOLISHING NOMINAL PENSION SECURITY IN THE FORM OF PRIVATE PENSION POTS

Opting for a personal pension pot was inspired above all by the assertion that so-called nominal pension security—or not achieving it, in particular—has specifically undermined confidence in the pension system.

With personal pension pots where the pension is calculated based on the accrued pension capital and the pension price around the retirement date, a large portion of the provided securities will in fact be taken out of the pension system.

In the current pension system, the pension commitment consists of the accrual of nominal pension entitlements to which is linked:

- The ambition to adjust accrued pensions annually in line with prices or wages, but where the actual application of this price and/or wage development depends on the funds available (coverage ratio now, and in the past usually available excess interest);
- The ability to cut accrued pension entitlements if a pension fund does not have sufficient funds. Insurers have not had and do not have this option. Based on this difference between insurers and pension funds, the funds will be able to ask for a relatively lower premium.

The majority of participants in pension plans with pension funds were not sufficiently familiar with the conditionality of indexation and the possibility of cuts. This may explain the loss of confidence, especially now that the market rate is below 2% and the conditional elements in pension plans have been reality for a long time already.

With the future-proof pension system, in addition to dropping the average-premium system, the intention is complete transparency that pensions (ultimately) are determined by the available funds and yields earned on them. The unconditional commitment will therefore no longer be part of the new pension system.

When transitioning to a single large DC plan, the issue arises about what should happen with the accrued pension assets in relation to the securities provided in the past.¹⁶ Some pension funds see all of the pension assets as the participants' assets. Opponents of transitioning to a defined-contribution plan point to the puzzle of reasonably distributing surpluses or deficits from the past as the primary problem with not transitioning to a defined-contribution plan.¹⁷ The trade unions are also of the opinion that this problem must be resolved before the proposed system can be introduced.

The puzzle of a reasonable allocation is (currently) complicated by the following:

- A lot of pension funds are currently underfunded.¹⁸ Sharing "poverty" is more complex than distributing wealth;
- The distribution of assets among various stakeholders (the fund, active participants, former participants or "Sleepers," and pensioners) is highly dependent on interest rates¹⁹ if risk-free interest is the standard for the distribution of the assets.

By contrast, in the world of company pension funds, several plans have already been converted from DB plans to (C)DC plans. The problem thus seems solvable. However, the question remains of how to deal with any deficits at the time of distribution.

When switching to a single DC plan, a feasible solution that is acceptable to all parties for the distribution of current pension assets within the pension fund must be chosen for the nominal entitlements accrued in the past. Pension funds can vary considerably, with a distribution key also varying widely from pension fund to pension fund. To prevent lawsuits, we can imagine that the government will provide "guidance" in the form of "best practice guidelines."

We have recently seen the following proposals for approaching the main problem outlined above in various publications:

Leave accrued pension entitlements alone and start with new accrual within a DC plan;²⁰

The question here is who will cover the costs for any of the current deficits, and in this situation who will have the right to any future surpluses.

- A phased introduction of the DC plan:
 - First, transition the accrued nominal pension entitlements of active participants to a new service provider, and then allocate the rest of the assets to stragglers;²¹
 - Gradual transition phase of 10 to 20 years before the pension date;²²
 - Participants will receive a right to the current net pension entitlement, multiplied by the coverage ratio. In
 addition, the participants will have the right to transfer of value to the individual DC plan. Based on the
 individual risk appetite, participants can then choose between maintaining the individual pension entitlement
 within the old plan or transitioning to the DC plan with a more uncertain outcome although an expectation of
 a higher entitlement.

In this case, it must be clear whether—or to what extent—existing "securities" for nominal entitlements have been dropped with the transition of funds and/or whether one-time compensation is granted. The outcome is dependent on the type of commitment, the type of implementing agreement, and the content of the statutes.

Distributing the available assets on the basis of one of the following three distribution keys:

¹⁸ "Underfunded" means that assets to cover the pension are less than necessary to finance the pension entitlement, valued at market value. This plays a role for pension funds and insurers.

¹⁶ A guarantee has never been formally provided with pension funds. On the other hand, we see that the willingness of pension funds and the Government to actually make cuts is very small. This ensures that the pension was in fact accepted by the pension world if it is seen as a guaranteed pension.

¹⁷ See Bernard Van Praag's take in *FD* of April 17, 2017.

¹⁹ See Bartjens in *FD*, October 18, 2017.

²⁰ This method has been applied to a number of customers whom Milliman advises.

²¹ Toekomst van Pensioenstelsel "De volgende stap" [Future of the Pension system: "The Next Step"] by Mark Heemskerk.

²² Toekomst van Pensioenstelsel "De volgende stap" [Future of the Pension system: "The Next Step"] by Mark Heemskerk.

- The provision of pension liabilities (PPL) based on risk-free performance multiplied by the coverage ratio; or
- PPL based on the real interest rate multiplied by the real coverage ratio; or
- A mix of investments is established based on a lifecycle system. Based on the methods indicated for this, the PPL is established plus the required personal equity (RPE). Participants will receive a share in the yield portfolio and the matching portfolio based on the lifecycle investment mix, RPE, and remaining coverage ratio, which will be established afterward.

This will provide three different distribution options that are different form the two Approaches mentioned for this, but the question remains current of who will cover what risk and to what extent.

