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FINANCIAL SECTOR ASSESSMENT PROGRAM UPDATE

KINGDOM OF THE NETHERLANDS-NETHERLANDS

PENSIONS SECTOR ISSUES

TECHNICAL NOTE

JUNE 2011

INTERNATIONAL MONETARY FUND
MONETARY AND CAPITAL MARKETS DEPARTMENT

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GLOSSARY

AFM	Authority for the Financial Markets
AOW	Social insurance pension system
CPB	Central Planning Bureau
CSIS	Center for Strategic and International Studies
DNB	The Netherlands Bank
EMU	Economic and Monetary Union
FSAP	Financial Sector Assessment Program
FTK	Financial Assessment Framework
GAP Index	Global Aging Preparedness Index
IWI	Inspection on Work and Income
PSW	Pension and Savings Fund Act
SVB	Social Insurance Bank
SZW	Ministry of Social Affairs and Employment

I. Summary and Conclusions[1]

1. **The pension system in the Netherlands consists as in many other countries of three-pillars.** A basic pension benefit linked to the minimum wage is sponsored by the government under a social insurance scheme (AOW). Fully funded occupational pension schemes supplementing the national scheme. Occupational pensions are provided under labor agreements and their terms are freely agreed but contain minimum common features. They are organized either as company pension funds, industry wide or professional funds. Participation in latter two types of scheme is often mandatory for that industry or profession. The third pillar consists of the private pension products, with special tax treatment offered by insurance companies and banks.

2. **The second pillar pension system manages assets in the order of 100 percent of GDP and has become a significant part of the Dutch financial system, second only to the banking sector, and is increasingly of potential systemic importance given its macro-economic relevance and major role in financial markets.** The total premiums that plan sponsors and active members paid into the occupational pension funds in 2009 were equal to 5.2 percent of GDP. The sector is served by 545 pension funds but is highly concentrated, with the largest two funds and the ten largest funds holding 44 percent and 78 percent of the total assets, respectively. (Table 1).

3. **The recent crisis and interest rate declines have put the financial sustainability of the Dutch occupational pension system under severe strain.** The cover ratios or total market value of the assets of the pension funds as a percentage of their pension commitments have dropped from 130 percent to an average of 95 percent in 2008, and are now around 100 percent but still below regulatory solvency requirements. Cover ratios below 105 percent have triggered unprecedented technical and supervisory measures. With a few exceptions, pension plans stopped the conditional indexation of the accrued benefits for the last two years, 430 pension funds are under supervisory recovery plans, and seven of them are required to cut benefits in the next months.

4. **The benefit cutting measures, all in congruency with the law, have been received by the public as an unexpected and almost unknown option inherent in the pension contracts.** While the first pension fund that was scheduled to cut benefits has avoided the situation by adding solvency capital into the fund, the general belief of the Dutch population in the safety of their pensions and the untouched image of the pension funds is undergoing a major crisis.

[1] This Technical Note was prepared by Rodolfo Wehrhahn.

5. **Adding to the strain on the pension funds generated by the market risk and the image crisis, longevity risk materialized during 2010 as a result of the new mortality tables reflecting an unexpected important increment in the longevity of the Dutch population and their impact on pension fund liabilities.** The impact has resulted in the reduction in their cover ratio by seven to ten percentage points, implying an additional capital need of around € 50 billion.

Table 1. The Netherlands: Company Sponsored Pension Plans

Occupational Pension Plans (Pillar 2)	2005	2006	2007	2008	2009	2010 (2Q)
Total number of pension funds	800	767	713	656	579	545
Industry-wide pension funds	103	103	96	95	87	85
Company pension funds	676	643	597	543	474	442
Professional pension funds	12	12	12	13	12	12
Number of active participants (in thousands)	6,232	5,958	5,983	5,823	5,818	
Number of beneficiaries (in thousands)	2,438	2,484	2,577	2,607	2,708	
Assets under management	640,346	746,356	717,984	605,394	692,900	707,000
Technical provisions	501,508	498,062	491,745	619,676	633,911	704,000
Gross benefits	17,743	18,896	20,539	21,847	22,939	
Gross contributions	24,982	23,521	24,883	27,220	30,252	
Average cover ratio in percent	128	135	141	132	92	100

Source: DNB.

