



PEER REVIEW  
IN SOCIAL PROTECTION  
AND SOCIAL INCLUSION  
2011

BALANCING THE SECURITY AND  
AFFORDABILITY OF FUNDED  
PENSION SCHEMES

THE HAGUE , 12 - 13 APRIL 2011

**SYNTHESIS REPORT**



PEER REVIEW  
IN SOCIAL PROTECTION  
AND SOCIAL INCLUSION  
2011

# BALANCING THE SECURITY AND AFFORDABILITY OF FUNDED PENSION SCHEMES

EDWARD PALMER  
UNIVERSITY OF UPPSALA

THE HAGUE , 12 - 13 APRIL 2011

## SYNTHESIS REPORT



---

This publication is supported by the European Community Programme for Employment and Social Solidarity (2007–2013). This programme is managed by the Directorate-General for Employment, Social Affairs and Inclusion of the European Commission. It was established to financially support the implementation of the objectives of the European Union in the employment and social affairs area, as set out in the Social Agenda, and thereby contribute to the achievement of the Lisbon Strategy goals in these fields.

The seven-year Programme targets all stakeholders who can help shape the development of appropriate and effective employment and social legislation and policies, across the EU-27, EFTA-EEA and EU candidate and pre-candidate countries.

PROGRESS mission is to strengthen the EU contribution in support of Member States' commitments and efforts to create more and better jobs and to build a more cohesive society. To that effect, PROGRESS will be instrumental in:

- providing analysis and policy advice on PROGRESS policy areas;
- monitoring and reporting on the implementation of EU legislation and policies in PROGRESS policy areas;
- promoting policy transfer, learning and support among Member States on EU objectives and priorities; and
- relaying the views of the stakeholders and society at large.

For more information see:

<http://ec.europa.eu/social/main.jsp?catId=327&langId=en>

Further information on the Peer Reviews and the Policy Assessment as well as all relevant documents are available at: <http://www.peer-review-social-inclusion.eu>.

The content of this publication does not necessarily reflect the opinion or position of the European Commission Directorate-General for Employment, Social Affairs and Inclusion. Neither the European Commission nor any person acting on its behalf is responsible for the use which might be made of the information in this publication.

2012

PRINTED IN BELGIUM



---

## Table of contents

Abbreviations and definitions	5
A. Introduction	7
B. Background — Overview of the Netherlands' pension system	8
C. What is the problem and what are the possible remedies for the Netherlands' Defined-Benefit Scheme?	11
D. Transferability to other countries	32
List of References	35





## Abbreviations and definitions

**DB — defined benefit (pension scheme).** In a defined benefit scheme individual benefits are defined by a set of rules. The level of premiums, contributions or taxes paid to cover the benefits adapt to whatever is needed to cover costs under the given set of rules.

**DC — defined contribution (pension scheme).** In a defined contribution scheme individual benefits are linked one to one to contributions paid into (FDC) or noted on (NDC) individual accounts and the rate of return on these.

**Paygo** — benefits paid in a period are financed wholly or principally by taxes, contributions or premiums paid in the same period.

**FDC — financial defined contribution (pension scheme).** This is a fully pre-funded pension scheme. Individuals' contributions are paid to their own personal accounts; money in accounts is invested in and earns a return from financial assets; and the account balance is transformed into an annuity using cohort life expectancy at retirement as the conversion factor. A rate of return during the payout period can be factored into the conversion factor or paid out as a supplement over time. Financial and investment risks are carried by scheme members.

**NDC- non-financial (notional) defined contribution (pension scheme).** This is a paygo scheme in which individuals' contributions are noted on their personal accounts but used to pay the benefits of current pensioners; accounts earn a rate of return determined by the rate of growth of contributions (the wage sum) of covered workers; and the account balance is transformed into an annuity using cohort life expectancy at retirement as the conversion factor. A rate of return based on the expected rate of growth of wages can be factored into the conversion factor used to create the annuity or paid out as a supplement over time in the form of indexation.

**FDB — financial defined benefit (pension scheme).** This is a fully pre-funded pension scheme. Individuals' contributions are paid into a general fund, the fund's assets are invested in the financial market and a benefit is computed at retirement according to the specific defined benefit rules of

---

the scheme. Benefits are usually indexed at least with the rate of inflation, but can also be adjusted partially or wholly to wage growth. If the condition that the scheme is fully pre-funded is fulfilled the feasible rate of indexation would be the financial rate of return on the fund. In practice, some of the return on the fund may be used to hold down premium payments, instead of offering higher benefits. Financial and investment risks are borne by the scheme's owners. In schemes emerging from collective agreements between management and labour financial and investment risks can be borne either by employers, employees or both.

**NDB — non-financial defined benefit (pension scheme).** This is a paygo scheme. The scheme may be financed by direct taxes on wages or other general tax revenues. The government pays the benefits of current pensioners in accordance with the specific defined benefit rules. Benefits are usually indexed to inflation but can also be indexed to growth of the average wage. This genre of schemes encompasses most public paygo schemes.



---

## A. Introduction

The Peer Review of the Netherlands' pension system took place on 12–13 April 2011 in The Hague. The topic of the review was: *Balancing the security and affordability of funded pension schemes — The Netherlands' supplementary occupational pension plans*. The participants were experts from the Netherlands, including a number of experts from the Ministry of Social Affairs and Employment, a member of two recent Pension Commissions and representatives of the social partners; experts from the peer countries (Belgium, Denmark, Germany, Ireland, Italy, Lithuania, Poland, Romania and Slovenia); experts from the European Commission; the independent expert Edward Palmer; a representative of AGE, a pan-European organization representing people 50 and older in 27 European countries and a representative of the European Federation for Retirement Provision — EFRP.





## B. Background — Overview of the Netherlands' pension system

The Netherlands' pension system consists of three pillars. The first pillar (AOW) is a statutory, universal flat rate benefit provided to all persons from age 65. The second pillar consists of supplementary non-statutory, occupational plans provided by employers as a part of collective agreements.

The first pillar AOW is based solely on residence, 50 years being required for a full benefit. For those with less than 50 years of residence, the benefit is prorated (*i.e.* 2% of the total for each year). It is not possible to postpone a claim but it is possible to continue working while receiving the benefit. The AOW is 70% of the net minimum wage for a single person and 50% for each person in a couple. Roughly, this gives a benefit amounting to about 30% of the average full-time wage.<sup>1</sup> There is also a social assistance scheme for older people that can provide a net benefit at the same level as the AOW. The allowance is determined and administered by the social insurance bank on behalf of the municipal authorities.

8

The occupational plans that comprise the second pillar stem from labour-management agreements that cover 90% of all employees. They are quasi-mandatory in that all workers in a sector, industry or professional group<sup>2</sup> covered by an agreement are automatically included in the relevant pension plan. They are financed with premiums paid by the employer and their scale is negotiated as a component of the gross wage. Although this implies that there could be considerable room for divergence between companies, occupations and sectors of the economy, this is generally not the case in the way the plans have emerged in practice. Instead, the schemes have very similar benefit profiles.

