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Netspar News




Contents

We Have to Be Willing to Discuss Demotion

Rick van der Ploeg: 'Happy Raising the Pensionable Age to 68'

Rick van der Ploeg

Sparks have begun to fly in the debate over raising the pensionable age. The credit crisis, unavoidable government interventions in the banking sector and the ensuing effects on our nation's pocketbook now make it necessary to reconsider a number of the old taboos. One of them is the idea of raising the pensionable age – perhaps gradually – from 65 to 67. If you ask Rick van der Ploeg, we can go even higher.

by Clemens van Diek

The Netherlands' pre-eminent economists have all put in their two cents. Not only the 'Tilburgers' Bovenberg, Eijffinger, Verbon, Van Ours, Koedijk and Benink, but also experts active elsewhere across the country, such as Boot, Van Wijnbergen and Stevens. Jan van Ours holds that raising the pension age to 67 will also stimulate labour market participation in the under-65 age group. In fact, he says, from the long-term perspective, 'a fixed pensionable age is one of those things for the old and elderly that will ultimately fall by the wayside.'[1] The national administration's 'Crisis Cabinet' is among the few bodies to still have large reserves at its disposal.

Already last year the Labour Participation Committee (Commissie Arbeidsparticipatie, more often referred to under the name of its chair, Peter Bakker) issued its frank appraisal: Go on, raise the age. After all, we are living considerably longer today, on average, then back when the General Old Age Pensions Act (Algemene Ouderdomswet, AOW) was established. Life expectancies have risen by nearly a decade since then. From an average of 70 for men and 73 for women in 1950, we have reached life expectancies of 78 for men and almost 82 for women today. A study conducted by Netspar researcher Karen van der Wiel found that a majority of the Dutch public assume there will be an AOW-age increase. Some are even planning ahead by purchasing single-premium and life annuity policies.[2]

With life expectancies on the rise, the government is forced to spend increasing amounts on AOW. Raising the AOW age now would mobilize the necessary growth, say advocates like Bovenberg, who point out that the government budget would benefit over the long term. According to experts' calculations, a rise from 65 to 67 would lighten the burden by several billion euros.

However, critics such as Harrie Verbon believe that raising the AOW age would be pointless, expensive and/or unfair. Pointless because it would not make older workers any more productive and would worsen their labour market position. Expensive for businesses that employ a large number of older staff and would have to foot the bill for the two-year AOW gap for their older workforce. And unfair because people with lower incomes would be forced to continue working longer, while those with higher incomes could take off for the Bahamas on turning 60.[3] Given the fact that only 30% of men between the ages of 60 and 65 are employed, an alternative would be to start with measures to increase that group's participation. And, advises Verbon, 'make it easier for people who are willing and able to continue working past 65 to actually do so'.[4]

The Dutch government has already designed a number of stimuli to raise participation levels in the 62-65 age group. People who are employed and earning over 8,860 euros receive a deduction on their taxable annual income (5% at age 62, 7% at age 63 and 10% at age 64). For someone with a salary twice the national average, this would come to more than 10,000 euros over three years. Those who work beyond 65 pay a lower premium, with an upper limit of 918 euros. These stimuli seem to be having an effect: the number of people working past 65 has grown from 60,000 in 1990 to over 100,000 in 2008.

Calling Rick van der Ploeg

'Pronto'.
'Are you in Italy?'
'No, in Oxford.'
But the 'pronto' of his Florence days has evidently stuck. Since then, he has taken an appointment at Oxford University and a 20% appointment at the University of Amsterdam. His CentER time at Tilburg University (1985-1991) is by no means forgotten; he has fond memories and has stayed in touch with researchers like Lans

1 Me Judice 68 (*www.mejudice.nl*)

2 *ESB* 6-2-09

3 *Volkskrant* 9-2-09

4 *Volkskrant* 9-2-09; *Brabants Dagblad* 20-2-09

Bovenberg and Aart de Zeeuw. And one of Tilburg's latest acquisitions, Jaap Abbring, earned his PhD under Van der Ploeg.

Tilburg continues to have a 'solid' name in economics circles. 'It's a well-respected qualification', according to Van der Ploeg, 'but the competition has intensified considerably. Tilburg is no longer the only prominent research institute. Rotterdam and Amsterdam (Tinbergen Institute) have also joined the game.'

And then it's down to business: 'What would you like to know?'

Is it necessary to raise the pensionable age?

Rick: 'It is unavoidable. Every ten years we gain another two years or so. It was not so long ago that Dutch people died between the ages of 65 and 70. There was no such thing as an advance pension, and people had little time to enjoy it – just three to four years, tops. Financing was simple then. Now we are receiving pensions for around 14 years, on average. And that's where the problem lies.'

Does that mean the pensionable age has to be linked to the average life expectancy?

Rick: 'In my opinion, yes. Other countries are already taking that step.'

How long do you plan to go on working?

Rick: 'I am one of these dotty academic types. I'll just keep at it untill I drop dead.'

How has the current financial crisis influenced pension financing?

Rick: 'The value of shares has just about halved. Pension funds are facing shortfalls and can no longer pay out what they promised. That leaves two options: lower pension benefits or raise premiums.'

'Also consider that it is up to the pension funds to decide whether to pay out less than agreed. In that case, the administration could intervene and say, 'No, we would rather you didn't. We would rather raise the pensionable age by two months every year from now on'. That would bring you to 67 in 12 years' time. If you ask me: raise the pension age by three months every year, up to 68. So then it's 2020, by which time we live to an average of 80. That's 12 years of pension – not a bad deal, is it?'