6. **During the Financial Sector Assessment Program (FSAP); the IMF staff, working closely with DNB, has carried out a top down stress test to assess the fragility of the Dutch second pillar system to particular financial market shocks.** The pension stress test consist of a series of single parameter top down tests to gain insight into the sensitivity of the system and on the cost of the tail of the pension payments.

7. **The stress testing exercise highlights continued pension funds vulnerability to market risks.** Funds are particularly sensitive to low interest rate, equity and real estate risks. Furthermore, given their already low solvency coverage, in particular a continued low interest rates environment would appear to be detrimental for the system; however, there are already pension funds that are hedging the low interest risk effectively, at least for a relatively short duration of such a financial environment.

8. **The stress test also calculated the cover ratios assuming indexation of the future benefits.** The additional drop in cover ratio that resulted is over 30 percent underscoring the urgency of the discussions currently being carried out on the needed changes towards a strong and explicit conditionality of the indexation of future benefits including the accrued benefits.

9. **As part of the stress test the cost of the payment of the pension's tail was estimated.** The results provide an indication that cost rise by 18 percent of the total reserve, or € 140 billion, should expected mortality improve by five years. The size of these numbers could initiate a discussion on the possibility to search for more effective tools to manage the tail of the pension payments.

10. **The pension supervisor (DNB) is responding proactively to the pressures on funds, in the face of political and social controversy, demonstrating independence and competence.** Cover ratios below 105 percent have triggered unprecedented technical and supervisory measures. With a few exceptions, pension plans stopped the conditional indexation of the accrued benefits for the last two years, 308 pension funds had to file supervisory recovery plans during 2008, and 7 of them are required to cut benefits in the next months should their cover ratio not reach the minimal regulatory level. DNB set up an effective mechanism to analyze over 300 recovery plans when submitted in 2008 and is currently supervising 308 plans.

11. **To deepen the knowledge of the key operational elements of pension funds, DNB has created a team of experts with long industry experience.** This group of experts has developed cutting edge knowledge in the areas of investment, assets management administration, trading and stress testing that is now put into supervisory action feeding the account supervisors with relevant indicators and warning signs. This has allowed DNB to provide superior supervision, and created technical respect and credibility much needed in times of crisis. The expert team model proven successful in pension supervision is now being implemented in all areas of DNB as part of the "Vita" project.

12. **The transparency and risk sensitive framework of pension funds regulation examined by the Goudswaard commission and the Frijns Report has brought the question of the sustainability of the Dutch pension system to the discussion table.** Negotiations on risk sharing and risk transferring negotiations are being carried out as a response of the pension funds crisis. In June 2010 the social partners signed a pension accord highlighting the strategy to cope with the sustainability challenge. This agreement also contains proposals regarding the future stability of the related state pension in the first pillar. An increase of contributions is ruled out, but lowering benefits and the sureness of the pension benefits are open for discussion.

13. **Not only is the sustainability of the second pillar under discussion, but also the effectiveness of the system as a whole.** The Frijns Report identified a series of problematic issues arising from the regulatory requirements on the industry. In particular the investment strategies do not appear to be aligned with the benefit expectations and demographic profile of the pension funds, and deficiencies in effective outsourcing controls and countervailing power at the board level were identified. DNB has responded to the findings assigning resources and expertise to boost compliance in this area. A series of deep and detailed analyses of the financial structure, the investments strategy and risk controls of pension funds have been, and continue to be, carried out. However, the strong outsourcing practice of the industry of large parts of their operation into unsupervised entities has created a supervisory lacuna that needs to be addressed.