A lot still must be considered here to determine the most suitable solution. The past has shown that a solution can be found, certainly in the Netherlands.

The distribution issue is an important topic that, in terms of principles, must be guided by reason and fairness. For the primary choices given for this, the government and social partners will play an important role, but one role that is at least as important lies with the boards of the implementing organizations and their oversight bodies, because in this discussion specifically the proportional defense and promotion of interests are essential.

4.3. OBSERVATION 3: AMOUNT OF DC PREMIUM

The introduction of a defined contribution plan with an age- and gender-neutral premium must be bound to framework conditions. The important question here is:

How high is the premium percentage that has to apply to the DC plan?

The following framework conditions must be taken into account in answering this question.

- What are the tax conditions?
- What pension objective is intended (in terms of achievable pension with a full participation period and at a given retirement age)?
- What is the financial strength of the company/industry?
- What is the risk appetite of the participants?
- What do employees and employers prefer (high income now, or sufficient pension later)?
- What is the required distribution of the premium between employer and employee?

The premium contribution percentage will almost always be business- or industry-specific and a result of the negotiations between social partners, with the tax conditions mentioned above necessarily being taken into account. We see the social partners as having the primary responsibility for determining the amount of the DC premium.

The premium contribution percentage that the social partners establish must be within the bounds set by the government in terms of the minimum accrual following any aforesaid general pension obligation and the maximum percentage to which tax facilitation will apply (see the following Paragraphs 4.3.1 and 4.3.2).

4.3.1. Tax conditions

An important starting point of the current Wages and Salaries Tax Act of 1964 is the following provision:

Article 18a, Paragraph 3:

An old-age pension based on a defined contribution system will be accrued in a **time-prorated** way and is oriented toward a pension that, after 40 years of accrual, does not total more than 75 percent of the average pensionable salary to that date.

We find a similar element in Article 17 of the Pensions Act.

Article 17. Time-weighted acquisition of pension entitlements

The acquisition of pension entitlements in the framework of a benefit agreement or a capital agreement takes place during participation in an **at least time-prorated** way.

Article 17a. Time-prorated passing-on of costs

Passing on costs in the framework of a premium agreement takes place in a time-prorated way.

We are of the opinion that, in any case, the first provision does not work with a pension system based on a flat rate premium. Accrual in this new system in the early years of pension accrual will be much higher than time-prorated, and at a later age much lower. By the way, there is no mention in the new pension system of direct accrual—only if a direct pension is purchased.

The Coalition Government Agreement has determined the following about this:

It will be examined whether the tax framework alone can still be limited to only the pension premium. In designing the tax framework, the Cabinet will keep an eye on facilitating adequate pension accrual.

This choice by the Cabinet is thus not free of obligations in relation to previous choices but has to be facilitated by the government, because otherwise an inconsistent and unfeasible pension will may arise. The further elaboration of the fiscal section must not address the issue whether the fiscal framework must be limited only by the pension premium the question of what a suitable limit is.

This question is complicated enough, by the way. A possible reference as a path toward a solution could be the current pension system, if this is established for individual pension space in the "third pillar."

The determination of the maximum premium percentage acceptable to society will be the primary responsibility of the government (Ministry of Finance). Also, setting new and clearer pension objectives will be an important task for the government and social partners.

4.3.2. Pension Objective 1: Desired pension amount

In determining the DC premium, the premium objective (what pension is intended in terms of achievable pension with full participation time and at a given pension age and that is acceptable to society with respect to the salary earned) plays an important role.²³ The way in which this intended pension comes about is also important. We will go into more detail on the first pension objective.

In the 1970s, the individual pension objective (including the General Old-Age Pensions Act, or AOW) was 70% of the most recently earned income. In the meantime, the objective has been 70–80% of the average nominal pension basis (pensionable wages minus exemption, based on the AOW). The underperformance of indexation ensures that the pension objective is closer to the average of the nominal pension bases instead of the indexed pension bases. For the purpose of the future pension objective, we recommend taking this fact into account.

The crux of **a future** DC plan is that the paid-in premium defines the pension provides. Tailor-made with respect to control of the intended pension is thus almost impossible. This also applies—albeit to a lesser extent—to the current average-wage plans with an uncertain indexation level.

This kind of upper limit to a premium can certainly be set so that a Significant portion of the population can achieve the pension objective. A (partial) opt-out option could Prevent "unnecessary" retirement savings."²⁴ This is also why a general statutory pension obligation as indicated above is so important.

Determining a suitable Premium by company or industry—as mentioned above—will have to be an important task for the **social partners** in the new pension system.

An appropriate pension objective must be set at an appropriate level for the Netherlands, and possibly also at the sectoral level. The pension ambition from the government could be defined for a small group (e.g., an organization of the self-employed or directors/majority shareholders).

4.3.3. Pension Objective 2: Degree of risk

The second pension objective is more about the extent of stability of the pension to be achieved. In the current debate, the stability of the pension under discussion is regarded as one of the most important Framework conditions for the new system. See the position of the Federation of Dutch Trade Unions (or FNV) and the positions of political parties (SP, PVV, and Party 50+²⁵) about a stable interest rate. If communication and policy for younger people (in this context, we would treat people more than 15 years from their pension date as "younger people") are oriented at the stable development of pension assets and pension entitlements arising from the plan expressly when a forecast dominated by the issues of the day is presented, then a stable outcome may be an incorrect model to contrast the quality of a new pension system against.