Across the board?

Rick: 'You have to put special schemes in place for people working in heavy labour professions. Someone with a job cleaning freight containers gets worn out faster and should be offered an advance pension option. This is already standard for fire fighters. Another possibility is to build greater flexibility into the system. For example, allow people to continue working until they reach 70, but with incremental reductions in their hours. So we take the general principle and then look around for sectors where exceptions apply. This is how I would do it, and I think the social democrats in government would also be able to accept this approach.'

Incentives to work longer, tax breaks for older people – are these good ideas?

Rick: 'Incentives have to be designed to make working past 65 attractive to people. Otherwise it's just an empty investment, really.'

And what about demotion? According to Van Ours, this is a taboo.

Rick: 'True. Demotion is an issue we shy away from in the Netherlands, but is one we simply have to be willing to discuss. Demotion has to be presented in such a way that it becomes an interesting option and does not impact a worker's pension. However, salary negotiations are rendered all but pointless as a result. And it would certainly be a shame to throw corporatism overboard.'

'It is a known fact that productivity declines with age, with some exceptions, whereas costs increase due to age-dependent pay scales and orders declaring collective agreements binding. When you are young, your productive capacity is high. Really, you're being underpaid at 20 and 25, and overpaid after hitting about 50. So it's an attractive option to let those 'old-timers' take an early pension as soon as their productivity no longer weighs up against the costs. The trade unions defend the system of age-dependent bonuses, but that makes them partly responsible for a veritable army of people taking advance pensions. It's a matter of whether you really want to throw the baby out with the bathwater.'

'In academia in the US, older professors make proportionately less; they had substantial earnings when they were young, but towards the end of their careers, when the kids have left home, their income shrinks, relatively speaking. Their salaries are no longer indexed, which means they stagnate. This does not actually imply a decline in their standard of living, but it does have the implication that the younger generation get to move up the pay ladder and catch up to the old-timers. We have nothing even resembling that system here.'

The financial crisis has hit the real world: rising unemployment, fewer job vacancies. So perhaps phasing out the older workforce is not such a bad idea, after all?

Rick: 'I understand that there is a strong tendency now to put aside measures to keep older people working longer. But that's precisely what we should not do. Now is the time to go on creating incentives to keep older people in the workforce.'

Growing older – some worrying facts

- Life expectancies have doubled to 80 years within the space of 150 years, primarily due to a drastic reduction in child mortality and the eradication of death during childbirth.
- Upon having made it to 65, men live another 17 years, on average, and women 20.
- Since the implementation of the AOW, the number of people over the age of 65 has risen from 1 million (9% of the population) to 2.4 million (15%).
- In 20 years, one-quarter of the population will be 65 or older.
- The actual pension age currently averages around 61-62.
- With respect to effective legislation for the right to receive a good pension, the Netherlands surpasses every other country.
- Pension funds control 600 billion euros. This is money that the public itself has saved.
- The biggest challenge confronting our ageing society is care.
- In the Netherlands, it is primarily the older generation that care for children and the elderly!
- No more than 6% of people over the age of 65 live in a care or nursing home.
- More than 40% of healthcare now represents care for the elderly.
- 1% of the population (those 85 and older) generate 12.5% of all healthcare costs.

Source: *CBS* and Paul Schnabel in the *Financieele Dagblad*, 14-2-2009.

The Future of Dutch Pension Schemes

By Dirk Broeders, Klaas Knot

Introduction

A key lesson from the current crisis is that pension schemes are exposed to sizeable risks. Many Dutch pension schemes are currently reporting funding deficits as a result of a combination of significant mismatch risks, fallen interest rates and a plunge in stock prices against the backdrop of a looming economic recession. Funding ratios decreased on average by some 50 percentage-points over the course of 2008. But this is not unique; for many years funding ratios have shown remarkable volatility, and the long-term movement is essentially downward sloping (as market interest rates are in a long-term downward trend). Interest-rate risk is a real economic risk factor for pension funds, and leaving that risk unhedged is certainly not without consequences. Clearly, current risk-absorption mechanisms are insufficient to counteract large swings in funding ratios. A new balance between assets and liabilities is therefore required. This article discusses the sufficiency of the existing options for risk sharing and envisages the future of Dutch pensions with new approaches to risk sharing. The next section proceeds by describing a pension scheme as a problem that can be viewed from different angles.

The ambiguous definition of a typical pension scheme

The definition of a typical Dutch pension scheme is ambiguous, for several reasons. First, the institutional framework is unusual. Unlike a commercial enterprise, the pension scheme has no external shareholders who take on residual risk. All risks are borne collectively by the scheme participants, who provide both external and own capital. A pension scheme has in effect no share capital with clear ownership or voting rights. The scheme's equity is the difference between the mark-to-market value of its assets and its liabilities. All stakeholders have a claim on this surplus. A second peculiarity is that the pension scheme can be analysed in different ways – depending on whether it is regarded as a risk-management problem or as an investment problem. If the focus is on risk management, then the primary concern is to secure the defined-benefit liabilities. From this perspective, the pension scheme can decide to limit mismatch risks – for example, by hedging interest-rate risks or inflation risks using bonds and derivatives. If pension provisioning is regarded as an investment problem, however, then other considerations play a role. From the perspective of an integrated life-cycle model, it may be more attractive to take investment risk in the pension scheme portfolio. This holds true especially for younger participants, who have substantial human capital with limited risk.