II. Recommendations

- The Global Aging Preparedness Index (GAP Index) published in October 2010 ranks the Netherlands in the first place with respect to resilience against the income adequacy risk, while in the 19th position out of 20 analyzed countries with respect to the fiscal cost vulnerability. These findings suggest the need for adjustments improving the fiscal sustainability without severely affecting the income adequacy condition.
- The effectiveness of the pension system could be improved by separating the risk management strategy of the two major risks affecting pension funds, market risk and longevity risk. A possibility to separate these risks would be to assign to current pension funds the responsibility to provide stronger guarantees and entitlements, but for a fixed number of years. (The starting age of retirement would still be flexible). The pension's tail would have to be provided by another mechanism that could be more effective and tailor-made for the elderly combining a larger base of participants and adjusting down the income but ensuring a cost limit on the health expenses.
- The pension funds image is undergoing a significant crisis. The benefit cutting measures and dropping of indexation, all in congruency with the law, have been received by the public as an unexpected and almost unknown option in the pension contracts by the public. Careful communication to regain a realistic image of the quality of the pension funds is important. A communication plan, together with media training, would be useful.
- In the risk transferring negotiation progress, due care should be taken to ensure proper understanding of the new risks assumed in a new pensions contract by all parties. This would allow implementation of a long term sustainable system avoiding unexpected pension shortfalls in the population.
- A regulation should be prepared that includes direct supervisory regime for entities performing large parts of the pension fund activity. This will help to address all the

supervisory gap that allows outsourcing of major parts of pension funds operations into unsupervised entities.

- Adjustments to the Financial Assessment Framework (FTK) should be made to better assess the riskiness of the pension fund portfolios.
- To establish stronger accountability and governance in pension funds, a regulation should be drafted to require the incorporation of professional board members for pension funds of a given size and complexity.

III. The Pension System

A. Overview

The global position of the Dutch pension system

14. **The pension system in the Netherlands enjoys a prime world class reputation.** In 2009 and 2010 the Melbourne Mercer Global Pension Index assessing over 40 indicators to evaluate the main three aspects of a pension system, adequacy, sustainability and integrity, has ranked the pension system in the Netherlands in the first position out of the 14 countries assessed (Table 2, methodology shown in Table 3).

Table 2. The Netherlands: Melbourne Mercer Pension Index

				Sub-Index Values		
	Ranking		Overall	Adequacy	Sustainability	Integrity
Country	2010	2009	index value	40%	35%	25%
Netherlands	1	1	78.3	76.1	71.6	91.4
Switzerland	2	-	75.3	73.1	71.8	83.5
Sweden	3	3	74.5	72.8	72.9	79.5
Australia	4	2	72.9	68.1	71.7	82.4
Canada	5	4	69.9	75.0	56.8	80.1
UK	6	5	63.7	64.9	47.1	85.3
Chili	7	7	59.9	52.1	54.7	79.8
Brazil	8	-	59.8	72.9	29.1	81.7
Singapore	9	8	59.6	43.7	63.6	79.5
USA	10	6	57.3	54.3	59.0	60.0
France	11	-	54.6	74.9	29.7	56.8
Germany	12	9	54.0	64.1	42.3	54.4
Japan	13	11	42.9	42.2	27.9	65.2
China	14	10	40.3	48.3	29.0	43.4
Average			**61.7**	**63.1**	**51.9**	**73.1**

Source: Melbourne Mercer Global Pension Index (October 2010).

Table 3. The Netherlands: Melbourne Mercer Pension System Rating

Grade	Index value	Country	Description
A	>80	Nil	A first class and robust retirement income system that delivers good benefits is sustainable and has a high level of integrity.
B	65–80	Netherlands Switzerland Sweden Australia Canada	A system that has a sound structure, with many good features, but has some areas for improvement that differentiates it from an A-grade system.
C	50–65	U.K. Chile Brazil Singapore U.S. France Germany	A system that has some good features, but also has major risks and/or shortcomings that should be addressed. Without these improvements, its efficacy and/or long-term sustainability can be questioned.
D	35–50	Japan China	A system that has some desirable features, but also has major weaknesses and/or omissions that need to be addressed. Without these improvements, its efficacy and sustainability are in doubt.
E	<35	Nil	A poor system that may be in the early stages of development or a non-existent system.

