Original Article

Principles for better pensions: Lessons from the Netherlands

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ABSTRACT This article looks at the Dutch pension system to see what can be learnt for future pension design. The authors derive a list of 10 principles that can apply to modern age defined contribution (DC) schemes. This can be seen as an attempt to combine the good elements of defined benefit schemes with DC schemes.

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The Dutch pension system is critically acclaimed. The Melbourne Mercer Global Pension Index¹ has rated the Dutch pension system the highest in the past 3 years.² And rightfully so: the Dutch system certainly has its merits and lives up to the standard of being one of the better pension systems in the world. However, it is not because of the many pension experts that live in the Netherlands, or extraordinary investment returns of the Dutch pension funds, but because the Dutch have a tradition of being paternalistic. When it comes to pensions, that is.

This article zooms in on the Dutch pension system and its strengths and weaknesses. More importantly, we will provide a list of principles that underlie the Dutch pension system and see how it can be applied to modern pension provision. Although the Dutch system consists primarily of defined benefit (DB) type of

arrangements, we do acknowledge that modern pension provision will take place in a defined contribution (DC) scheme. The principles apply specifically to DC schemes.

We believe that the success of the Dutch pension system stems from the quasi-mandatory participation. Owing to deals made between social partners – the representatives of employers and employees – over 90 per cent of Dutch employees participate in an employer-based DB scheme, which is backed by the employer who pays in a part of the contribution. Combine this with a flat-rate Pay-As-You-Go (PAYG) income in the first pillar that increases with wage growth and one can conclude that the average Dutch pensioner is very well off. Owing to the mandatory participation, pension funds have economies of scale and do not have to spend much, if anything, on marketing and distribution costs, resulting in low costs of pension accumulation. What makes it even better for the participants is that pension funds are (typically mission-driven) not-for-profit institutions, with no board that has the possibility

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of benefiting at the expense of the participant. Finally, the pension contributions into DB schemes are high (up to 16 per cent of wages earned), meaning that the pension funds over the past few decades have had long periods of a very healthy balance sheet. In the 1980s, the pension funds reached such a financially healthy status that even 'premium holidays' were possible. The Dutch accept the fact that 20 per cent of their total income goes towards their income after retirement (including the first pillar). Or, as the Dutch like to say, we work 1 day a week for our pension.

Other characteristics of the Dutch pension system include smoothing of returns and the absorption of financial shocks through the funding ratio, as is typical in DB schemes. These mechanics imply intergenerational risk sharing and thus intergenerational transfers occur. The idea behind it is that no generation should be 'unlucky' in the financial markets, and if they are they receive subsidies from the generations who live in a time when financial markets generate better returns. In expectation, everybody should be well off. This system was designed right after the Second World War and made sense back then: there was no mark-to-market discounting of liabilities and assets, there were no computers to do complicated calculations, people planned to work for the same employer their entire career and ageing was not an issue as it is today.

However, this system of intergenerational risk sharing is not sustainable if the underlying principles are not correct. As said, the system was designed at a time when mark-to-market discounting of the assets and liabilities did not exist, meaning that the real economic risk was not recognized (and the calculation bases were intentionally conservative) making unfair transfers between generations inevitable. The problem becomes more severe if there is no clear *ex ante* deal on the distribution of a possible deficit or surplus of the fund.

The Dutch found that indeed the system was unsustainable. In the last decade, three financial crises hit the pension sector. At the same time, owing to stricter solvency requirements and accounting rules pension risks became more explicit on the balance sheet of the employer.

Although pensions are recognized by employers as very important to their employees, the financial consequences of these pension risks were too much when employers had to pay substantial amounts to their pension funds in order to bring the funds back a higher solvency ratio. The pension deal was initially made less rewarding to employees in 2006, when the large majority of Dutch DB schemes moved from a final salary method to calculate benefits using an average wage method. Similarly, there was a clear increase in DC pension arrangements at the expense of DB schemes. The change in DB schemes and the shift towards DC is often mistaken for a shift from collective schemes towards individual schemes, but that does not need to be the case. It can be better described as a shift of the pension risk from the sponsor (employer) towards the participant (employees).