The ambiguity described above implies that pension scheme trustees face a complex problem that involves weighing the interests of all stakeholders against each other. In some cases, these interests may conflict. Consider the trade-off arising from the current funding deficits. On the one hand, immediate recovery obtained by cutting back accrued benefits might prove unnecessary if markets recover swiftly. On the other hand, if deficits persist, then the continuity of the pension scheme is challenged – in that it might well become unattractive for new generations to enter the pension scheme.

Giving fair consideration to all of these interests requires the application of mark-to-market valuation, which minimises the probability of misjudgement. Mark-to-market valuation shows that cover ratios vary sharply according to the observed mismatch risks. Fortunately, this does not mean that all policy decisions have to follow each and every fluctuation in market valuation. Under normal circumstances, a pension scheme can choose to smooth its contribution- and indexation decisions. These stabilisation mechanisms need to be temporarily disabled in case of a funding deficit, however, in order to focus on solving the deficit.

Current opportunities for risk absorption

If our defined-benefit pension schemes are seen primarily as a risk-management problem, then sufficient resources need to be in place for risk absorption. Given the current situation and the high volatility of funding ratios, critical consideration must be given to the issue of the availability of these resources. What are the existing options?

First, the sponsor can make extra donations. This is not without consequences, from a corporate finance point of view, as use of this approach will substantially increase volatility on the sponsor's balance sheet.

Second, the pension scheme can raise the contribution level (by limiting contribution discounts, for example). Premium hikes are effective only in the long run and still have disadvantages, particularly due to their pro-cyclical effect.

Third, the pension scheme might opt for changing the asset allocation. It could switch towards the replicating portfolio of fixed-income securities, locking in any deficit and borrowing money from the sponsor or a third party equal to the deficit and repaying the loan from future contributions. This would prevent deficits from accelerating, but also means that the pension scheme will not capitalize on a stock market recovery.

Fourth, a pension scheme can cut back on indexation. While this will not immediately help to improve the funding ratio, the long-run significance of indexation cuts is mainly that they will slow down a decline in funding level (as compared to a situation of full indexation). Omitting indexation, however, leads to a loss in purchasing power, which directly affects pensioners. This is even more the case for the ultimate measure: cutting back on accrued benefits. If none of the previous approaches have helped, then the pension scheme needs to cut back on pension entitlements, which, while very effective in restoring the funding level, entails a great expense for the pensioners and active members.

This list of options leads us to conclude that without change, pension schemes in a long-term balanced situation will have to aim for higher solvency buffers. If adoption of more substantial capital buffers does not seem like an attractive option – perhaps because it takes years and considerable effort to build up such buffers, or because they involve uncomfortably vague ownership rights – then the only alternative is to make changes to the pension schemes themselves.

Looking into the future

The discussion above suggests that we may have to consider a redesign of our old-age provision. Volatility can be reduced by fewer mismatches between assets and liabilities – to be implemented either through alternative assets, alternative liabilities or a combination of both. Dutch pension schemes can lay off risk in the international capital market by funding pensions with corresponding assets. After all, a key purpose of funding is to diversify risks over international markets. Given the lack of Dutch inflation or wage-index-linked bonds, pension schemes can rely on other governments who do issue index-linked bonds to bear some of the risk. Also, there is a growing market for inflation-linked derivatives.

Another approach is to redesign pension schemes on the assumption that old and young people might have different preferences. For older participants, a risky investment strategy is not optimal. For a younger participant, investment risk can be a source of diversification, especially if there is a low correlation between returns on human and equity capital. This discrepancy between the interests of younger participants (who face an investment problem) and their older counterparts (who have a risk-management problem) can be taken into account by adopting a policy that differentiates between age cohorts. The younger members get a defined-contribution contract, while older members get more security in the form of an (indexed) defined-benefit contract. The residual risk for offering this security can be borne by the equity-like claim of the young. Their defined-contribution claim is progressively converted, as the participant grows older, into a defined-benefit claim. The disadvantage is that there is no certainty about the outcome of the defined-contribution portfolio, leaving substantial risks for the individual. This needs to be solved through ample labour market flexibility.

The advantage of both approaches is that they lead to lower overall solvency requirements on the macro level. This, in effect, enhances the sustainability of the pension system, as the interests of the various stakeholders will become better aligned as a result. Whatever route pension schemes follow, a significant change of the Dutch pension system seems imminent.

Dirk Broeders is senior economist at the supervisory strategy department at De Nederlandsche Bank (DNB). **Klaas Knot** is director of the division for regulatory policy at DNB and part-time professor of Money and Banking at the University of Groningen.

Cees Dert (Pension Fund Director, ABN AMRO) and
Roderick Munsters (CIO, APG)

How Much Risk Can Pension Funds Take?

How much risks can pension funds take? What kind of effect does the credit crunch have on planning the investment strategies? Jean Frijns interviews two leading figures from the pensions sector to find the answers. Cees Dert is director of the ABN AMRO Pension Fund. Roderick Munsters is CIO of APG.

By Jean Frijns

No need to mince words: most pension funds have low funding ratios and an aging participant population. What does that mean in terms of their ability to take risks?
'It depends on their capacity to recover,' Cees answers. 'A lower funding ratio means less capacity. It is risky to continue pursuing a risky policy without a strong plan sponsor. There is a limit to taking risks: if the funding ratio drops too low, young people might leave.'