In addition to old age pensions, plans typically cover disability and may also provide spouse and child benefits when a recipient of a plan dies. The normal retirement age is 65, though retirement can be deferred, with a resultant

- <sup>1</sup> Implicit in the fact that the minimum wage is about 46% of an average full-time wage.
- <sup>2</sup> About 0.5% of all members are participants in professional group plans according to information provided for the Peer Review by the NL Ministry of Social Affairs and Employment.



actuarial adjustment in the benefit payable. Pensions are based either on final salary or average earnings. Final salary plans have an accrual rate of 1.75 and average earnings plans 1.75–2.0.

Up-rating of individual entitlements in average earnings plans, which apply to almost 90% of all participants,<sup>3</sup> is based on average wage inflation. The entitlement of around 8% is up-rated in relation to price inflation only. In the case of pensions currently being paid, around half are indexed against wage inflation in the relevant sector and about 27% are indexed against price inflation.<sup>4</sup> The norms for up-rating of entitlements and indexation of pensions are set by the individual funds. In practice funds have been compelled at times to diverge from these “norms” to maintain an adequate degree of solvency. In the case of an earnings career of 40 years, with entitlement up-rated in line with the average growth of wages, and an accrual rate of 1.75, the replacement rate for an average pension plan is  $(1.75 \times 40) 70\%$ .

There are currently 22 000 pension agreements, administered by 519 pension funds, of which around 75% are single employer funds. The social partners are closely involved in the policy for individual plans. The pension funds held assets totalling around EUR 750 billion in 2010. More than 90% of pension schemes are defined-benefit plans. There is also a third pillar that consists of private individual, voluntary insurance.

The Netherlands pension system stands out from systems in other countries because of its level of generosity. According to the Joint Report on Pensions (European Commission, 2010) the gross theoretical replacement rate in 2008 for a male average-earner retiring at 65 after a 40 year contribution career, covered by the AOW and a typical occupational scheme, was 92.4%, while the net rate amounted to 103.8%. These replacement rates can be compared with the EU-27 average replacement rates of 76% and 62% for a worker with similar career length and earnings profile. Only just under 8% % of those aged 65 and older have incomes below the at risk of poverty threshold (60% of the median) in the Netherlands (compared to just under 18% on average

3 There has been a shift during the 2000's from final to average salary as a basis for the benefit. In 2000, only about 30% of participants were in average salary plans according to information provided by the NL Ministry of Social Affairs and Employment for the Peer Review.

4 Pensions at a Glance (OECD 2009).



in the EU — 2008 income year). This attests to the strength of the AOW for most low-income pensioners. For low-income individuals and households that do not fulfil the residence requirement necessary to obtain a full AOW it is possible to obtain social assistance.

Generally speaking, being a single woman gives a higher likelihood of having income below the poverty line in old age than being a single man, (e.g. Zaidi 2010; James 2010). More alarmingly, even in countries with the very best results for gender equality there still remain considerable structurally determined differences between the outcomes of men and women (Klerby *et al.* 2010). Women have lower pensions to begin with and the risk of poverty is higher since they are much more likely than men to lose their partners and be left in the position of having to live on a single income.<sup>5,6</sup>

According to data reported in the EC study referred to above, in the Netherlands, gender is at present not a strong determinant of relative poverty among those aged 65 and older. This is attributable to a combination of factors. The first is the universal flat rate AOW, which provides about 30% of an average wage to all pensioners. The second is that many women have accumulated sufficient pension rights in an occupational plan to give them a benefit after retirement that together with the AOW is close to replacing a full average wage. Thirdly, benefits for spouses are included in many plans.

In sum, to date the overall performance of the Dutch pension system is impressive. This said, the overriding theme of the review is that it is no longer possible to meet the aspiration of providing a replacement rate of close to 100% of final earnings without substantially increasing premium payments in occupational schemes from the present 15% of gross wages. This is also the conclusion of two recent commissions, the Frijns Commission, which published its report in January 2010, and the Goudswaard Commission, which also reported in January 2010.

5 Growing Unequal? OECD 2008. Note however that the OECD uses under 50% of median income as the threshold for relative poverty, whereas the EU norm is 60%, which gives, by definition, a larger percentage in relative poverty.

6 Zaidi, Asghar 2010. Poverty and Income of Older People in OECD Countries. Paper prepared for the IARIW 31<sup>st</sup> General Conference — St. Gallen, Switzerland, 22–28 August, 2010



## C. What is the problem and what are the possible remedies for the Netherlands' Defined-Benefit Scheme?

The Peer Review focused on illuminating and discussing the many challenges of balancing security and affordability, with the Netherlands' pension system as the centre of attention. This section provides a synthesis of the discussion, placing it within a pension theoretical context. People live longer, want a decent old age and at the same time do not want to pay too high taxes or pension contributions, so choices must be made, weighing costs and benefits.

The Netherlands' occupational schemes are pre-funded and as already noted, at the end of 2010 held assets of about EUR 750 billion. Despite the fact that the occupational pension plans are pre-funded, the present level of funding is not sufficient to meet projected future commitments. Had the occupational schemes been financial defined contribution (FDC) schemes commitments would have equalled the value of assets by definition. For defined-benefit schemes this is not necessarily the case since benefits are defined by some combination of rules that may or may not reflect the level of funding in the schemes. Although some individual schemes may be sufficiently funded, at present overall the system is underfunded, given the present defined benefit rules. This was the point of departure for the Peer-Review discussion.

### Defined benefit principles

The principle behind a defined benefit (DB) pension scheme is that the level of premiums (contributions) paid by individuals or their employers on their behalf should be adjusted when necessary to pay for "the" defined benefits of current pensioners as well as the projected benefits of current workers. The benefit in a DB scheme is frequently defined by years of contributions, the contributor's wage related to the average wage and an accrual rate per year of contributions. This is the general set-up of the Dutch plans, where the accrual rate is 1.75–2.00.

In the Dutch plans the definition of average earnings employed in the calculation has changed from an average of final salary years to a career average. It is well known that there is a potentially perverse *distributional aspect* in final salary schemes since they favour people whose earnings rise steeply at the end of their careers. They, therefore, can receive more than the average person, even though they might have paid less in contributions overall during their working careers.

The change from final salary to average career earnings for computing benefits in the Dutch pension plans eliminates the perverse effect of final salary schemes by creating a tighter link between what people pay and what they get. It also eliminates the tax wedge which can arise when there is no direct link between contributions and benefits and which in the worst case can influence the behaviour of individuals regarding how much, and how long, they work. Hence, the transition to a career earnings basis for calculating pensions has tended to create an economically more efficient system. The move closer to a DC scheme also contributes to creating a financially more sustainable outcome — since the closer link between contributions and benefits also carries over to the macro level. The fact that the Dutch plans have made this change can thus be considered a lesson for others considering implementing DB schemes.