With the changes made to DB schemes in the Netherlands, one could easily argue that true DB (with a guarantee backed by the sponsor) ceased to exist and is instead replaced by a collective defined contribution (CDC) scheme. Other countries, like the United Kingdom, which had very similar DB schemes in place, chose a different route and instead closed DB schemes for new members and guided new employees into individual DC schemes. Although certainly advantageous for the sponsor, it has some negative side effects for the members that should be addressed.

Traditional unit-linked DC schemes that are well known in the United Kingdom (Personal Pensions) and the United States (401(k) plans) can be – at best – described as suboptimal pension solutions. They tend to have low contributions, low participation rates, high fees that dampen the pension outcome drastically, no annuity phase leading to a significant conversion risk and many degrees of freedom for a participant who is on average incapable of making an informed decision about his retirement. CDC shares some of these disadvantages.

In conclusion, one could say that the move from DB towards another type of pension scheme, either CDC or DC, is a logical one. However, the outcome in both cases is

suboptimal. An interesting idea would be to think how a pension system would look if we could start from scratch. What would the outcome be when the great minds who thought of DB in the 1940s would design a pension system in 2012?

We have pondered this question and have striven to present the principles that underlie a good pension system. The end result is a DC type of solution with DB elements: our attempt to combine the best of both worlds.

A PENSION PRODUCT COVERS BOTH ACCUMULATION AND DECUMULATION

Often, an asset management product is disguised as a pension solution. Instead of offering a pension solution, a participant receives an investment account in which he saves for retirement while paying a fee for the investments that are done on his behalf. Although this certainly achieves the goal that one saves through investing for retirement, it cannot be called a pension solution. A pension solution aims at delivering an income after retirement – a deferred annuity. Instead of just focusing on the asset management part of the pension, the aim should be to deliver a complete product.

An important advantage of a combined approach is that the participant can protect himself from the conversion risk that the ‘asset management’ approach gives rise to. The conversion risk occurs at the retirement date when the pension pot is converted into an income, an annuity. It happens at the specific interest rate prevailing on the day. While you can be either lucky (when the interest rate is high) or unlucky (when the interest rate is low), you are subject to the interest rate at that time. By using monthly premiums to buy fixed deferred annuities, you can smooth the interest rate exposure of your annuity over time, making sure you are neither lucky nor unlucky when it comes to buying an annuity. Of course, with this mechanism you might lose out on potential market returns by being invested in bonds rather than in equities, and thus it is advisable to not fully guarantee your pension income.

LIFE CYCLING IS IMPORTANT, ITS IMPLEMENTATION EVEN MORE IMPORTANT

Life cycling is a good idea in a DC product. However, life cycling is often confused with a stocks-bonds portfolio in which the relative size of bonds (or cash) increases with the age of the participant. This is built on the wrong assumption that bonds are a risk-free asset in the life cycle. The assumption is wrong because it implies that one should minimize volatility of the asset portfolio when the participant is approaching retirement or that the bond index is a good match for the desired fixed income post retirement. As said before, the aim should be on providing an income after retirement, thus minimizing the volatility of the future pension payouts.

So how should a life cycle work? The risk-free portfolio is basically a deferred annuity, meaning that it is a stream of cash flows that is protected against interest rate changes and ideally also longevity changes. The former can be hedged in the financial markets by using derivative instruments. This deferred annuity can then be used as the risk-free asset in the life cycle in which you invest more when the retirement date comes closer.

The risky portfolio consists of assets that have a certain risk profile, depending on the underlying assets and the risk preference of the fund or the participant. This way one could truly say he is life cycling properly, instead of swapping equity risk to sovereign and duration risk when one gets older. The risky portfolio should aim at providing a real upside or, in other words, should compensate for the erosion of the pension income that is caused by inflation.

GUARANTEES ARE IN HIGH DEMAND AND SHOULD BE PROVIDED

Guarantees were common in pension solutions in the past, but are decreasing in popularity, not because demand is fading away, quite the contrary, but because guaranteed solutions are more expensive to maintain. In a pension framework, the risk of providing a hard guarantee has to be borne by either the sponsor or the government. Both parties are unwilling to bear this risk going forward. In an insurance

framework, the capital required to offer a guarantee is increasing significantly with the implementation of Solvency II. This makes it unattractive to offer guaranteed products.

At the same time, the demand for guarantees is increasing as people want security. Research (for example, Smits³) shows that a majority of the Dutch people prefers a portion of the pension income to be guaranteed compared to their full pension income being dependent on the financial markets. Even if this implies a significantly lower expected pension income due to the high costs of buying guarantees.