Roderick takes a different view. 'What do we consider risk?' he asks. 'A pension fund needs to do more than just worry about the funding ratio. Sure, it's an important meter on the dashboard, but there are other more valuable meters. The prevailing rules for measuring funding ratios produce some scary outcomes. But all things considered, you need, as a pension fund, to look beyond the short-term funding ratio and consider the risk of not realizing the long-term objective: an indexed retirement benefit at a reasonable price.'

'Certainly,' Cees grants, 'your long-term objective is the main priority, but the real funding ratio is a good indicator of your chances of realizing that objective.'

The health of the sponsor and/or robustness of the underlying investment packages would thus seem to be important. Where can that health actually be found in terms of fleshing out the recovery plan?
'That varies from case to case,' Cees explains. 'In our case, it's stipulated in the performance agreement concluded with the company. If we did have to come up with a recovery plan, then in our case we would look at cutting indexation, implementing a recovery surcharge and adapting our investment strategy.'

'You could argue that an aging pension fund has little room to initiate recovery by raising premiums,' says Roderick, putting it in more general terms. 'And draconian premium increases are not economically viable. That would impact a large portion of the Netherlands. Every pension fund will have to decide for itself what a recovery plan might look like. Some of the options are, indeed, recovery surcharges and lower indexation, and only after that, a reduction in the investment risk.'

It has been argued in academic circles that any recovery plans should include more comprehensive contracts. That would require regulatory oversight.
Roderick nods his head. 'That's very sensible from an academic point of view,' he concurs, 'but really quite difficult for labor and management. How would we communicate it to the rank and file, when you risk compromising solidarity? Still, it is always worth thinking about ways to improve the contract.'

'I think it would be a good thing,' Cees says. 'It is important to clearly define who bears the risks, especially when times are tougher. This needs to be based on the notion of total itemization, but the trustees must also be able to deviate from this under certain circumstances.'

Roderick agrees with him, but he also wants to point out the flaws of combining real objectives with nominal requirements. Cees believes the time has come for taking the first step. 'You can make a good case for switching to a real basis. A cash value of 100% would be approximately equal to a real one of 70%. It would just take some adept communication to generate support for this.'

Can you also imagine that pension funds might take this step, Roderick?
'If the pension funds are going to do that, they could also look into the possibility of differentiating between those actively engaged in the workforce and those who are not, and thus into revising the entire pension contract,' he answers.

Besides all the criticism in the pension world of the nominal basis, there is growing criticism of using interest rate swaps to determine the market value of the nominal liabilities.
Roderick largely agrees with that criticism. 'There is simply no explaining why an interest rate swap negotiated on some derivative market on the last day of the month can have such a big affect on the financial position and strategy of Dutch pension funds, and thereby the pensions of

Roderick Munsters (right) reacts to Cees Dert's arguments.

millions of Dutch people,' he concedes. But Cees is more ambivalent. 'I believe in market value,' he asserts. 'And, in principle, market value also brings with it opportunities for hedging risks. If we redistribute risks among the participants in a pension fund, it's hard to defend straying too far from the principle of market value: you'll always have a group of people who could have gotten a better deal in the market.'

'But I'm still bothered by whether, within a pension fund, the perceived market value should be the measure of things,' Roderick replies. 'Settling accounts among participants based on the funding ratio at market value is a bit strange. I subscribe to the notion that everyone should recognize the value of fairness in shared relationships. Otherwise, you'll lose your base. And this is a problem in more areas than internal financial relationships. If you look at IFRS, the discount rate is much higher. For them, the funding ratio for a pension fund is not currently a big issue. So, you can ask yourself whether the risk-free rate really is the only correct measurement standard. Shouldn't we move toward interest on corporate bonds as the discount rate for liabilities?'

'That is actually the question in terms of the security we offer our participants,' Cees says. 'If we cash out the liabilities at the interest rates for corporate bonds with a AA rating, you're admitting that the risks are greater.'

In planning their investment strategy, pension funds are caught between their long-term objective of paying out indexed benefits and the short-term demands in terms of their nominal funding ratio. The long-term objective can be at odds with the funding ratio, depending on the actual market conditions. This often leads to policies that are all over the map. How can you deal with this paradox, to the extent it exists?

'Well, stretching the short term out to the long term seems an obvious solution: the market should, per expectations, take care of the problems in the end,' Roderick replies. 'In our case, the long term is the defining factor. But you must, of course, comply with regulations. Current recovery plans operate according to mechanical parameters, but these do not address the realities of the day. The strength of pension funds, in my view, lies in taking a long-term approach. Unfortunately, doing that right now is at odds with Dutch law.'

Cees agrees. 'For our pension fund, as well, the long-term strategy is the guiding principle,' he says. 'Until recently, that could be easily combined with managing the short-term nominal risks of the funding ratio by scaling back those risks when the funding ratio dropped. That worked well for us last year. Now that the funding ratio is lower, that choice will be more difficult. The trustees must decide how desirable downward risk is under the present conditions and what the risk distribution to the stakeholders will be.'

'You see the large company pension funds using dynamic strategies,' Roderick adds. 'That is frequently due to being listed or complying with IFRS. In the APG Group's strategy, you can see a shift toward a real basis and greater emphasis on obtaining a stable real return. There is less mutability in the risk assessment: stability is the main priority. We are also opting for a stable approach aimed at long-term projections. And we are not convinced, either, that things need to be radically changed right now.'

Gentlemen, perhaps you could say something together in closing.

Cees and Roderick both remain positive. 'Crises cause a great deal of suffering but also bring about many new dynamics, which might provide opportunities for structurally improving the pension system.'