## Population ageing and sustainability

An ageing population is the major challenge for all pension systems. In its simplest guise, an ageing population means that pensioners are living longer and longer. However, an ageing population also reflects the change in working age population, and therefore, the labour force, which in turn is affected by changes in fertility and the net immigration of people of working age. Ageing can therefore mean both fewer working age persons and more retirees, thereby increasing the dependency ratio.

Table 1 shows that the number of people age 65 and older in the Netherlands is expected to double in the period 2000–2035, with most of the rise occurring in the coming 15 years, largely due to the retirement of the large post-World War II baby-boom cohort. On the other hand, during the same period the



working age population is expected to decline from about 68% to 58% of total population. With this prospect, there may be about a million people fewer in the Dutch labour force in 2035 than in 2010. So, in this country of around 15 million, one million or so fewer people in the workforce will have to support about 2 million more pensioners compared with today.

Should this prospect make a difference to a system of pre-funded pension plans? The answer is, generally speaking, no, at least not if the system is set up as a defined contribution pension scheme, but maybe yes, if, as in the Dutch case, the system is a defined benefit scheme. Why is this? In an FDC scheme every unit of pension rights, *i.e.*, pension plan liability, is matched by a financial asset. In an FDB scheme, which almost all the 500 plus Dutch schemes are, this is not necessarily the case. The fact that it is at present estimated that the contribution rate must be increased by up to

**Table 1. Population projections for the Netherlands. 2000–2070.**

Year	Population 65+		Population 15–64	
	(thousands)	(% of total)	(thousands)	(% of total)
2000	2 151	13.6	10 766	67.9
2005	2 289	14.0	11 008	67.5
2010	2 543	15.3	11 129	67.0
2015	3 003	17.8	10 987	65.2
2020	3 386	19.9	10 896	63.9
2025	3 778	22.0	10 663	62.0
2030	4 193	24.2	10 312	59.6
2035	4 534	26.1	9 971	57.4
2040	4 694	27.1	9 774	56.4
2045	4 625	26.8	9 783	56.7
2050	4 519	26.3	9 814	57.2
2055	4 433	26.0	9 808	57.5
2060	4 409	26.0	9 741	57.4
2065	4 411	26.0	9 681	57.0
2070	4 486	26.4	9 605	56.5

Source: Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat, World Population Prospects: The 2010 Revision, <http://esa.un.org/unpd/wpp/index.htm>,



---

6 percentage points to cover foreseeable liabilities — or that liabilities (the defined benefit pension promises) must be reduced, or some combination of the two — indicates that there are not currently matching financial assets for all expected liabilities.

In any pension scheme, at the end of the day assets must equal liabilities. Assets include the present value of future contributions and all funded money, held in the form of financial assets. The aim of fund managers is to have a comfortable margin of assets compared to the present value of liabilities, *i.e.*, the plan must be solvent. The reason why it is difficult to manage a DB scheme, whether it is financial or non-financial, is that the conditions surrounding the so-called defined benefits, for example, working patterns during the accumulation phase and the longevity of pensioners during the payment phase, inevitably change over time. The most noteworthy example is the increasing longevity of pensioners and the consequent increase in the number of years of pension receipt relative to the number of years of working and paying contributions.

14

Generally speaking, the challenges — or risks — involved in running a financial DB scheme are twofold: The first is demographic. The demographic risk has two components. One is the uncertainty about the future size of working-age population and of the workforce, *i.e.*, the future flow of contributions into the system. The other is the uncertainty about the longevity of pensioners, *i.e.*, the future flow of money out of the system and the risk of underestimating this. The second risk is financial and also has two components. The first is the systematic risk, the risk of a long-term financial rate of return that is lower than expected, *e.g.*, the historical trend. The lower the rate of return on the fund the higher the contribution rate on earnings must be in order to achieve a given defined benefit. The second component is the risk of increased volatility. This increases uncertainty, even about the long-term financial outcome, and requires the fund to hold a larger share of assets in short-term, low yielding liquidity.

The demographic effect can be illustrated with simple pension mathematics. The following equation expresses the contribution rate,  $c$ , as the number of years (or months) with an average pension in relation to the number of years (or months) of working and contributing with a contribution rate  $c$  and



an average wage and the macro replacement rate (the average pension in relation to the average earnings):

$$c = \frac{\text{Average Pension}}{\text{Average Wage}} \times \frac{\text{Ave. no. of years with a pension}}{\text{Ave. no. years of work}}$$

The first term on the right hand side of the equation is the average replacement rate. This *per se* can be a policy goal, which in the Dutch case is at present 70% for the average full-life career worker, but since all retirees do not have a pension based on a full working career it will in fact be much lower than 70% for the average of all retirees taken together. All other things equal, it is possible to index acquired rights of workers and the benefits of pensioners in line with the rate of growth of covered earnings, (the denominator in the first ratio on the right-hand side of the equation). This is also what Dutch plans aspire to do. If the second ratio (the dependency ratio at the macro level) is constant, increases in the average wage can be transferred through indexation to an equivalent increase in pensions while maintaining an unchanged replacement rate. Since the system is pre-funded, so long as the rate of financial return is at least as high as the growth in the wage sum, the system can afford more indexation — or can require lower contribution rates to achieve the same result.

Although this is a general equation, it provides a good illustration of the present dilemma of Dutch occupational plans.

Assume that the policy is to fix the ratio of an average benefit to an average wage at 70%. If the contribution rate is also to be kept constant over time, then it is necessary for the ratio of the number of years (months) with a pension related to the number of years (months) of work also to maintain a constant relationship over time. This is not possible if the pension age remains constant at the same time as pensioners are living longer — unless people work and earn more before they become a pensioner. To maintain financial stability the average number of years of work must change in line with the average number of years of receiving a pension, all other things equal. In order to move the system in the right direction and to minimise the need to increase the contribution rate, policy makers can index the pension age in line with life expectancy. Exactly what happens in this process is also



affected by whether or not people work longer and whether or not this extra work entitles them to a higher benefit.

With the need to increase working lives in view, the government recently abolished the previously favourable tax treatment of early retirement. It has also worked with the support of the social partners to close the gap between the actual age of exit from the labour force (because of disability or unemployment) and the formal retirement age of 65. More is needed, however.

The Spring Accord,<sup>7</sup> reached between the employers' confederations and trade union federations in the late spring of 2010, envisages indexing the pension age in line with life expectancy. The idea expressed in the Accord is that each new birth cohort would have the right to a specific relationship between the number of years of contributions and the expected number of years receiving a pension. It is hoped that this will lead to a contribution-neutral response to increasing life expectancy. It has been estimated in this connection that getting one additional year of pension means that a Dutch worker will have to work an additional 6–8 months. The accord allows for considerable variation among funds in its application as it preserves the freedom of individual funds to work out what is necessary to maintain cost neutrality, all other things equal, for their particular pool of fund participants.

Note also that the proposal in the Spring Accord follows other proposals to increase the pension age from 65 to 66 in 2020 and higher ages thereafter. Indexing the pension age is preferable to fixed dates for pension age increases because, first, it is a rule, which means that it is transparent, and, second, it performs the same function as increasing the pension age, but it does so gradually instead of in steps with longer time intervals between changes. It is also a more precise method for achieving the goal of adjusting to increasing life expectancy.