²³ Inge Van der Target, PMT, interview *FD* October 22, 2017.

²⁴ See the opinion of Keith Ambachtsheer, a Dutch pension expert who works mainly in the United STates and Canada.

²⁵ FD October 24, 2018. Interest sensitivity of the current rules undermines confidence in the system.

In practice, we see that the focus usually is on safeguarding the nominal pensions within the insured plans and that maintaining purchasing power is often no longer a part of these plans. If it is the case, then purchasing power in insured plans often must be financed in an alternative way.

In addition, we note that various studies have shown in general that the following are true:

"Underpromise and overdeliver!"

By sticking to the current securities and limited indexation, there is a great chance that young participants above will no longer be able to trust that pension prospects will be realized. With the Cabinet's choices, the chance seems greater than trust of participants will not be impaired (over the long term). The way in which insight is provided into the stability of the pension will become more important.

We therefore recommend not providing young participants in the new pension system with forecasts with respect to the pension to be achieved.

4.4. OBSERVATION 4: FOR EACH NOW²⁶-OLDER EMPLOYEE, LOWER PENSION OUTLOOK

Based on the current average-premium system, one and the same pension premium will apply to all participants, and in principle people accrue the same pension every year regardless of their age. It is well known that this average-premium system will result in generational effects, among other things. There is also discussion of subsidization by young participants of old participants. Dropping the average-premium in conjunction with pension accrual dependent on the (equal) DC premium paid in will counteract these undesired Generational effects.

We note that the Cabinet has set money aside to compensate²⁷ today's older workers, because in the past they made contributions toward the pension accrual of older employees at that time but will now not benefit (any longer) from the current pension system. Below we will go into detail on possible consequences of this.

Accrual costs per pension unit

The pension costs per pension unit increase with age because the remaining period until pension age gets shorter and can render the premiums paid in less (long) (less time, shorter age duration provides lower interest). Above all, the chance of death increases.

If the premium contribution percentage is the same for every participant in the future, then today's older participants will accrue less—which is so-called "degressive pension accrual." The total premium under an average-premium plan has contributed in the past to the expensive accrual of pension by (then) older people, but today's older people will not get the "advantage of proportional accrual for an average-premium" back when the current premium system is abolished. Trade unions do not consider this effect desirable. The Cabinet's transitional measures to prevent this effect thus appear necessary.

We make the following side notes about this:

- It is not only DB pension plan participants subject to an average-premium who are involved in this issue, but also every older employer. For all younger people, the value of their pension accrual was still lower than that of older employees. In the current DC plan, for example, accrual is lower from adjusting a lower premium contribution percentage for younger people and a higher one for older people.
- Compensation for the aforesaid difference may thus relate not only to participants in an average-premium plan;
- If younger people continue to make progress and older people maintain minimum pension accrual through compensation, then the system overall will become much more expensive (for the next 15 years, in any case);
- When comparing the expected pension income of a younger person to that of an older employee, the income of the older employer will likely be higher because they have accrued pension in the past when the pension age was lower and the accrual percentage was higher. The older worker will not actually have paid a higher premium for this because at the time interest rates were higher and life expectancies were shorter.

²⁶ "Now" means the moment of transition. Compensation will be accrued for younger people more or less automatically.

²⁷ From the Coalition Government Agreement: The Cabinet will contribute financially to the recovery of the costs for abolishing the averagepremium system and transitioning to a new means of pension accrual by temporarily extending the tax frameworks. A stipulation is that the extension will have no effect on the long-term sustainability of public finances. This is about 1 billion euros.*

However, if a solution is sought to reduce the pension outlook of older people, the following possible solutions could be considered:

Level off premium payment levels annually over a short period of time (e.g., 5 years) so that:

- The premium amount stays the same or slightly increases;
- Inequalities are allowed to persist on a limited basis.

This issue certainly requires further elaboration but falls outside the scope of this White Paper.

4.5. OBSERVATION 5: RISK SHARING THROUGH BUFFERS REQUIRES FURTHER ELABORATION Risk sharing is emphasized as a tool to contribute to a lifelong distribution at reasonable costs. We thus consider clear agreements about the following question essential: how much and what risk does who run and when?

In answering this question, we distinguish²⁸ the following risks at the plan level:

Biometric risks

The main biometric risks are the mortality risk (the chance that a survivor's pension must be paid), longevity risk (the chance that more pension has to be paid out than has been saved, but also that purchasing a pension near the pension date costs more than expected), and disability risk (the chance that a disability pension has to be paid out, or that pension accrual has to be continued without payment of a premium).

Interest risk

Interest risk relates to the change in value of fixed interest securities (bonds) as well as the price of a pension near the time of pension start. If the Interest rate increases, then the value of blonds falls (negative return), but the price of buying a pension also falls, making the pension higher in turn.

Market risk

In addition to the Interest risk, marketable securities and corporate bonds may vary widely in value. This risk, the so-called "market risk," has a direct impact on the value of the investments.

Inflation risk

The chance that the purchasing power of the anticipated benefits is lower than hoped/expected.