Source: Melbourne Mercer Global Pension Index (October 2010).

15. **Well-known demographic challenges affecting the pension systems in an aging and longer living society will not leave the Netherlands pension system unaffected.** The GAP Index produced by the Center for Strategic and International Studies (CSIS) providing a comprehensive evaluation of the progress that countries are making in preparing for global aging; and particularly the "old-age dependency" dimension of the challenge, has ranked the Netherlands at the two extremes with respect to the main two indicators (Table 4). The GAP Index published in October 2010 ranks the Netherlands in the first place with respect to resilience against the income adequacy risk, while in the nineteenth position out of 20 analyzed countries with respect to the fiscal cost vulnerability. These findings suggest the need for adjustments improving fiscal sustainability without severely affecting the income adequacy condition.

The structure of the pension system

16. **The Dutch pension system consists of three pillars: the state pension (AOW), the supplementary collective pensions and the individual pension products.** The AOW is the only statutory pension scheme in the Netherlands. This pension layer is financed on a pay-as-you-go basis by the government and provides basic income to all citizens of age 65 and over.

Table 4. The Netherlands: The Global Aging Preparedness Index

	Fiscal Sustainability Index	Income Adequacy Index
1	India	The Netherlands
2	Mexico	Brazil
3	Chile	United States
4	China	Germany
5	Russia	United Kingdom
6	Poland	Australia
7	Australia	Sweden
8	Japan	Chile
9	Canada	Spain
10	Sweden	India
11	United States	Canada
12	Korea	Japan
13	Switzerland	Poland
14	Germany	Switzerland
15	United Kingdom	Russia
16	Italy	France
17	France	Italy
18	Brazil	China
19	The Netherlands	Korea
20	Spain	Mexico

Source: CSIS, The Global Aging Preparedness Index (October 2010).

The flat-rate pension benefit in principle guarantees 70 percent of the statutory minimum wage. The entitlement in the First Pillar builds up by 2 percent for each year of residence between ages 15 and 64, leading to a 100 percent entitlement at the age of 65. Around 2.8 million people will receive € 28.6 billion in 2010. The second pillar is provided by occupational pensions which are primarily financed by means of contributions paid by employer and employees. It is a fully funded system and, for most employees, participation in a pension plan is automatically linked to their contract of employment, resulting in 90 percent coverage of the working population. The assets accumulated in these funds amount to € 750 billion (Q3. 2010). Around 95 percent of the assets are managed by pension funds and less than 5 percent by insurance companies. The specifics of these occupational plans are negotiated individually among the social partners. The only industry wide parameter is the retirement age, which is currently set at the age of 65 years. Most schemes are defined benefit pensions, using the career average salary as the pension basis, provide conditional indexation, annual accrual between 1 percent and 2 percent, and disability and survivor benefits. The ambition for the occupational pension is to supplement the first layer pension benefit to achieve a total pension of 70 percent of the average income. This ambition is been currently revised and a lower amount is in discussion. On average the supplement provides an equal amount to the first layer. The third layer consists of private saving for retirement. These products are offered by insurers and banks and are usually incentivized by favorable tax treatment. The size of this pillar is estimated around € 7.5 billion where two thirds of the assets are managed by insurers and one third by banks, with a trend to increase the banking share.

B. The First Pillar

Framework of the First Pillar

17. **The AOW is the only statutory pension scheme in the Netherlands.** It provides all residents of the Netherlands at the age of 65 or older with a flat-rate pension benefit that in principle guarantees 70 percent of the statutory minimum wage. As of 2009, for singles, the gross pension benefit is € 1038 a month. For couples, if both partners are 65 or over, the gross benefit for each partner is € 723 a month.[2] There is no means-test for eligibility for benefits. The entitlement builds up by 2 percent for each year of residence between ages 15 and 64, leading to a 100 percent entitlement at the age of 65. Those living outside the Netherlands for part of this period, such as migrant workers, will therefore receive reduced benefits unless they voluntarily continue participation while living abroad.