Paper Page

Recently Published Papers

This page offers the recently published papers in the *Netspar papers* series. More papers and all pdf versions can be found on our website www.netspar.nl/research/database.

Discussion Papers (DP) are produced by all Netspar researchers and Ph.D. students who are involved in one or more Netspar research programs or themes. A DP aims at publication in high-standard scientific journals. It is usually the output of a research proposal funded by Netspar. It is published on the Netspar website jointly with a management summary. The DPs are discussed during Netspar activities.

Berend Roorda and Hans Schumacher: *Time consistency of nonconvex risk measures* (DP 01/2009-006)

Dion Bongaerts, Frank de Jong and Joost Driessen: *Derivative pricing with liquidity risk: theory and evidence from the credit default swap market* (DP 01/2009-005)

Philip Clarke and Tom van Ourti: *Correcting the bias in the concentration index when income is grouped* (DP 01/2009-004)

Eduard Ponds, Roy Hoevenaars and Roderick Molenaar: *Public investment funds and value-based generational accounting* (DP 01/2009-003)

Alessandro Bucciol: *Measuring self-control problems: A structural estimation* (DP 01/2009-002)

Alessandro Bucciol: *Social security, self-control problems and unknown preference parameters* (DP 01/2009-001)

Andreas Würth and Hans Schumacher: *CVaR pricing and hedging in Unit-Linked insurance products* (DP 10/2008-048)

Andreas Würth and Hans Schumacher: *Risk aversion for nonsmooth utility functions* (DP 10/2008-047)

Alexander van Haastrecht and Antoon Pelsser: *Generic pricing of foreign exchange, inflation and stock options under stochastic interest rates and stochastic volatility* (DP 10/2008-046)

Alexander van Haastrecht, Roger Lord, Antoon Pelsser and David Schrager: *Pricing long-maturity equity and FX derivatives with stochastic interest rates and stochastic volatility* (DP 09/2008-045)

Alexander van Haastrecht and Antoon Pelsser: *Efficient, almost exact simulation of the Heston stochastic volatility model* (DP 09/2008-044)

Richard Plat: *Stochastic portfolio specific mortality and the quantification of mortality basis risk* (DP 09/2008-043)

Hans-Martin von Gaudecker, Arthur van Soest and Erik Wengström: *Selection and mode effects in risk preference elicitation experiments* (DP 10/2008-042)

Tom van Ourti and Philip Clarke: *The bias of the Gini coefficient due to grouping: revisiting first-order corrections* (DP 10/2008-041)

Petter Lundborg: *The health returns to schooling – What can we learn from twins?* (DP 12/2008-040)

Jonneke Bolhaar, Maarten Lindeboom and Bas van der Klaauw: *A dynamic analysis of the demand for health insurance and health care* (DP 09/2008-039)

Norma Coe and Maarten Lindeboom: *Does retirement kill you? Evidence from early retirement widows* (DP 10/2008-038)

Johannes Binswanger and Daniel Schunk: *What is an adequate standard of living during retirement?* (DP 09/2008-037)

Alessandro Bucciol and Raffaele Miniaci: *Household portfolios and implicit risk aversion* (DP 07/2008-036)

E. Erdogan-Ciftci, Eddy van Doorslaer and A. Lopez-Nicolas: *Health, financial incentives and retirement in Spain* (DP 11/2008-035)

Jiajia Cui: *DC pension plan defaults and individual welfare* (DP 09/2008-034)

Maarten van Rooij and Federica Teppa: *Choice or no choice: What explains the attractiveness of default options?* (DP 11/2008-032)

Antoon Pelsser, An Chen and Carole Bernard: *On the cost of regulation under solvency II* (DP 05/2008-031)

Giovanna Nicodano, Massimo Guidolin and Carolina Fugazza: *Time and risk diversification in real estate investments: Assessing the ex post economic value* (DP 08/2008-030)

Panel Papers (PP) outline the implications of new developments in the academic literature for policy questions faced by Netspar's partners. The PPs are meant for professionals in the pension and insurance sectors and are discussed twice a year during one-day panel meetings. Representatives from academic and private sector partners, as well as international academics, act as discussants. The papers are published in a special PP booklet series. *Netspar has not published any new Panel Papers since Netspar News 7 (autumn 2008).*

NEA (Netspar Economic Advice) Papers describe and motivate the position of the author on a policy-relevant topic. In contrast to the PPs, these papers contain strong statements. Although Netspar as such is impartial, individual researchers of Netspar may very well have (and express) a personal opinion. Netspar simply offers a forum for in-depth discussion. The authors present the NEA Papers at meetings and discuss them with the audience. NEA Papers are also published in a booklet series. *Netspar has not published any new NEA Papers since Netspar News 7 (autumn 2008).*

Dissertation

Maarten van Rooij: *Financial literacy, retirement provisions, and household portfolio behavior*

Patricia Voets Completes Her Master's While Working at PGGM

'I Recommend this Degree to Colleague

She started on her Master of Science in the Economics and Finance of Aging at Netspar three-and-a-half years ago – while working full-time, that is – and was awarded her degree in mid-February. Patricia Voets works at PGGM. She is thrilled to have completed her studies, and not just because it was such a crazy time. 'This master's gives me a good foundation to build on', she says.

Name: Patricia Voets
Age: 28
Position: Investment Manager, Beta Liability Management at PGGM
Education: Econometrics, Master of Science in the Economics and Finance of Aging (Netspar)

By Sander Peters

She is not the first student to ever successfully complete a master's degree in the Economics and Finance of Aging, but she is the first to do it on the side, outside her normal job. Patricia Voets (28) works at Dutch pension fund PGGM and was awarded her degree in mid-February. It was a well-deserved reward, crowning several crazy years. It wasn't always easy combining her studies with work (and a personal life), despite all the cooperation she received from her employer and Netspar.