The challenge for pension funds and insurers is to find ways to offer guaranteed products in a capital-efficient manner under, respectively, IORP II and Solvency II. In designing new pension products, this could be done in a capital-efficient manner but it requires stepping outside the asset management mindset of current DC solutions.

TRANSPARENCY AND CLEAR OWNERSHIP ARE REQUIRED

Often, it is stated that pension products should be more transparent. Although we do acknowledge that this is important, a better way to state it is to say that the ownership of the pension rights should be clear. With clear ownership rights no individual member will subsidize another member. This is important because of three modern participant demands: portability, liquidity and open ended.

Portability, or the possibility to transfer your pension rights at a fair value, matters as people are switching jobs frequently and should be able to take their pension rights with them. However, it is worth stressing that this should happen at the market value of both the assets and the liabilities. This especially matters when a participant migrates and wants to take his/her pension pot with him/her. An obvious requirement is that a comparable discount rate between the countries exists.

Liquidity is the ability to spend your pension money by not just buying an annuity. Although we do think that taking an annuity is the right thing to do, one should have some flexibility in taking up lump sum amounts right before or after

retirement as the utility of the lump sum might be significantly higher than a small increase in the monthly payments. To do this, liquidity is required. More importantly, liquidity is required to address the aforementioned portability.

Open-ended solutions imply that a participant can change the size and frequency of his/her premium into the pension product at any point. Fairness requires that a guarantee will only be set, based on the current market conditions, when the premium is received.

PARTICIPATION RELIES ON WELL-DESIGNED INCENTIVE STRUCTURES

People are reluctant to save for retirement. The theory of hyperbolic discounting, introduced by Frederick *et al*⁴, states that people discount future outcomes more steeply when they have the opportunity for immediate gratification than if they do not. This means that they rather have consumption immediately today rather than tomorrow, let alone consumption in a few decades. In our view, the government has the moral obligation to steer people towards saving for retirement. Many possibilities arise: compulsion obviously being the most effective. The United Kingdom introduced the concept of auto-enrolment where everyone automatically participates if he/she does not opt out. We expect that auto-enrolment will be as effective as mandatory participation with the added value that individuals can opt out of or opt for an alternative arrangement if they do not like their pension provider. Other possibilities are tax reliefs, subsidies and increasing the coverage and financing of the first pillar.

DEFAULTS, DEFAULTS, DEFAULTS

Participants are notorious for making irrational decisions regarding their pension. They do not pay enough contributions, they do not reveal their risk preferences if they know what their risk preference is at all, they do not choose the right asset classes if they choose at all and they have no idea what effect costs have on the pension outcome. This has been shamefully exploited in

the past by salesmen, pension providers and asset managers. High-fee pension solutions have eroded the pension income of millions of participants, while others have been subject to the outcome of their badly guided decisions.

We strongly believe that people should be steered towards the right way of pension savings through default choices. The defaults should include (i) a strong incentive to participate, (ii) a certain level of contributions to accumulate a pension that will pay out a pension that is relative to the income during the working life, (iii) a certain investment strategy (for example, the life cycle as described earlier) that targets a decent income after retirement with the potential for upside and (iv) the annuitization of the pension pot at retirement, preferably with a solution for the conversion risk included. This default could either be determined by the social partners (unions and employer representatives) or the government (providing the ultimate downside protection, via the social security system).

At the same time, there should be an opt-out from the default, for people who do wish to participate in the scheme, but wish to set their own profile. We believe that this is a set of relevant choices that helps the participant to determine the level of risk that is preferred. It is our view that the selection of the individual investment funds should not be offered to participants; instead, the participants should select among a limited set of risk profiles. If one wants to select investment funds, he/she should do this outside of his/her pension arrangement with the excess wealth without foisting the extra cost (and moral hazard) onto the pension system.

COMMUNICATION IS KEY

Although we put communication in this section, this should be the first principle to emphasize. Communication has four purposes: (i) stressing that saving for the pension is a trade-off between consumption right now and consumption after retirement, (ii) informing why a default is set as it is, (iii) giving an indication of how much the participant will receive after retirement and (iv) informing about the options to save more for retirement. Communication is difficult, as pension

providers run into problems that are often described by behavioural economists: people are unable to discount future cash flows properly and will procrastinate; pension is a low-interest product; financial education is ineffective in getting people to make better financial decisions, for example, concepts like inflation or compounded interest are poorly understood. Perhaps it can be best described by the statement that '50 per cent of the people do not know how much 50 per cent is'.