We have a number comments on longevity risk:

- Income and education level play an important role in the amount of this risk. If a group is not homogeneous in these terms, this can create "perverse solidarity." Correctly defining an appropriate group is therefore very important.
- Longevity risk and the other risks often overlap now, but they can very easily be separated. Milliman has developed a system in the United States where sharing market risk remains possible after the start of the pension and at the same time can adequately cover the longevity risk (without reinsurance). This system is called the Retirement Enhancement Trust (RET). For more information about this, please refer to our Pension Special.²⁹

The component interest risk has a counter effect with respect to the cost price of a pension. The market risk is not predictable³⁰. We will go into more detail about this with Observation 6.

In the current pension system, the interest risk is important to older people, and the inflation risk is important to younger people. Sharing these risks among generations can be seen as a dilemma. If security is sought with respect to the future interest risk, then this will lead to the disappearance of leeway in covering inflation risk. Wanting to cover both risks at the same time within a single pension system will not result in an affordable solution for either objectives. This internal tension is seen at the moment almost daily within (almost) every pension fund.

In the current system, the pension fund appears to bear a lot of risk but ultimately does not. In the end, employers and employees—depending on the commitment—bear all risks via higher premiums or cuts to pension entitlements. With insured plans, a lot of risk is transferred to the insurers, but this naturally comes at a price.

²⁸ There are many more risk categories to be distinguished at the service provider level.

²⁹ http://nl.milliman.com/insight/2016/Milliman-Retirement-Enhancement-Trust-RET May 19, 2016.

³⁰ Theo Kocken, "Memento Futuri," November 9, 2017.

With respect to the risk, estimating the amount isn't the only thing that is important; so is the extent to which these stakeholders want to accept, avoid, or manage the risk. Choices regarding investment policy are dependent on this as well.

4.6. OBSERVATION 6: MARKET RISK MAY NOT RESULT IN INTERGENERATIONAL SOLIDARITY. In a pension system based on "personal pension pots," the way in which the return comes about and risk is shared via buffers is an important choice in the context of intergenerational solidarity. Sharing market risk can certainly also easily lead to intergenerational solidarity. The government parties find intergenerational solidarity undesirable.

Even in the case of a DC plan, various points of view are possible for distributing the investment profits in group plans. At one extreme, investments are made for the entire group, and everyone shares to an equal extent in the return (or loss) on investment. At the other extreme, a investments are made for everyone with their own views and at their own discretion, and all participants have their own return (or loss) on investment within the plan.

By sharing the market risk via a group buffer with future accrual, this risk can be shared over a longer horizon with more generations than when this market risk is borne using individual personal pension pots. With a group buffer, more market risk can be borne thanks to risk sharing, and younger people can also bear more market risk. In the case of intergenerational risk sharing, it is not only existing pension accrual that is shared but also future pension accrual in the risk and return on current investments. The risk sharing with future generations results indirectly in a tax or subsidy on new pension accrual, regardless of the amount of the group buffer.

The starting point for group investments under the DC plans (variant 4c of the SER analysis) is also an important "preliminary decision." This choice means that the main variant will amount to group investments with buffer capacity. The amount of the buffer to date has seemed to be a "weighty" topic of debate. The implicit assumption therein is that, if the buffer is high enough, it will lead to less intergenerational risk sharing because the Surplus in assets will be skimmed off during good times and used to supplement assets if returns see a low period. The technical debate here is: "What will be high enough?" The role of the government here must be to determine how much transfer of funds from one generation to the next is acceptable. The social Partners will have to determine within their own pension fund what amount of solidarity is desirable within the group.

In the current investment system, the investment mix (including interest rate hedge) is often group-based with a maximum nominal pension security and (often) enough extra security. We make the following observations in this context:

 By choosing a defined-contribution plan based on personal pension pots, the amount of achievable pension for younger people will always be uncertain and not a part of the pension commitment. The pension provider here thus will not need to provide security for this. Rather, a younger participant will want to see as high a return credited as possible (the minimum interest + inflation) 10 to 15 years before the pension date (and perhaps longer).

We estimate that the younger participant will want to cover the interest risk him- or herself and certainly not go looking for an annual security with respect to the amount of the (nominal) pension that can be purchased at any time. This risk is also not covered by the provider, given the type of new commitment that the provider does not guarantee. Covering the Interest risk will thus not need to be under consideration for a large part of the population.

The assumption is that older people will not want any cuts to pensions. Coverage with a fixed-income Security will then be on the agenda. An investment policy with a buffer will be seen as a systemic error, in this case by Theo Kocken, for example.³¹ Counting on buffers then also makes no sense according to him.

2. The optimal investment policy and the choice of group investments, or group investments based on an individual investment portfolio, will not lead to inconsistencies at the pension system level³². When switching employer/provider, no inconsistencies will arise about who will get which portion of the assets/return on assets. Different profit-sharing systems can effectively exist side by side. This does not apply to an accrual plan in addition to a DC plan with equal premium, for example. By allowing leeway in this area in the pension

³¹ 4: PensioenPro November 2017: FNV is open to alternatives to a buffer.