A higher and increasing pension age will help to reduce the ratio of pensioners to workers, but if years of work do not increase proportionately with life expectancy, everything else being equal, more adjustment may be

<sup>7</sup> See "Pension Accord Spring 2010". Stichting van de arbeid. June 4, 2010. [http://www.stvda.nl/en/~media/Files/Stvda/Talen/Engels/2010/20100604\\_akkoord\\_engels.ashx](http://www.stvda.nl/en/~media/Files/Stvda/Talen/Engels/2010/20100604_akkoord_engels.ashx)



needed. According to Table 1, the picture of the future for the Netherlands is that the number of workers will decrease. To the extent that liabilities are not already completely pre-funded the decline in the size of the labour force will be another factor adversely affecting long-term sustainability. In other words, adjustment may require more than a “simple” adjustment for the increasing longevity of pensioners. In addition, it was not clear from the Peer Review to what extent the baby-boom liability has been pre-funded.

The clear lesson here is that it is not possible to think of a defined benefit as something that can be the same for present and future birth cohorts in a society where pensioner longevity is increasing and the labour force is declining. Increasing life expectancy among pensioners and low fertility leading to a shrinking labour force call for a continuous process of adjustment, which means the “defined benefit” must in fact be defined with respect to what the system can afford — and is therefore no longer defined in the sense that it is the same for all cohorts. What a country choosing a defined benefit format can aspire to do then is to create a factor in the defined benefit formula that provides sufficient adjustment of newly granted benefits to keep pace with changes in the demographic environment.

## Rate of return on invested assets

If pensions are to maintain their purchasing power, indexation has to match the general rate of price inflation. Price indexation maintains a stable replacement rate for pensioners with respect to their own historical average earnings. However, indexing pensions solely in line with prices is not sufficient to secure a stable macro replacement rate *vis à vis* average earnings of present workers because of increases in the *real* wage. To achieve a stable ratio of current pensions being paid to current wages, pensions have to be indexed in line with the growth of nominal wages, that is, in line with real wage increases in addition to price inflation. Hence, a stable macro replacement rate can only be achieved if the financial rate of return on a plan’s pre-funded savings is at least as high as the rate of growth of the average covered wage. If the covered labour is also declining in number, the financial rate must also compensate for this.

Generally speaking, the financial rate of return is expected to exceed the rate of growth of the economy and wages. Everything else being equal, this means that fewer contributions have to be paid into a financial scheme to obtain a given pension compared with a non-financial pay-as-you-go scheme. If all the liabilities in the form of entitlements granted to workers and the pensions currently being paid are backed by investment in the financial market, then this is the return that will determine how large a pension individuals will receive.

Over the period 1966 to 2004, OECD stock markets generated a nominal rate of return on equities of over 9% and one of about 7% on bonds.<sup>8</sup> These rates clearly exceed the nominal rate of wage increases over the same period. What has led to a feeling of “crisis” in the Netherlands is nevertheless the performance of the Dutch and global equity markets since 2000 or so. Table 2, based on statistics from the Netherlands Central Bank, shows the development of major Dutch stock market indices and a selection of international indices.

The period is marked by two financial crises, the first in 2002 and the second in 2008. Alarming from the point of view of a pension scheme, over the past decade as a whole, many Dutch and international equity indices have produced dramatically negative returns, among these the Dutch AEX-index, the Dutch all share index and the Eurotop — 100 index. Only the Dutch Midkap and Nasdaq indices show positive growth for the period as a whole. Note that the Midkap, the index that performed the best during the 2000’s, has an underlying nominal annual rate of return of about 3.3%, enough to cover inflation of 2–3% but not much more. Of course, the question for fund managers must be whether this is an indication of the future to come or just a temporary blip. The answer is that no one knows.

Probably nobody expects a chronic decline in financial market returns. The events of the past decade nevertheless signal the advent of an increasingly more volatile and uncertain market. In addition, there is the risk that the increasing number of pensioners will itself force a transition from saving

8 Yu Wei Hu, Pension Fund Investment and Regulation — A Macro Study, Economics and Finance Discussion Papers, No. 06-11. Economics and Finance Section, School of Social Sciences, Brunel University.



**Table 2. Development of stockmarket indices, 2001-2010**

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
AEX-index	1.000	0.637	0.666	0.687	0.862	0.977	1.018	0.485	0.662	0.700
Midkap-index	1.000	0.652	0.747	0.858	1.088	1.417	1.372	0.652	1.067	1.334
All-share index	1.000	0.654	0.690	0.730	0.915	1.066	1.117	0.542	0.741	0.794
Dow Jones-index	1.000	0.832	1.043	1.076	1.069	1.244	1.324	0.876	1.041	1.155
Nasdaq-index	1.000	0.685	1.027	1.115	1.131	1.238	1.360	0.809	1.163	1.360
Nikkei-index	1.000	0.814	1.013	1.090	1.528	1.634	1.452	0.840	1.000	0.970
Eurotop-100 index	1.000	0.663	0.738	0.786	0.956	1.074	1.100	0.625	0.776	0.808
MSCI-world index	1.000	0.748	0.918	1.005	1.143	1.298	1.335	0.799	0.982	1.059

Source: De Nederlandsche Bank - Stockmarket indices. <http://www.statistics.dnb.nl/index.cgi?lang=uk&todo=Aandelen>



---

to consumption in the coming decades that will put downward pressure on stock market prices by weakening demand. In order to seek higher returns, funds may be forced to place a larger share of saving in emerging markets but with higher risks.

Both of the Netherlands' pension commissions concluded that it is necessary for the pension funds to take responsible risks to achieve the goal of affordable pensions and to hold down the contribution rates required in the future. The Frijns Commission, however, cautioned against purely yield-driven policy. For this and other reasons already discussed it is generally understood that participants will have to be prepared to bear more risk in the future. The financial market events of the past decade have created public awareness of the risks involved in their pension schemes, and according to Dutch speakers at the Peer Review, there is also increased acceptance of this. More than one speaker at the Peer Review expressed the opinion that the fact that individuals will have to bear more risk in the future will inevitably steer the Netherlands' occupational schemes in the direction of defined contributions.

20

The lesson is that even in financial DB schemes it is inevitable that the participants bear the demographic and financial risks, either through contributing more in premium payments or accepting lower benefits. Just as in DC schemes the rate of return is the crucial determinant of the growth of funds beyond that provided by contributions themselves. And as a financial DB scheme evolves towards a DC one, with a fixed contribution rate, *i.e.*, where a change in the contribution rate is no longer a feasible alternative to create long-term solvency, then the participants will bear all the risk through the repercussions on benefits. This is because when necessary, solvency will always have to be achieved by tightening the conditions of the defined benefit.