'I have a fairly demanding job at PGGM, and the coursework was pretty tough, too', she explains. 'It was particularly difficult that first year, when the classes were still spread throughout the week. I mean, I work in Zeist and live in Utrecht, but the classes were in Tilburg (about 60 miles away). Fortunately, after that first year, Netspar made sure the class time was all on one day. It was a long day, that's for sure, but it saved me a great deal of time overall. In the end, it took me three-and-half years – partly because I switched jobs at PGGM. But it was absolutely worth it.'

Interesting

Voets was trained in econometrics, and what she learned in the course of obtaining her master's does not necessarily apply directly to her current work. 'When I started the program, I was working in PGGM's actuarial department', she points out. 'In that job, you could pretty much use what you learned in the master's program right off the bat – say, in doing asset liability studies. But I was eager to work in financial markets, so last year I was given a different position. Now, I'm an investment manager, managing such things as government bond portfolios and inflation-linked bonds.
I'm glad I finished the master's anyway, though. You're confronted with the topic of aging almost every day – and the implications for the economy as a whole, and pensions, in particular. More than that, it was just incredibly interesting – not least of all because of the guest lectures by famous names in the industry. I would definitely

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advise any of my actuary colleagues to enroll in the program.'

Compliment

Voets wrote her thesis on what has been called 'longevity risk'. In other words, she calculated what the implications are for pension funds and their funding levels as people live longer on average. 'What we mean by that', she explains, 'is longer than the assumptions now in use. The implications are huge; I can divulge that.' The fact that her thesis is now being used as reference material at PGGM is a huge compliment. And the compliments kept coming during the master's degree ceremony. Does that leave her wanting more? Will she become the eternal student? 'Yes,' she admits, 'I am going back to school, into the Chartered Financial Analyst post-doctoral program, but this time in an independent study program. That's easier to plan in conjunction with my job – and, of course, my personal life.'

Thesis Awards

Netspar's editorial board had as many as 21 students and researchers to consider for Netspar's Thesis Awards, which were granted in January. The editorial board, chaired by Henk Don, selected the most outstanding theses on a Netspar research subject. The Bachelor Thesis Award went to Sjoerd Timmermans (Tilburg University) for his thesis Intergenerational risk sharing. Bart Custers (also Tilburg University) won the Master Thesis Award with The added value of age differentiation in pension deals. Marloes Lammers (Free University Amsterdam) was the award winner in the MPhil category with The effects of savings on reservation wages and search effort.

The award for the best dissertation went to Ralph Koijen (Tilburg University). This young Netspar research fellow was earlier awarded a prize of € 5000 by his university for his dissertation Essays on asset pricing. Ralph has also had success at the international job market. The prestigious University of Chicago has offered him a research position, which Ralph accepted after turning down offers from various other prominent universities and schools.

ORTEC Finance

Guus Boender (left) and Ton van Welie (right)

Mission

ORTEC Finance seeks to build and apply models ('constructive knowledge') in order to gain insight and identify solutions for financial problems in societies and corporations. We view models as an efficient and effective means for knowledge sharing with our clients. ORTEC Finance is focused on decision making under uncertainty in several markets. Our clients include pension funds, insurance companies, housing corporations, and individuals, both in the Netherlands and abroad. In these sectors our products and services aim to cover a wide range including strategy (asset liability management), implementation (portfolio construction) and risk management and performance attribution. In order to keep our edge with regard to the available scientific knowledge, and in order to maintain close ties with our most important fuel, talented and well-educated employees, we consider our close relationship with the academic community to be essential.

Key figures

ORTEC Finance employs about 130 specialists – most with a masters- or Ph.D. degree in quantitative economics, econometrics or other βdisciplines. Our revenues in 2009 will strive to touch € 20 million, 30% of which will be generated outside the Netherlands. We generate about 40% of our revenues by carrying out consultancy projects, and 60% by implementing the models at our clients and from license revenues. Key foreign countries are Switzerland, the UK and the Nordic countries. In addition to our many satisfied clients in the Netherlands, ORTEC serves a range of foreign clients – including the World Bank Group, the Bank of International Settlements, FAO, AP funds in Sweden, Publica in Switzerland and the national pension fund in Korea. These foreign clients, in many cases, are attracted by the excellent reputation of the Netherlands in the international pension industry.

Integral risk management

Several misperceptions about ORTEC Finance and ALM seem to persist. The first is that ORTEC Finance is an ALM-only company. We see ALM and risk management as integral parts of integral risk management, where ALM sets the strategy (also taking into account the fact that long-term objectives can be met only if short-term hurdles can be managed) and where risk management plays the important role of quality control of the strategy (rather than only focusing on whether in- and outside asset managers keep within their mandates). The second misperception is that the 'L' in ALM stands for long term. A long-term strategy that does not take into account short-term constraints is like a tanker ready to set forth with the rudder fixed in the direction of New York; however excellent this long-term approach may be, the ship probably won't be able to leave the harbor. It is also not true that the 'L' of ALM stands only for liabilities, in the sense that ALM can be viewed as 'asset allocation taking into account the liabilities'. ALM for pension funds, insurance companies, housing corporations and individuals is a holistic approach in which all available policy instruments are taken into account in order to manage the objectives and constraints of all stakeholders. In the pension sector, an ALM policy is frequently referred to as a pension deal. A pension deal, then, is an integral indexation-, contribution- and investment policy – where all stakeholders, given the assumptions, know to which extent their ambition will be realized, and how much risk they bear in order to realize the ambition at an affordable cost.