³² Report on Intergenerational solidarity, "Dissolving into factors: Risk decomposition as the basis of a" [cut off] https://fi.intms.nl/fi_43a1c02c/files/downloads/ontbinden-in-factoren-2015.pdf.

system, there will be room for innovation.³³ On this, see the ideas of Stefan Ormel at First Investments³⁴ and Ernst Visser and Rajish Sagoenie³⁵ at Milliman, who have developed alternative visions of this.

3. Buffer capacity can result in an easier and higher pension on balance, as long as the buffer exists. Indeed:

Premium + Investment Income + Purchasing Power = Benefits + Indexation + Increase in Buffer Capacity.

The result of a buffer is that negative results will not Immediately lead to a reduction of pension entitlements. Because of this, more risk can be taken on, which may result in a higher return. On the other hand, the formation of buffers is difficult to uniquely attributed to a personal pension fund and after a bad period for the generation afterwards can lead to lower benefits. The amount of a buffer must be set within the context of a group. Young participants have relatively little burden from negative results. But for pensioners and older employees, the impact can be very large.

Especially in the benefit phase, an increase or reduction of the pension entitlement can be guided on the basis of the real coverage (as is the case now). A limitation on the mobility of coverage is important for this group. The assets then have to be sufficient to cover these liabilities—with or without a buffer.

4. Sharing market risk can be arranged independently from sharing the longevity risk. To share the longevity risk, it is necessary that participants not be able to withdraw before participating in the pension plan. Clear communication is thus highly desirable.

Our preference in the new pension system extends to an intermediate form: The group will offer a limited number of group-managed investment products, each with its own risk/performance profile. The group will offer a risk profile for each participant based on his or her age, in principle a standard mix of those investment products. However, participants can choose to depart from the standard mix at additional cost or risk in order to thereby supplement their own risk/performance profile. This way, the provider can limit its costs, and the participant, at his or her discretion, can allow or limit more market risks. Sharing investment results can be arranged in this way within the group, there would then need be no breaking point in the negotiations on the future-proof pension system.

The responsibility of the regulatory bodies (DNB [Netherlands central bank] and AFM [Netherlands Financial Markets Authority]) will also change. The questions that the regulatory bodies will have to answer in the event of a transition to a compulsory DC plan are:

DNB:

- If funds are transferred to a DC system: Are there additional criteria for a distribution of funds like this among the various groups of participants such that all parties are represented in a balanced way? If so, what are they?
- If funds are left in a DB system: What assets must be present and what investment policy is acceptable to secure all nominal pensions, without the ambition to grant cost of living adjustments?

AFM:

What criteria should apply to how the amount is estimated of the cumulative balance in the DC plan as of the pension date and of the pensions that can be obtained from this cumulative balance?

There is still a lot of work to do. We should let everyone keep busy with the questions that fit with their own roles in the process, and above all not lose sight of the larger picture.

³³ FD November 19, 2017, CHOICE OF PERSONAL PENSION WITH SMALL GROUP BUFFERS DESERVES A CHANCE Opinion | Lans Bovenberg and Theo Nijman are both professors at Tilburg University.

³⁴ OPINION. "Click Pension is better than lifecvcle." in *PensioenPro*. April 1, 2015

³⁵ Solidarity in the group pension plan in *The actuary and Milliman Insight* by Ernst Visser, Rajish K. Sagoenie | January 20, 2017 http://nl.milliman.com/insight/2017/Solidariteit-in-de-collectieve-pensioenregeling/

5. Conclusions

Below we will summarize the most important conclusions and recommendations from Sections 3 and 4.

1. Every pension plan will eventually be transformed into a defined-contribution plan with an age- and sex-neutral premium;

We have to ask whether a pension system is possible with the current large mandate, where all working Dutch can accrue an acceptable pension at an acceptable cost. We consider a minimum statutory pension obligation much better suited to this objective. For the practical implementation of the plan by sector, e.g., regarding the amount of the premium, any risk coverage to be coinsured, and the distribution of the premium among employers and employees, we still see an important role for the social partners.

This means that the government, in consultation with the social partners, will establish minimum frameworks so that every working person (thus, not only employees) can accrue an adequate pension. The premium (and thus not an Entitlement to be accrued) must be central to establishing these frameworks. A general pension obligation based on a minimally definable premium must be weighed against the current mandate through industry/occupational pension funds.

2. Transitioning to a system based on a defined-contribution plan with a flat rate premium contribution percentage will result in personal pension assets (pension pots). This means that the security of a guaranteed nominal pension will disappear;

A transition to a system with personal pension assets also means that consideration should be given to the way in which the transition must be handled. A large number of different solutions are possible for this, ranging from fully maintaining the accrued pension entitlements in the current (DB) system to fully transferring the value of the accrued pension entitlements to the new (DC) system.

When transferring to the new (DC) system, further compliance will be needed regarding the way in which the accumulated funds are allocated among the participants. The decisions about this must be made based on the plan/fund. We initially see an important role in this for the social partners. This is ultimately their plan, and the interests not only of the various groups of participants but also of the employers are involved in during the transfer. Pension providers (especially funds) will subsequently have to rebalance interests when accepting the implementation that the social partners request. It is possible that more detailed framework conditions that can be defined by the government or oversight agency or agencies will be desirable, e.g., on the basis of "best practice" research.