## Policy and participant expectations

One of the discussion items at the Peer Review was the difficulty of ensuring that participants in plans are provided with the information relevant for them. In addition, there is a tendency to "advertise" schemes as if a 100%



replacement was the standard, whereas for many the actual result will fall below — perhaps well below — this. This “fallacy” of perception, which is based on poor knowledge of possible individual outcomes, has recently been illuminated in a working paper from the De Nederlandsche Bank (Alessie et al. 2011). A key finding of the study is that “...employees’ expectations about the level of their pension income are high compared to what retirement plans may realistically provide.” Of course, if benefits must be reduced to maintain future sustainability, there is a risk of even greater confusion and an even wider information gap.

This was pointed out in the Frijns commission report, which stressed the importance of greater transparency of policy and the consequences of its implementation. With this message the commission was stressing the importance of communicating with participants the objectives of plans, the risks and the means used to achieve objectives and to minimise the risks.

## Policy and risk management

The Frijns Commission stressed that risk and portfolio management policies must be driven by long-term portfolio policy, where the objective of an investment fund is to secure a pension that at least maintains its purchasing power. The Commission recommended a focus on balance-sheet management, combining explicit long-term investment objectives and short-term liquidity management. As already discussed, this is easier said than done.

This “social partner” approach to pension policy brings in both employer and employee representative interests in promoting the goals of, and providing information about, the country’s pension system. Several speakers stressed the advantages of the strong engagement of employer and employee organisations in the pension system.

The fact that the Dutch occupational schemes originate from labour-management negotiations also has a possible backside, however. The Frijns Commission made clear that a situation can arise where it may not be possible to raise workers’ contributions though the funds are still expected

to deliver on their “guarantees”. The risk is that the “owners” of the scheme, workers and employers, may not be willing to put in a necessary injection of new capital. In other words, the only alternative left is to reduce liabilities, which can even include benefits being paid. Inevitably, this means that the picture that workers have of their future pensions may diverge increasingly from the outcomes.

In terms of improving risk management, the Frijns Commission recommended that pension funds should only accept labour contracts that are explicit and balanced in terms of pension commitments, premium agreements and risk allocation.

The development of the financial market during the past decade — as described by the indices in Table 2 — indicates that it is difficult, if not impossible, to guarantee even price indexation in the face of extreme events leading to sharp drops in the value of financial portfolios. Internationally, we have seen that financial DB schemes have been compelled to renege on so-called guarantees in response to reductions in solvency rates below the levels stipulated and enforced.

22

The contribution of Dengsoe and Beier Sørensen stressed the importance of hedging policy as part of the investment strategy of the Danish ATP scheme. The ATP has learned that pension goals and risk tolerance are intimately connected. One way to hedge against financial risk is to acquire bonds with a life close to the average “life” of a unit of contributions, which is typically a little over 30 years in developed economies.

Investing judiciously in 20–30 year bonds would help stabilise long-term returns, given that there is an ample supply of such bonds. There is also considerable discussion in the current financial literature of developing this option. To the extent that the supply of long-term bonds comes from the government this makes the government a partner in financing the pension system. Of course, there are pros and cons to this. The Danish experts informed the Peer Review that the Danish government was supplying such bonds and that ATP Denmark’s hedging policy took advantage of these.



In sum, the events of the past decade tell us that volatility is a feature of the financial market to be reckoned with. The lessons are twofold. First, hedging strategies may be useful in managing the impact of shocks. The discussion at the Peer Review suggested that too little attention has been devoted to this technical issue. Second, although policy can be formulated so as to include wise hedging against this risk by allocating a significant portion of the portfolio to investment in long-term bonds, investment in equities are still in the end what really motivates the existence of a financial scheme.

The lessons here are that, when the contribution rate becomes fixed in a financial DB scheme the message to be communicated is that the goal of achieving higher long-term returns may sometimes result in the need to adjust benefits downwards due to the short-term volatility of the financial market. This means that there can be no hard “guarantees”.

The alternative, which is to invest extremely conservatively, is less appetising because it could lead to much lower benefits on average over the long run. However, this said, the Peer Review did not address the question of the efficiency of active versus passive portfolio management. Can the active policy of 100 portfolio managers achieve better results than a more passive one of a few large funds?

### **The contribution rate**

The Dutch goal of giving the career worker 70% of the final salary in the earnings-related occupational schemes, on top of a flat rate of 30%, is very generous by international standards. Can this be maintained with the present contribution rate of 15%? Or does it imply further downsizing of benefits? In essence, the Dutch have only three choices: (i) taking on greater investment risks, (ii) paying higher contributions; (iii) reducing benefits — or some combination of these. A recurring theme in the Dutch presentations was that there is little room left — if any — to increase the contribution rate from its present level.

Here it can be noted that, according to the written contribution of the Irish experts, the overall ambition of the two pillar Irish scheme is to achieve a





---

replacement rate of 50% of earnings for the average career worker, *i.e.*, half the Dutch objective. One of the reviewers remarked in the discussion that perhaps the Dutch must consider “killing some of their Darlings,” the 70% replacement rate of final earnings on top of a 30% flat rate being one of them.

The Dutch occupational schemes have already moved considerably in the direction of the soft promise (Bovenberg and Nijman 2010). There have already been many changes in DB plans over the past 15 years. One of the most important was a move from final to average career wages in the computation of benefits already mentioned. Consequently, it is safe to say that employees have become accustomed to the fact that the “defined benefit” is a soft promise. The question now is whether to introduce parameters that adjust to demographic (and economic) developments. The next step in the Dutch debate is to formulate a clear view of the advantages of the soft promise DB plan relative to the main alternative of DC.

One of the sobering messages of the discussion of the Dutch occupational plans is that there’s no illusion that employers pay contribution rate increases at the expense of their own long-run profits (although this may be the case in the short-run when contribution rates are increased). In the Netherlands it is recognised explicitly that contributions to the pension plans are an integral part of labour-management negotiations, which means that it is recognised that there is a trade-off between contributions to the employee’s pension plan and earnings.

Negotiations about the level of pension contributions have to compete with negotiations about wages. In the opinion of a participant, the highest premium people are prepared to pay is the equivalent of one day a week’s wages. At the same time pension agreements may vary in with the formulation of contracts, the policies of different pension plans and the characteristics of the typical plan members. An important conclusion is that if the limit for workers is 20% of gross wages then there is still some room left to increase the contribution rate. In the end it is the willingness of workers to sacrifice a certain amount of their earnings for pensions that is the limit. As has already been mentioned, both of the Dutch pension commissions concluded that increasing the share of wages paid in contributions is no longer feasible. This



conclusion should be viewed in the light of the fact that actuarial calculations show that an increase of up to 6 percentage points in the contribution rate is required to achieve financial sustainability, given present benefit ambitions.

The bottom line is that all parties are aware that the Dutch contribution rate is near its limit and that this constrains future investment strategy and/or further changes in the DB conditions.

One of the clear messages of the discussion was that the Dutch occupational schemes are rapidly approaching the risk distribution of typical DC schemes. Here we should take a step back and take note that it can be, and often is, claimed by those promoting DB schemes that the degrees of freedom left by the possibility of increasing the contribution rate to increase financial resources is a valuable feature of DB schemes. The other side of this view is the ease with which costs for current pensioners can be pushed onto younger generations of workers. This erodes intergenerational equity.