ORTEC Finance in the financial crisis

Werner de Bondt, founder of behavioral finance and professor at de Paul University in Chicago, stated that the statistical model used by the bankers wasn't sufficient for the purpose because it didn't recognize that extreme circumstances might occur now and again.[1] The ALM models also experience the current crisis as an extreme event. The joint collapse of equity markets, interest rates and commodities etc. in our models had a probability of occurrence between 0.1–0.01% (1 in 1,000–10,000). What are the lessons learned for ORTEC Finance? First of all, we will strongly hold to our principle that any economic model is a simplified statement of reality, not the 'Ultimate Truth', and therefore should be applied only as a tool for decision support, rather than as an aim in itself. We will therefore strongly continue to make the assumptions underlying our models transparent to our clients. Then, and only then, will our clients be able to responsibly make decisions that are based on the results of our models. Are we going to put a great deal of effort into trying to model events that have only an extremely small probability of occurring? While this is certainly necessary in the management of the risks of nuclear power plants, it is not economically rational in the management of events, like pension insolvency, that are allowed to occur with 1% or 2.5% probability. What, then, are we going to improve? This crisis has revealed that, due to globalization, we are increasingly exposed to risk factors that influence almost all financial assets, resulting in 'heavy correlation in the tails'. We have to identify these underlying risk factors and include them in our models. Whereas obvious examples include securitization, leverage and liquidity, also worldwide aging, energy requirements and climate changes are long-term risk factors affecting the future development of the value of financial assets. Secondly, we are going to put much more emphasis on economically based stress scenarios and on integral risk management, where ALM and risk management jointly serve the stakeholders, rather than each being a principle aim in itself.

ORTEC Finance and Netspar

ORTEC Finance is an official Netspar partner. ORTEC Finance may be of service to the scientific community in identifying practical problems that are worthwhile for scientific research. Moreover, ORTEC Finance and her stakeholders could provide challenging jobs, also outside the Netherlands, both for practitioners and applied researchers. What does Netspar mean for ORTEC Finance? Above all, Netspar provides a highly efficient platform to share knowledge with a very large and interesting subset of the pension sector. There are also many benefits to be gleaned from the synergy between ORTEC Finance (applying actuarial-, financial- and modeling disciplines in the pension- and social insurance sector) and the many experts of Netspar (approaching pension issues from the broader perspective of the interaction with the national economies). Last but not least, the collaboration between ORTEC Finance and Netspar could help to show the rest of the world that the Dutch are world pension- and social insurance champions.

Ton van Welie, CEO
Guus Boender, Founder
Hens Steehouwer, Head of Financial Research

1 In Dutch: 'het statistische model dat de bankiers gebruikten klopte niet. Dit model erkende niet dat extreme situaties zich nu en dan kunnen voordoen'.

Data Collection and Data Access

One of Netspar's aims during the past four years has been to improve data collection and to provide greater access to data for Netspar researchers. Two initiatives, in particular, contribute to progress with regard to this aim. First, Netspar continues its participation in the SHARE project, which is aimed at collecting internationally comparable data in a large number of European countries. Second, Netspar supports specific data acquisition and data access facilities for many Netspar-related projects, including register data on pension entitlements.

By Arthur van Soest

SHARE (Survey of Health, Ageing and Retirement in Europe) is a multi-disciplinary and cross-national panel database on health, socio-economic status and social and family networks of more than 30,000 individuals aged 50 or over. Since 2004, fourteen European countries have contributed data to the project. Netspar researcher Arthur van Soest was Dutch country team leader until October 2008, when he was succeeded by Netspar director Frank van der Duyn Schouten.

Affiliated with SHARE is the EU-funded project COMPARE, which is coordinated by Van Soest. COMPARE focuses on improving the comparability of subjective measures of economic and non-economic dimensions of well-being across countries. Interesting findings so far are that Dutch and Swedish citizens are the happiest among the countries considered, and that the health care systems across Europe show huge differences, with Poland and Italy in particular scoring poorly.

At present, SHARE's third wave of data collection is focusing at detailed retrospective life histories in fifteen countries, including the Netherlands.

Register Data on Health and Socio-Economic Status

In cooperation with Statistics Netherlands, several Netspar researchers are making extensive use of the secure remote access facility that now exists at the universities of Rotterdam, Tilburg, and Utrecht, and at the Free University Amsterdam. Some examples: Rob Alessie, Adriaan Kalwij and Marieke Knoef analyze the relation between household finances and mortality risk using register data from Statistic Netherlands' Income Panel Survey (IPO).

Van Doorslaer, Lindeboom and their co-authors combine register data from several sources to analyze the relation between healthcare utilization and socio-economic status. Johan Mackenbach's Netspar theme 'Living Longer in Good Health' will use administrative data from several sources to analyze disability, mortality and life expectancy among the elderly and the impact of health and aging on healthcare and informal care costs.