3. The amount of the defined contribution under a defined-contribution plan with a flat rate premium contribution percentage is not a choice made by the system but by the social partners;

Although the government should provide minimum frameworks, ultimately the decision about the amount of premium contribution percentage in the plan will have to lie primarily with the social partners. The premium contribution percentage will ultimately be a negotiated result between the social partners, where the social partners will obviously also taken into account other objectives in the terms and conditions of employment. This will result in the premium contribution percentage being specific to a company or industry, as expected. Technically, we see feasible solutions.

The Pensions Act and the Wages and Salaries Tax Act still currently assume time-proportional accrual. However, time-proportional accrual does not relate to a system with a premium contribution percentage that is equal for all ages. For a system like that, an adjustment will thus be necessary to the Pensions Act and tax legislation. The government will have to see to this.

4. A defined-contribution plan with a flat rate premium contribution percentage will result in older employees accruing less in the future. This applies not only to older employees with a DB plan financed by an average-premium but to all older employees with a pension plan, regardless of Whether it is a DB or DC plan.

Full compensation for this loss of accrual will be very costly. The question is whether and/or how these costs can be covered.

Technically, there are a number of ways to offer compensation to older workers for (a part of) the missing pension accrual. One angle may be to start with a defined contribution schedule that increases based on age and that levels off annually over a short period of time (e.g., 5 years).

The government will have to offer the social partners clear maximum frameworks within which the social partners will be able to agree on compensation measures. Further study will be necessary into how high the maximum frameworks have to be, in relation both to income and to service time. The specific interpretation of the compensation measures that will ultimately be adopted will then remain the responsibility of the social partners themselves.

5. Even in the case of a defined-contribution plan with a flat rate premium contribution percentage, the discussion should remain on sharing risks. This needs further elaboration.

Sharing biometric risks (in particular: longevity risk) will continue to be necessary. Sharing this risk could be handled in an overarching way, even by pension fund or pension plan.

A large number of factors play a role in the amount of the longevity risk. Important examples of this are household income and educational level. When determining a group within which this risk will be borne jointly, a correct definition of the group is thus important.

Within a single pension system, interest risk and inflation risk cannot be covered at the same time. It must be possible to have more individually tailored options within a pension plan.

How far and in what way risk sharing (or risk hedging) can take place is a matter primarily for the social partners. Based on further study, we will have to consider which areas risk sharing can take place on a more individualized basis. For a number of risks, the public may have to establish detailed frameworks.

6. In the case of a defined-contribution plan with a flat rate premium percentage, market risk will not result in intergenerational solidarity.

Sharing market risk can also easily lead to intergenerational solidarity. The governing parties consider that undesirable. Longevity risk and the other risks often overlap now, but they can very easily be separated.

Even in the case of a DC plan, various points of view are possible for distributing the investment profits in group plans. At one extreme, investments are made for the entire group, and everyone shares to an equal extent in the return (or loss) on investment. At the other extreme, a investments are made for everyone with their own views and at their own discretion, and all participants have their own return (or loss) on investment within the plan.

Our preference extends to an intermediate form: The group will offer a limited number of group-managed investment products, each with its own risk/performance profile. The group will offer a risk profile for each participant based on his or her age, in principle a standard mix of those investment products. However, participants can choose to depart from the standard mix at additional cost or risk in order to thereby supplement their own risk/performance profile. This way, the provider can limit its costs, and the participant, at his or her discretion, can allow or limit more market risks. Sharing investment results can be arranged in this way within the group. Every provider can thus look for the optimum organization for its system. Accrual in a new pension system can be continued, regardless of these choices.

Further consideration should be given—if necessary through a new kind of pension institution such like premium pension institutions (or PPIs) or general pension funds (or *APF* in Dutch)—and how this risk sharing can be handled. Solutions that extend beyond the organization within an industry pension fund should also be considered.

Finally

The Coalition Government Agreement shows that the Cabinet has chosen a clear pathway. The consequences of the direction they have chosen are large, however, and many questions remain open. There is still a long way to go to achieve a future-proof pension plan for the Netherlands. We call on the government and social partners not to spend too much time in "rearguard" battles but putting their energy into concrete contributions that will lead to a good, consistent, and sustainable pension system. A system that can give new confidence to the workers of today and of the future.

For the various stakeholders, this means that they must ask the right questions to reach the right answers within the context of the Coalition Government Agreement.

The responsibility **of the Cabinet** is to create the appropriate framework for pension policy. The Cabinet will need to answer a number of important questions about that responsibility:

- What are the maximum fiscal frameworks?
- In the case of a DC plan, this is about the maximum acceptable premium for a "second pillar" (or employer) pension. All quantities in the following formula must be formulated accurately:
 - (part-time percentage × (pensionable salary exemption) × premium contribution percentage);
 - A low exemption would create leeway for lower-paid workers for an earlier retirement age.
- What is the minimum desirable pension accrual?
- How can we make sure that all workers will be able to accrue a sufficient pension?

The responsibility of **the social partners** is to adequately flesh out the content and implementation of the DC plan. Social insurance partners will need to answer the following questions about that responsibility:

- What is the correct premium amount, considering the company or sector?
- What risks need to be recognized, and how must these be shared among the various groups of participants?
- What is an adequate survivor's pension?
- How can we make sure that the implementation is, and continues to be, close to the wishes of participants?