The question was raised in the Peer Review discussion as to whether the Dutch should not shift the focus of their pension discussion from the rhetoric of solidarity to the rhetoric of intergenerational equity. There are two aspects to this. First, it is questionable what is meant by “solidarity” in a DB scheme where the parameters are constantly subject to change and where the pressure is always upward on costs, with the temptation to transfer current costs to future workers. Second, this issue relates to the question of whether the Netherlands would not be better off with a transition to a financial DC scheme, now that the saturation point may have been reached for further increases in the contribution rate. DC schemes guarantee intergenerational equity by definition as all members of a generations pay the same fixed percentage of earnings into the mandatory (or quasi-mandatory) pension scheme. There is still considerable redistribution that occurs through the bottom DB flat rate benefit in the Netherlands, and the top-up in other countries.

From the point of view of many of the countries represented at the Peer Review, the fact that the Dutch occupational plans are drifting in the direction of DC means that the Netherlands is moving in the direction of where these countries already are. DC schemes have been the point of departure for

financial schemes in many of these countries (e.g. Germany, Italy, Lithuania, Poland and Romania)<sup>9</sup>, which the presentations of the peer experts from these countries so strongly brought into the discussion. Here it should also be remarked that some countries support financial pension schemes through general tax revenues by providing tax relief on contributions to quasi-mandatory or even individual voluntary supplementary pensions (e.g. Ireland) for DB schemes (but are likely to include pensions in general income for taxation purposes). Others, such as Germany, may do this through government matching of voluntary individual contributions to financial DC schemes, which in a voluntary DC scheme shifts tax revenue to those who voluntarily save for their own future consumption as pensioners. Both of these mechanisms have tax-transfer distributional and perhaps behavioural aspects which have not been clearly illuminated in the pension literature.

In the discussion of DB versus DC schemes that ensued, there were many references to “raw” forms of entrepreneurship in countries where DC schemes have been introduced. In particular, developments over recent years in the UK were cited on several occasions, which suggest that it is not DC per se, but DC as it has been implemented institutionally in some contexts that gives rise to concern. The point that the Dutch made in this context was that the social partner framework of the Dutch supplementary pension schemes minimises the role of private financial markets, placing most of the responsibility with the social partners. Of course, whatever truth there is in this argument depends on the social partners actually taking on the financial responsibility, including organising efficient means of investing portfolios.

Regardless of whether the system chosen is DB or DC one of the key determinants of the level of benefits is to design an institutional structure that minimises the costs of administration. In the opinion of the Dutch experts at the Peer Review, the costs of running the supplementary pension plans in the Netherlands are relatively low. One can nevertheless question the efficiency of having over 500 individual fund administrations, since all the funds must perform approximately the same functions. Hence, even if the cost of running many pension funds is relatively low per fund,

<sup>9</sup> See the individual country papers prepared for this Peer Review



it could be lower with more consolidation, while maintaining differences in individual plans to the extent this is desirable. There are undoubtedly other advantages to larger scale administration, including information storage and dissemination of information to participants, portfolio management and the administration of benefit payments.

A lesson from the discussion of the Dutch DB plans and the discussions of the restrictions imposed on the pension system by demographic trends and the level of the contribution rate is that DB schemes must have built in demographic shock absorbers in order to avoid demographically driven increases in the contribution rate. If there is to be a ceiling on the acceptable level of the contribution rate, then the degree of freedom left to a DB scheme is to determine the rule(s) under which demographic and economic shocks can be absorbed. In addition, DB schemes must take collective financial risks if the overall long-term return is to be maximised. What becomes important is to determine how the impact on short-term payments can be managed through liquidity reserve policy.

## Solvency issues

Security for current pensioners involves building a sufficient buffer against the risk of temporary, but strong downturns in the economy and the financial market.

Regardless of the parameters of a financial DB pension scheme, it will have to maintain solvency according to some rule regarding the ratio of assets to liabilities. The value of assets fluctuates with the rate of return on portfolios and the valuation of liabilities is dependent on the discount rate used for this purpose. In principle the discount rate should reflect the long-run return on investment, but in many settings countries require a current safe rate of return. This means that the lower is the return the lower is the present value of a given stock of assets, *i.e.*, the discounted value of the fund will not be able to cover a higher level of liabilities.

A solvency problem arises when the value of assets in the fund falls dramatically in the short-run, thereby reducing solvency with regard to

discounted liabilities. This is when it is obviously crucial for a fund to have sufficient short-term liquidity, which translates into a stock of assets (usually government debt instruments), with lower rates of return, that can be used to finance current pensions. At the same time, as equity prices are low at the trough of a financial crash it is the right time to purchase more equity shares — which also requires liquidity. On the other hand, it makes no sense to build up unnecessarily large secure asset reserves for liquidity at the expense of investments in equities. So, one of the challenges of portfolio management is to be able to shuffle the equity portfolio in order to maximise returns from the recoil after a downturn. What is needed for each fund is a market edge. But the question is to what extent a whole nation of funds can together be expected to gain a market edge, that is, do better than a benchmark index. Clearly, some will do better and some worse.

Also, the more stringent solvency regulations are, the more restricted funds are in putting money into equities. This was also a matter of concern in the discussion. EU discussion of more stringent solvency requirements has aroused considerable opposition in the Netherlands. It is interpreted as unnecessarily taking freedom away from Dutch pension funds that perceive that they need to pursue a relative aggressive investment strategy to achieve high replacement rates and sufficient indexation of benefits. This, in fact, is the core of the conflict between adequacy and sustainability.

There is another variant of setting up financial DB pension schemes that did not receive attention, at least not directly, in the Peer Review discussion. This is that there is a trade-off between promising less from the outset in the pension agreement but distributing “bonuses” ex post. This is called profit sharing and has traditionally been the philosophy underlying the construction of financial DB plans in, for example, Denmark and Sweden. The primary challenge is to create a system design that handles risks in a manner that builds in security for pensioner. Given this, transparency and information to participants are also important.

On the issue of pan-European solvency requirements, it was stated that given the differences between systems across the EU, it is important that the EU regulatory framework is sufficiently flexible to accommodate these differences. The importance of the subsidiary principle, as it leaves



governments with a choice, was also stressed. This opinion was shared by many participants. If there is a lesson to be derived from this discussion it is that even solvency policy and the regulations deriving from it must be sufficiently flexible so as to be guided by the long-term sustainability of a particular policy and its execution.

## The minimum level of protection

The Netherlands' overall pension system provides a strong level of minimum pension protection, as was established at the outset of the discussion. A sufficient guarantee is needed to provide a minimum acceptable standard of living for the poorest pensioners. This helps protect individuals from the impact on income in old age associated with individual risks as well as with career breaks because of having children and caring for them, unemployment and so on.

All EU countries have some form of guarantee at the bottom of the system. The most rudimentary, but potentially very well-targeted, is perhaps the type Italy has, which is a means-tested benefit. Most countries have either a flat rate at the bottom, as the Netherlands, or a top-up that is only means-tested against other mandatory and perhaps quasi-mandatory benefits.