Experimental Data and Data on Stated Preferences

Netspar subsidizes several data collection projects in the Dutch CentER panel and in its US analogue – the RAND American Life Panel. Katie Carman and Peter Kooreman collected survey data on preventive healthcare in the US and the Netherlands. They found, for example, that people have biased estimates of the effects of preventive flu shots. Wieland Mueller and his co-authors are measuring risk and time preferences in the Netherlands, which is relevant for the optimal design of third-pillar pension products, for example. Johannes Binswanger has collected data in both the Netherlands and the US on the way in which households make long-term saving decisions, addressing such questions as: Is there a minimal amount of income that people would want to have in retirement at all costs? How much risk are individuals ready to bear in exchange for a higher expected old-age income? Are our standard workhorse preference models a good guide for addressing those questions? These are all questions of paramount importance in evaluating the extent to which individuals are adequately prepared for retirement, or the way in which they should prepare for retirement.

Tunga Kantarci and Arthur van Soest collected data on preferences for gradual retirement, focusing on what kind of gradual retirement scenarios people find attractive. In the theme project 'Pensions, Aging, and Health', monthly data are collected on the Dutch public's expectations of future generosity of old-age benefits and pensions, showing that there is general pessimism about retaining current standards: most people expect a reduction in benefits or an increase in the age at which people can stop working or become entitled to old-age support.

Netspar Research
New Themes for 2009–2012

Research at Netspar is arranged in themes. Netspar's themes are intended to stimulate entrepreneurship, commitment and coherence. Every year, Netspar allocates up to € 1 million each to three theme-based projects; the annual awards are given for a three-year period. The theme groups include researchers from various universities and institutes. Themes involve all three pillars of Netspar: research, education and knowledge exchange.

In 2009, the themes selected vary substantially. The first involves an online decision-making tool, another explores the economics and psychology of decision-making and the third studies the influence of financial crises on pension fund recovery.

Supporting consumer pension decision-making online

Theme coordinator: Benedict Dellaert

In recent years, the range of available pension- and related income-provision products has expanded significantly. This trend is likely to continue in the future. Consumers are potentially better off– but are they really willing and able to act on this potential welfare gain? How can individuals be classified in terms of their willingness to consider pension decisions? How can they best be assisted in formulating their future needs when retiring? Additionally, how can the selection of the pension products best be facilitated with interactive decision aids? This theme's focus is on the role of online systems in answering these questions.

The economics and psychology of lifecycle decision-making

Theme coordinators: Peter Kooreman and Jan Potters

Lifecycle decisions– especially with regard to pensions and insurance– are increasingly left to individuals. As stated in the first theme, consumers are potentially better off. This second Netspar theme aims to expand our empirical knowledge about lifecycle decision-making. In order to make better models, predictions and recommendations, we need a better understanding of people's preferences, probability- and risk perceptions, and decision strategies. Laboratory experiments are performed by researchers from both economics and the social sciences, from various parts of the world.

The influence of market imperfections on recovery strategies for pension funds

Theme coordinator: Laura Spierdijk

Pension funds, insurance companies and banks generally rely on diversification of their investment portfolios to reduce their risk exposure. This causes different financial institutions to hold exposures to the same risk drivers. As a consequence, financial crises may easily spread from one market to another and from the local to the global level. This third theme investigates what are the best asset- and liability strategies for a pension fund, in response to financial crises affecting multiple markets and assets.

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Short News

German award for Netspar research fellow

Netspar congratulates its research fellow Gerard van den Berg (VU University Amsterdam (VU A)), who has been awarded the Alexander von Humboldt Professorship by the German Alexander von Humboldt Foundation. This prize consists of 3.5 Million Euros and a permanent position at Mannheim University. He is the first social scientist ever winning this award. All others were from medicine or natural sciences. Van den Berg will be working in Mannheim as of September 1, 2009. He will set up a new Centre of Economics and Empirical Economics. He will stay affiliated to VU A and Netspar.

Netspar Debate

May 28, 2009, Utrecht
At the next Netspar Debate the latest NEA papers are discussed. All interested scientists, professionals and policy makers are welcome at this event.

UMBS course: Responsible Investing

June 3 – 4, 2009, Zeist
The UMBS course Responsible Investing first discusses the concept of corporate responsibility (CR), which lies at the heart of responsible investing. Most companies are collectively owned by institutional investors (fiduciaries), most notably pension funds, mutual funds and insurance companies. This new pattern of universal ownership raises important policy questions, which are discussed. The second important element in the decision making process of institutional investors is the question whether the ESG policy of an investor can influence (harm or improve) investment returns in the long run. Two opposing theories are discussed with respect to the relationship between extrafinancial information of a company and returns and valuation of the particular company on the stock market. Finally, institutional investors face several difficult questions while developing and implementing an ESG policy. In an interactive case study these questions are addressed in great detail. This module is developed especially for (investment) professionals working at pension funds, insurance companies or banks and governmental and regulatory bodies, and investor relation managers or CSR managers of companies who engage with investors. Free seats are available for employees of Netspar partners.

Workshop: Pension Plans & Product Design

June 8 – 9, 2009, Stockholm (Sweden)
This pension workshop brings together international experts on all areas of pension research. The conference is organized by Netspar and SIFR – the Institute for Financial Research. The workshop consists of two days. The first day targets at both academics and practitioners. The second day has a more academic focus. Richard Thaler (University of Chicago), Christopher Jones (Financial Engines), Motohiro Yogo (Wharton), Francisco Gomes (London Business School), Daniel Barr (Premium Pension Authority) and Cees Dert (ABN AMRO pension fund) are the keynote speakers. Netspar covers travel and accommodation costs for all speakers, discussants and international research fellows.

Netspar events calendar

You can find information on all Netspar events in the events calendar in Netspars email newsletter ‘Newsflash’ and at *www.netspar.nl/event.*

Netspar Partners