18. **The AOW is administered by the Social Insurance Bank (SVB), which is operationally independent from the government.** The board of directors manages the SVB in consultation with a board of advisors. The Ministry of Social Affairs and Employment (SZW) appoints the members of the board of directors and advisors, and approves its annual plan and budget. The SVB is also subject to oversight by the Inspection on Work and Income (IWI), a section of the SZW that supervises the administration of statutory employees' insurance schemes carried out by a number of organizations.

Financing of the AOW

19. **The AOW is an integral part of government finances.** The (negative) balance of the AOW is consolidated within the national fiscal balance and debt. The AOW is financed by a premium, which is currently set at the legal maximum of 17.9 percent of taxable income (subject to a maximum income level). In addition to premium income, the government makes a yearly contribution to the AOW fund, which is expected to rise, because the growth in expenses caused by ageing will exceed the growth in premium income (Table 5).

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[2]Seventy percent of the net minimum wage for a single person, 90 percent of the net minimum wage for a single parent with an unmarried child under 18, and 100 percent of the net minimum wage for a married person or a person living together with a partner (i.e., 50 percent each).

Table 5. The Netherlands: AOW Finances

Table 4 (x € 1 mln.)	2005	2006	2007	2008	2009	2010 (estimate)
Premiums	17 944	17 377	17 637	20 288	17 883	16 793
Government contribution	5 644	6 591	8 379	6 486	9 749	11 388
Expenses	23 369	24 169	25 198	26 446	27 649	28 559
Balance (relevant for EMU balance)	52	- 334	677	209	- 781	- 612
Fin. Position (relevant for EMU-debt)	1 621	1 287	1 964	2 173	1 989	1 377

Source: DNB.

Vulnerabilities and issues of the First Pillar pension scheme

20. **The demographic projections will add strain on public finances in the Netherlands.** Public spending on pensions and health care will increase at a faster pace than revenues. The projected necessary adjustment, known as the sustainability gap, is calculated at 4.5 percent of GDP. This gap has grown by 1.5 percent GDP since the previous ageing study by Centraal Planbureau (CPB)[3] in 2006. The main reasons for this deterioration are a higher life expectancy and the impact of the credit crisis. The government has to decide how to improve its budget, with restructuring or tax increases, immediately or delayed. This study shows the consequences of alternative policy reforms on the sustainability gap and government debt, on the economy and on the distribution of net benefits between generations. Under the assumption that the benefits will be indexed to average wages (and not to contract wages as is the current rule), costs will rise from about 4 percent of GDP in 2008 to 8 percent by 2033 (Table 6).

21. **The following changes were introduced in recent years to cope with the fiscal pressure affecting the AOW.**

- In 2005 temporary compensations were introduced ("Tijdelijke regeling tegemoetkoming AOW'ers" and the "Tijdelijke regeling eenmalige tegemoetkoming AOW'ers") to support the income of the elderly. They are a supplement to the regular AOW. The supplement was introduced as a temporary measure, but will be transformed into a permanent measure the coming year.

[3]CPB (2010) Ageing: the clash between generations, Special Publication 86
http://www.cpb.nl/nl/pub/cpbreeksen/bijzonder/86/bijz86.pdf

Table 6. The Netherlands: AOW—Expenditure

Period	Percentage of GDP	Period	Percentage of GDP
2005	4.8	2033	8.0
2006	4.7	2034	8.1
2007	4.6	2035	8.2
2008	4.6	2036	8.4
2009	5.0	2037	8.4
2010	5.0	2038	8.5
2011	5.0	2039	8.5
2012	5.0	2040	8.5
2013	5.2	2041	8.5
2014	5.3	2042	8.5
2015	5.4	2043	8.4
2016	5.5	2044	8.4
2017	5.6	2045	8.3
2018	5.7	2046	8.3
2019	5.9	2047	8.3
2020	6.0	2048	8.2
2021	6.1	2049	8.1
2022	6.3	2050	8.1
2023	6.4	2051	8.1
2024	6.6	2052	8.0
2025	6.7	2053	8.0
2026	6.9	2054	8.0
2027	7.1	2055	7.9
2028	7.2	2056	7.9
2029	7.4	2057	7.9
2030	7.6	2058	7.9
2031	7.7	2059	7.9
2032	7.9	2060	7.9

Source: DNB, (based on CPB (2010) Ageing: the clash between generations, Special Publication 86).