The government can do more, however. It can expand coverage through additional contributions to a financial (or non-financial) pension scheme. This is a relative advantage of DC schemes since the government can contribute money to *individual accounts* from general tax revenue to cover specific periods, such as around child birth or caring for children, or relatives, unemployment or sickness. This is easy to do within the DC but not the DB framework and is one of the features of DC that makes it attractive. It is difficult to envisage how this would work, however, within the framework of the Netherlands occupational DB scheme.

Within DC schemes, it is also possible to share accounts between spouses or legally cohabiting partners. DB plans can offer survivor benefits, but it is impractical, if not impossible, to arrange a joint annuity for people who are affiliated to different schemes, at least without some form of “clearinghouse”

---

that can arrange this. Joint annuities are easy on the other hand to arrange in DC schemes, even if individuals belong to different scheme, so long as one of them can move money between accounts at retirement. All of these mechanisms make it possible to augment accounts with either externally provided contributions or internal redistribution between partners. This is a factor which needs to be taken into consideration in the initial choice between financial DB and financial DC scheme.

Finally, returning to the guarantee, there is a tendency for countries “simply” to index the guarantee against price inflation. With *real* growth in wages over many years the gap between an average pension and an average wage will increase. This tends to increase the number of persons in relative poverty. Clearly the guarantee must be indexed by more than price inflation with some degree of regularity to maintain a reasonable floor relative to the income of the population as a whole. This must be a part of any overall policy discussion.

## The social partners

The Dutch, together with some other EU countries, have a tradition of close cooperation between unions and employers, the social partners. Both the Dutch representatives and other participants were agreed on the value of this cooperation in encouraging participation in an otherwise voluntary scheme, such as the Dutch one. In fact, the rules are generally that even if an individual chooses not to be a member of a trade union he or she is nevertheless covered, through agreement between the employers and unions, in the company, sector or occupation pension plan. This is the background behind the high level of coverage of the Dutch occupational schemes. At the same time it was recognised in the discussion that not all the EU enjoys this form of institutional framework and that it is difficult for it to evolve where it has not previously existed.



## Universality

The Dutch occupational schemes cover about 90% of all employees but do not cover the self-employed. A coverage rate of 90% must be considered high for a system of occupational schemes (in this respect the Netherlands resembles some other European countries, such as Denmark and Sweden in particular, where occupational coverage is also at this level). However, 90% is not 100%. In addition, these schemes do not cover the self-employed. This means that a considerable percentage, around 15% of those in the labour force are not covered by a supplementary, earnings-related pension plan. This has to be considered a problem and is why many countries choose to mandate their pension schemes.

The lesson is simple. It is not possible to achieve 100% coverage within a voluntary framework. The success of the Dutch in achieving such a high degree of coverage has in fact to do with the high degree of social partner cohesion, which is more the exception than the rule in the EU.



## D. Transferability to other countries

As a technical construct, the Dutch financial DB schemes are definitely transferable to other countries. Similar schemes are in fact prevalent in many countries. This said, there are many issues to be considered. The following *technical issues* emerged in the Peer Review:

1. The problems that the Dutch occupational schemes have encountered during the past decade — which have led to a career average basis for computing pensions, elimination of early benefit rules and upwards adjustment in the full-benefit pension age will be issues wherever DB schemes are implemented.
2. The introduction of a factor in the DB formula that reflects the relationship between years of work and years of pension receipt seems inevitable.
3. Full pre-funding of the projected liabilities associated with newly acquired pension rights must provide the foundation for the system. Everything else being equal, this is a true foundation for solvency and sustainability. Less than full pre-funding shifts the payment burden to future generations and jeopardises intergenerational equity.
4. Long-term investment strategy, liquidity management and hedging strategies must be carefully thought out to combine the goals of security, adequacy and sustainability.
5. The profit-sharing model with a soft guarantee along the lines practiced in administration of financial DB schemes, in e.g., Scandinavia, should be considered as a means of dealing with “the” guarantee.
6. Solvency regulations for financial DB plans should be geared towards ensuring long-term solvency, while enabling funds to manage short-term volatility in a way that promotes the long-term interests of participants, without taking inordinate risks. The discussion in the Netherlands suggests that more attention should be paid to the optimal solvency framework for financial DB schemes.



There are also some *policy lessons* emerging from the Peer Review of the Dutch pension system. These are:

1. There are advantages to a country framework, such as the Dutch one, where the social partners participate actively in the creation and sponsorship of supplementary pensions. Among these are the possibility to provide tailored pension plans for occupations or sectors, provision of information and responsible management of schemes at a potentially lower cost.
2. This said, it is possible to create separate insurance pools for groups with differing longevity prospects, differing retirement age needs, etc. even within the DC framework. In addition, the DC framework is more amenable to external contributions (e.g., from the government) supporting socially desirable non-contributory rights, enabling sharing of pension rights between partners and creating joint annuities at retirement — even with different retirement ages of partners. DC schemes can also be set up so as to achieve cost efficiency and economies of scale in portfolio investment.
3. The disadvantage of a system characterised by many funds — over 500 in the case of the Netherlands — is that small funds are extra sensitive to demographic developments and volatile financial markets. In addition, regardless of their present level, average administration costs would be lower with fewer and larger funds. There are clear advantages to scale. The counterfactual to what the Netherlands does is to reduce the number of portfolios to a handful. In addition, it is questionable whether active management of a large number of funds is preferable to active management of a small number. On average, they should all tend to approach the mean. There are clear economy-of-scale advantages that can be obtained and it is not unreasonable to require management fees of well under 20 basis points.
4. The voluntary format of the Dutch system has served the Netherlands well. Some 90% of employees are covered. However, 10% are apparently not covered and together with the self-employed this means that around 15% of the workforce is uncovered. The high level of quasi-voluntary coverage is a result of the extensive cooperation

---

between employers and employees in the Netherlands, which is more the exception than the rule in the EU and elsewhere. The counterfactual to this approach is a government mandate covering 100% of the work force, *i.e.*, truly universal social security.

5. The Dutch financial DB schemes are quickly approaching the ceiling for what is believed to be a maximum percentage of wages that can be contributed to a supplementary scheme (recall that there is a flat rate DB scheme at the bottom of the overall system). Some believe the ceiling has already been reached. What is perceived as being the ceiling can vary between countries and circumstances, but there will always be a limit to the share of earnings people think is reasonable to devote to pensions. This means that the problems now being encountered in the Netherlands will arise in any country with a similar pension system. This makes the discussion in the Netherlands particularly valuable as a learning example for others.
6. Because there is a ceiling on what people perceive to be optimal for the DB framework, in the end, DB schemes tend to converge with DC schemes. This is one of the lessons of the Dutch experience. The difference between DC and DB is that DB schemes must be equipped with extra mechanisms to deal with demographic developments, as discussed in this Peer Review.