The responsibility of the **regulatory bodies** (DNB [Netherlands central bank] and AFM [Netherlands Financial Markets Authority]) will also change. The questions that the regulatory bodies will have to answer in the event of a transition to a compulsory DC plan are:

DNB:

- If funds are transferred to a DC system: Are there additional criteria for a distribution of funds like this among the various groups of participants such that all parties are represented in a balanced way? If so, what are they?
- If funds are left in a DB system: What assets must be present and what investment policy is acceptable to secure all nominal pensions, without the ambition to grant cost of living adjustments?

AFM:

What criteria should apply to how the amount is estimated of the cumulative balance in the DC plan as of the pension date and of the pensions that can be obtained from this cumulative balance?

For the development of a new, transparent, and sustainable pension system, it is high time to make important choices. These choices are not being made at the moment, the stakeholders are waiting on each other, which results in talking in circles and the process not getting any further along. It seems that no party is prepared to make decisions.

However, we see some fundamental choices have been made in the Coalition Government Agreement sometimes with conflicting preconditions. Based on these choices, we see a real chance for the government to give more form and content to the process of setting up a new pension system. In our opinion, the government must go one step further by clearly establishing the bounds within which the social partners are allowed to move. In this White Paper, we have indicated what these bounds should look like based on our most important observations in the Coalition Government Agreement. We therefore propose the following ranking:

- 1. **Creating the appropriate frameworks**: the government must create clarity about the mandate and average-premium plan through detailed legislation and regulations. The government must also set forth the minimum and maximum social framework to establish a DC pension.
- 2. Adequately fleshing out the content and implementation of the DC pension: social partners come with appropriate pension solutions that meet the requirements of a new pension system within these minimum and maximum bounds. This White Paper articulates a number of ideas for this.
- 3. **More-detailed monitoring requirements**: regulatory bodies will answer the relevant questions that arise in the transition to a DC pension.

There is still a lot of work to do. We should let everyone keep busy with the questions that fit with their own roles in the process. We can then join forces and probably more quickly achieve an adequate solution for a new future-proof pension system.

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Bibliography

Bartjens Financieel Dagblad (October 18, 2017) Individuele pensioenpot: Going Dutch.

Bastiaan Starink and Wim Koeleman. PensioenPro (December 4 2017) Alternatief leeftijdsonafhankelijke premie.

Casper van Ewijk and Coen Teulings (January 2011) Centraal Plan Bureau Policy brief Nieuw pensioencontract onvermijdelijk.

Centraal Plan Bureau (May 20, 2016) Notitie pensioenresultaat bij degressieve opbouw en progressieve premie.

Centraal Plan Bureau (June 7, 2016) SER varianten toekomstige pensioenstelsel: een ALM-studie.

EIOPA (December 8, 2014) Database of pension plans & products in EEA: Statistical Summary.

Inge van den Doel, Benne van Popta, Financieel Dagblad (October 22, 2017) Pensioenfonds PMT Het pensioenstelsel in één klap veranderen? Iedereen weet dat dit niet kan.

Keith Ambachtsheer (November 1 2008) De Actuaris: VS en Canada hebben interesse in goed pensioenstelsel.

Marcel Lever and Sander Muns Netspar-Design-Paper (May 2017) Pensioenresultaat bij degressieve opbouw en progressieve premie.

Martine Wolzak Financieel Dagblad (October 19, 2017): Kritiek pensioenfonds Bouw op regeerakkoord, Afschaffing doorsneesystematiek 'onnodig'.

Mark Heemskerk (September 26, 2017) Toekomst van het pensioenstelsel. De volgende stap.

Martine Wolzak, Financieel Dagblad (January 24, 2018) Vakcentrales willen af van starre rekenrente pensioenfondsen.

OECD (2017) Pensions at a Glance 2017: OECD and G20 Indicators Retried from http://dx.doi.org/10.1787/pension_glance-2017-en.

ORTEC (May 2017) ORTEC Insight. Retrieved from http://insights.ortec-finance.com/nl-nl/2017/05/12/zowel-rentedaling-als-stijging-risico

Publication OPF And Association of Occupational Pension Funds: Het Nederlandse pensioensysteem. Een overzicht van de belangrijkste aspecten.

Coalition Government Agreement (October 10, 2017) Vertrouwen in de toekomst Regeerakkoord 2017-2021.

R.K. Sagoenie, E. Visser (January 18, 2017) De Actuaris Solidariteit in de collectieve pensioenregeling.

SER (May 2016) Persoonlijk pensioenvermogen met collectieve risicodeling. Retrieved from https://www.ser.nl/nl/publicaties/adviezen/2010-2019/2016/persoonlijk-pensioenvermogen.aspx.

Stefan Ormel (April 2017) Pensioenbestuur & Management Hoger en zekerpensioen, 25% ZZP'ers geen pensioenopbouw Retrieved from https://www.tno.nl/nl/over-tno/nieuws/2017/7/kwart-zzp-ers-heeft-geen-pensioenvoorziening/

Theo Kocken Pensioen Magazine (February 2015) Ontbinden in factoren: risicodecompositie als basis voor een simpel en solidair pensioen.

Theo Kocken and Bernard van Praag Financieel Dagblad (April 18, 2017): Eigen pensioenpotjes: vloek of zegen?