The best way to communicate is to provide an overview of the total net pension income of the different pension pillars that are either discounted for inflation or communicated in today's terms. Guarantees have the significant advantage of being relatively straightforward to understand for participants, as what you buy is what you get. If the construct of the fund is such that your pension income consists of a guaranteed portfolio and a risky portfolio, one could communicate the guaranteed minimum income plus the expected value of any non-guaranteed benefits. The latter will increase in accuracy as the retirement date approaches.

USE ECONOMIES OF SCALE

Typically, larger pension funds have lower execution costs. Administration has obvious economies of scale when the size of the operation increases. Asset management has, up to a certain size, economies of scale in operations. The advantage comes from the increased bargaining power in the procurement process. Larger schemes therefore provide better net returns, as they can cut costs by negotiating better deals with providers. A simple but clear example of this impact can be seen when one looks at returns and the effect on pension income. Similar pension schemes with different cost structures (50 and 150 bps) have very different outcomes. The cost-efficient scheme ends up, after 40 years, with 22 per cent more pension income.

In addition to financial effects, having fewer larger schemes makes trustee recruitment easier. Larger schemes can take the form of industry wide pension funds like they have in the Netherlands, or master trusts that are currently promoted by the National Association of Pension Funds (NAPF) in the United Kingdom.

INTELLIGENT RISK SHARING IS POSSIBLE

Risk sharing is often seen as one of the arguments to promote large collective schemes. Although risk sharing certainly has its advantages and should be applied, the question one should ask is which risks can be shared in a collective. In short, idiosyncratic risks should be shared, whereas systemic risks should not.

An example of sharing a specific risk is mortality. This enables people to save for the average age at which they are expected to die, instead of saving too much due to the chance you might live longer than expected. A simulation by⁵ shows that mortality risk pooling can add 15 per cent of cost savings in a DB scheme compared with a DC scheme without this type of risk sharing. It is impossible, however, to efficiently share a systemic risk like longevity, the trend that people will live longer.

Often, the concept of risk sharing is used for the sharing of financial risk. This is applied in DB schemes as the returns will be smoothed over different generations. We believe this is a mechanism that one should not apply to a pension solution because financial risk sharing means intergenerational risk sharing.

There are three major problems with intergenerational risk sharing. The first is that it implicitly allows for redistribution of the pension money. As is well known from the insurance literature, this gives way for adverse selection to take place, meaning that people will only participate if they know they will get the benefits of risk sharing. Second, redistribution is by definition a political issue, and putting important decisions on one's retirement income in the hand of a small group of people might be an uncomfortable thought to some, especially when certain groups are not represented on the negotiation tables, like future participants and deferred participants. Third, financial risk sharing can be very in-transparent to the participant as he/she will not know at any moment in time how much he/she will actually receive until he/she retires, which conflicts with the principle of clean ownership rights that we described earlier. Therefore, we believe that smoothing the pension income should be done by

means of hedging pension pay-outs in the financial markets, especially as no expert is able to predict the next movement of the stock market in order for the pension scheme to know whether to smooth up or to smooth down.

GOVERNANCE DETERMINES THE EFFECTIVENESS OF THE SCHEME

While communication should be the most important principle, governance certainly should be the second. There are two mainstream governance models: the trustee model and the shareholder model with both strengths and weaknesses. For example, the trustee model tends to lead to operational inefficiencies and limited product development. The shareholder model tends to lead to more operational efficiency, but maximizing profits can lead to excessive fees. Both models can be managed if the weaknesses are identified. A hybrid model is a possibility, for example by supplying a mutual product where the shareholder owns the service provider.

CONCLUSION

We have outlined the principles for good pension provision above. As might be obvious by now, we believe that the typical DC scheme currently in place is incapable of securing a sufficient income for the participant. At the same time, we recognize that DB schemes are unsustainable if the underlying principles are not right. A solution can be found in starting from scratch and asking yourself the question: what is important in providing the participant with a good pension? You might just end up with a list similar to ours.

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