The counterfactual, DC schemes, is more straightforward than the alternative of equipping DB schemes with mechanisms. In addition, a strength of a DC scheme is that it conveys the simple message that an individual's own contributions determine their pension. This is largely true in the financial DB framework too, but the message is more obscure because the plan manager can — and sometimes must — adjust the conditions of the DB contract to economic, financial and demographic developments. In DC schemes, the adjustment is automatic.

In closing, it should be mentioned that any country either with its own financial DB scheme(s) or planning to implement schemes of this kind on a large scale, should follow closely developments in the Netherlands. As this Peer Review shows there is much to be learned by studying this — and other country — examples.



# List of References

## General References

Alessie, Rob, Annamaria Lusardi and Maarten van Rooij (2011). *Financial Literacy, Retirement Preparation and Pension Expectations in the Netherlands*. De Nederlandsche Bank, Working Paper 289.

Bovenberg, Lans & Theo Nijman, (2010). *Dutch stand-alone collective pension schemes: the best of both worlds?* Mimeograph. Netspar. Tilburg University.

Broeders, Dirk and An Chen (2010). *Pension benefit security: a comparison of solvency requirements, a pension guarantee fund and sponsor support*. De Nederlandsche Bank. Working Paper 268.

De Nederlandsche Bank. *Pension indexation lags behind rising wages and prices*. Statistical Bulletin March 2010.

De Nederlandsche Bank. <http://www.statistics.dnb.nl/index.cgi?lang=uk&todo=Pen2>

Hu, Yu Wei (2006). *Pension Fund Investment and Regulation — A Macro Study*, Economics and Finance Discussion Papers, No. 06-11. Economics and Finance Section, School of Social Sciences, Brunel University.

James, Estelle (2010) *Gender in the (N)DC World — Issues and Options* forthcoming in R.Holzmann & E. Palmer (eds.) *Non-financial Defined (NDC) Pension Systems: Progress and New Frontiers in a Changing Pension World* (World Bank 2011).

Klerby, Anna, Bo Larsson and Edward Palmer (2010), *To Share or not to Share — That is the Question*, forthcoming in R. Holzmann & E. Palmer (eds.) *Non-financial Defined (NDC) Pension Systems: Progress and New Frontiers in a Changing Pension World* (World Bank 2011).

OECD, *Growing Unequal?* (2008).

*Pensions at a Glance*, (2009). OECD.

*World Population Prospects: The 2010 Revision*, Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat. <http://esa.un.org/unpd/wpp/index.htm>

Zaidi, Asghar (2010). *Poverty and Income of Older People in OECD Countries*. Paper prepared for the IARIW 31<sup>st</sup> General Conference — St. Gallen, Switzerland, 22-28 August, 2010.

## Papers prepared specifically for the Peer Review

Beier Sørensen, Ole and Chresten Dengsøe. *Elements of the Danish system relevant to the Dutch pension sector*. Paper presented at the Peer Review of the Netherlands' Pension System. Hague, April 12-13, 2011.



Berghman, Jos and Bertrand Leton. Balancing of the Security and Affordability of Funded Pension Schemes. Paper presented at the Peer Review of the Netherlands' Pension System. Hague, April 12-13, 2011.

Buškutė, Inga and Teodoras Medaiskis. Balancing the security and affordability of funded pension schemes: Statements and comments. Paper presented at the Peer Review of the Netherlands' Pension System. Hague, April 12-13, 2011.

Dzik, Bartłomiej and Robert Wójcik. Balancing the Security and Affordability of Funded Pension Schemes — The Netherlands' supplementary occupational pension plans: Statements and Comments. Paper presented at the Peer Review of the Netherlands' Pension System. Hague, April 12-13, 2011.

Görge, P. and K. Stiefermann. Balancing the Security and Affordability of Funded Pension Schemes — Germany. Paper presented at the Peer Review of the Netherlands' Pension System. Hague, April 12-13, 2011.

Geroldi, Giovanni and Elena Moiraghi. Some comments on the discussion paper with reference to the Italian experience. Paper presented at the Peer Review of the Netherlands' Pension System. Hague, April 12-13, 2011.

Hickney, Rinbarr and David Hagarty. Balancing the Security and Affordability of Funded Pension Schemes — The Netherlands' supplementary occupational pension plans: Statements and Comments. Paper presented at the Peer Review of the Netherlands' Pension System. Hague, April 12-13, 2011.

Joint Report on Pensions. European Commission, Brussels, 2010.

Matthijsen, Regine, Michel Riquier and Maciej Kucharczyk. AGE contribution to the Peer Review — Balancing the security and affordability of funded pension schemes. AGE Platform Europe. Paper presented at the Peer Review of the Netherlands' Pension System. Hague, April 12-13, 2011.

Mot, Gheorghe and Ileana Colțănel. Balancing the Security and Affordability of Funded pension Schemes. Paper presented at the Peer Review of the Netherlands' Pension System. Hague, April 12-13, 2011.

Netherlands Ministry of Social Affairs and Employment (a). Balancing the Security and Affordability of Funded pension Schemes: Host Country Report. Paper presented at the Peer Review of the Netherlands' Pension System. Hague, March April 12-13, 2011.

Netherlands Ministry of Social affairs and Employment (b). The Old Age Pension System in the Netherlands.

Palmer, Edward. Balancing the security and affordability of funded pension schemes — The Netherlands' supplementary occupational pension plans. Discussion Paper prepared for the Peer Review. Paper presented at the Peer Review of the Netherlands' Pension System. Hague, April 12-13, 2011.



---

Pecman, Nataša and Andraž Rangus. Balancing the Security and Affordability of Funded Pension Schemes. Paper presented at the Peer Review of the Netherlands' Pension System. Hague, April 12-13, 2011.

Verhaegen, Chris. Europe's Pensions Challenge. European Federation for Retirement Provision — EFRP. Paper presented at the Peer Review of the Netherlands' Pension System. Hague, April 12-13, 2011.







<http://www.peer-review-social-inclusion.eu>

## Balancing the security and affordability of funded pension schemes

Host country: **The Netherlands**

Peer countries: **Belgium, Denmark, Germany, Ireland, Italy, Lithuania, Poland, Romania, Slovenia**

Stakeholders: **AGE, EFRP**

On top of its General Old Age Pension Scheme, which guarantees a minimum income to all persons aged over 65, the Netherlands has an elaborate supplementary pension scheme.

The government's objective is to ensure that everybody is able to build up a supplementary pension sufficient to improve their standard of living after retirement, and a number of protective measures have been developed to enable this.

Nevertheless, in the wake of the economic crisis, funded schemes are increasingly perceived as being overly risky and the Dutch Government has decided to take a more fundamental look at some characteristics of its pension system. Of particular interest are the investment policies of pension funds, the sustainability of the occupational pension system and the financial supervision framework. Three studies have been commissioned to examine these questions. They are due to be discussed by government and social partners in mid-2010 and may serve as the basis of a possible reform.

Based on these studies and on the experiences of other Member States, the Peer Review will seek to shed more light on how to achieve the necessary balance between security and affordability in future pension schemes.