Theo Kocken PensioenPro (November 8, 2017) Het financiële stelsel is erg fragiel geworden.

Theo Kocken White Paper (December 2017) Memento Futuri scenario denken als antwoord op fundamentele onzekerheid

Willem Noordman Financieel Dagblad (November 16, 2017) Open voor alternatieven voor buffers in nieuw stelsel.

Appendix 1: Text from the Coalition Government Agreement

Renewal of the pension system

The Netherlands has a strong pension system. Changes in the labor market, increasing life expectancy, the financial crisis, and low interest rates have also exposed vulnerabilities in our system. Expectations have not been sufficiently realized, there are tensions between generations, and the system no longer fits with to the changing labor market.

During the conversation about pensions over the past few years, broad support emerged in favor of updating the pension system. Previous reports from CER (2015, 2016) have provided good guidance on this. In reforming the pension system, the Cabinet wants to develop the outlines for a new pension system as contained in the reports from the SER. In them, the SER examines the possibility of personal pension assets combined with the preservation of collective risk sharing. The SER will provide advice on this in the short term. The Cabinet is working with social partners to take this step toward an renewed pension system. A renewal that addresses the vulnerabilities in the current pension system and with which the strong elements of (4) mandate, group implementation, risk sharing, and fiscal support are maintained.

Building on that work and reports from the SER, the Cabinet wants to reform the pension system into more personal pension assets with collective risk sharing, abolishing the average system. The Cabinet awaits a proposal from the SER with interest. The following elements are essential to it.

- (1) The so-called average-premium system will be abolished. For all contracts, an age-neutral premium will be required, and the participants will get accrual that matches the premium paid in. This will put an end to the redistribution that is the result of the average-premium plan, and pension accrual will be more transparent, and the system will be better matched to the labor market. (4) It will be examined whether the tax framework alone can still be limited to only the pension premium. In designing the tax framework, the Cabinet will keep an eye on facilitating adequate pension accrual.
- (3) People will continue to share risks. A pension remains a lifelong benefit, as a result of which you will not run the risk of running out of money if you live longer than expected.
- (2) Social partners develop a new pension contract. The SER previously explored a new pension contract with personal pension assets. This gives an insight into what you have built as a participant and can reduce interest rate sensitivity. For as stable as possible a pension, there remains discussion of a group benefit phase during which the rules under the law will in principle be connected to an improved premium arrangement.
- The SER reports provides for the option of a group buffer, which is filled from surplus returns to protect against unexpected changes in life expectancy and shocks on the financial markets. This way, the buffer will limit the differences between generations.
- If a new contract provides for a buffer, then statutory frameworks will apply to the maximum size and accrual and benefit rules for the buffer, where the buffer cannot be negative. The current mandate must be maintained within these rules.
- (5) The system is better equipped for freedom of choice for participants and for the possibility that the selfemployed can voluntarily join or remain connected due to the disappearance of the redistribution of the average-premium system and the introduction of personal pension assets.
- The system contains adequate Coverage for survivor's pensions and disability pensions so that labor mobility is not inhibited.
- The renewal of the system requires a careful approach:
 - The effects of the transition to a new way of accruing pensions must be balanced for all participants. The Cabinet will draw up frameworks that measure make a the customization by social partners and pension providers possible during the transition.
 - The simultaneous transition to a new pension contract and the abolition of average accrual will facilitates the transition. The aim is that pension funds make the transition to the new contract inasmuch as possible, where the system will be simpler and over the long term allow fewer types of contracts.
 - The new system must remain consistent with European law, and the current compulsory participation in industry and professional pension funds will remain unchanged.

- The Cabinet will contribute financially to the recovery of the costs for abolishing the average-premium system and transitioning to a new means of pension accrual by temporarily extending the tax frameworks. A stipulation is that the extension will have no effect on the long-term sustainability of public finances.
- The Cabinet will facilitate the collective conversion of existing entitlements to personal pension assets. This is subject to a joint responsibility of the Cabinet and the social partners.
- Important points in shaping the new pension contract will be the consequences for the amount, volatility, and the stability of the benefit.
- Social partners will receive leeway during a limited implementation period to adapt the plans to the new
 means of pension accrual and potentially move to a new pension contract. During this implementation
 period, it must be taken into account both with pension plans in which the average-premium system is
 temporarily maintained as well as with pension plans in which there is no (longer) discussion of an averagepremium system.
- The accrual of pensions under the terms of employment will remain the responsibility of the social partners.
 The Dutch Government will establish the frameworks. The pension system will remain a national competence. The Cabinet specifically rejects European rules that violate this.
- The Cabinet wants to offer more leeway for freedom of choice and will examine whether and how it will be possible in the new system to set up a limited portion of the pension assets as a lump sum at the time of retirement.
- In this reform, the Cabinet Explicitly addresses the need for transparency and control and, where possible, the reduction in the costs of implementation.
- Both the design of the new contract and the transition require further elaboration. The Cabinet will take this up in close cooperation with the social partners. The goal is to achieve consensus on the guidelines in early 2018 so that the legislation can then be started. A process like this will contribute to confidence and wide social support. The starting point will be—subject to all diligence required that is required for the purpose of the feasibility—to complete the legislative process in 2020 so that the implementation period can then begin.

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