- In 2009 the AOW and the compensation AOW were increased to compensate for a change in the tax deductibility of medical expenses.

- In 2015 the AOW supplement for nonworking partners younger than 65 will be abolished.

22. **The Dutch government is currently planning to increase the retirement age.** The discussion concerning the timing of the increase, and by how many years the retirement age will be increased, are still ongoing.

23. **The AOW Savings Fund established in 1997, which is an integral part of the national fiscal balance and debt will be closed in the coming year.** Like the build-up, the termination of this fund will have no impact on the government deficit or debt as this was a nominal fund holding no assets.

C. Second Pillar

Framework of the system

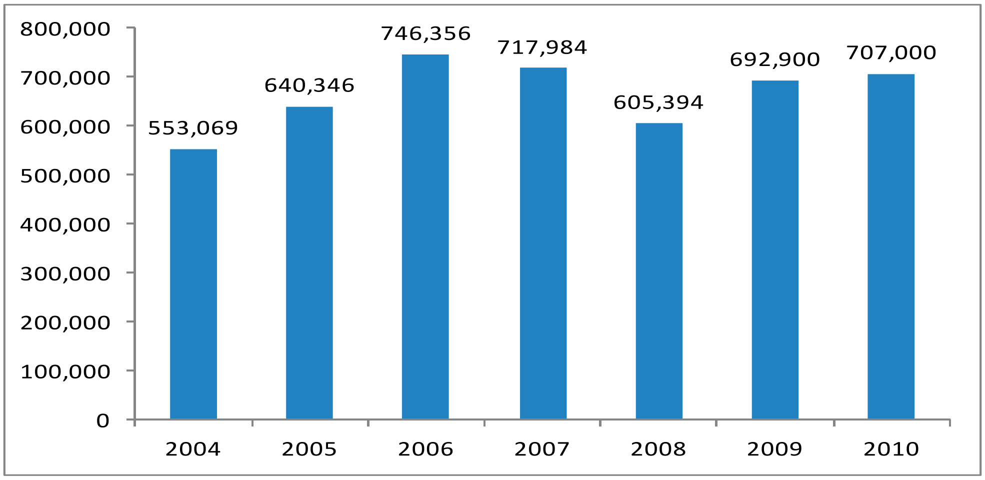
24. **Occupational pension schemes are supplementary to the AOW.** More than 90 percent of employees or close to 6 million people participate in these schemes, which are established in accordance with labor agreements. As such their terms are subject to free negotiations between employers and employees (social partners). Currently around 87 percent of all active members participate in a career-average scheme. Under such a scheme, accrual rates of around 2 percent or more are used. The pension accruals are usually indexed to wage growth or inflation. This indexation is not guaranteed, and will depend on the financial situation of the fund. In over half of all plans, the conditional indexation is based on wage growth, usually those in the industry concerned. For over 20 percent of pension plan members, pension accrual is linked to the movements in the general level of consumer prices. Some pension funds operate as collective defined contribution plans. These plans combine a career-average scheme with a fixed contribution rate for a number of years with collective adjustments of the benefits if necessary. Fully individual defined contributions schemes are less popular.

25. **Pension funds manage assets in the order of the country's GDP.** At the end of 2008, the assets held by pension funds totaled € 605 billion, grew to € 693 billion at the end of 2009 and reached € 707 billion in June 2010 (Figure 1).

26. **The two largest industry wide pension funds, ABP and PFZW are responsible for around 44 percent of all assets of the sector, and the 10 largest pension funds account for around 78 percent of the total market.**

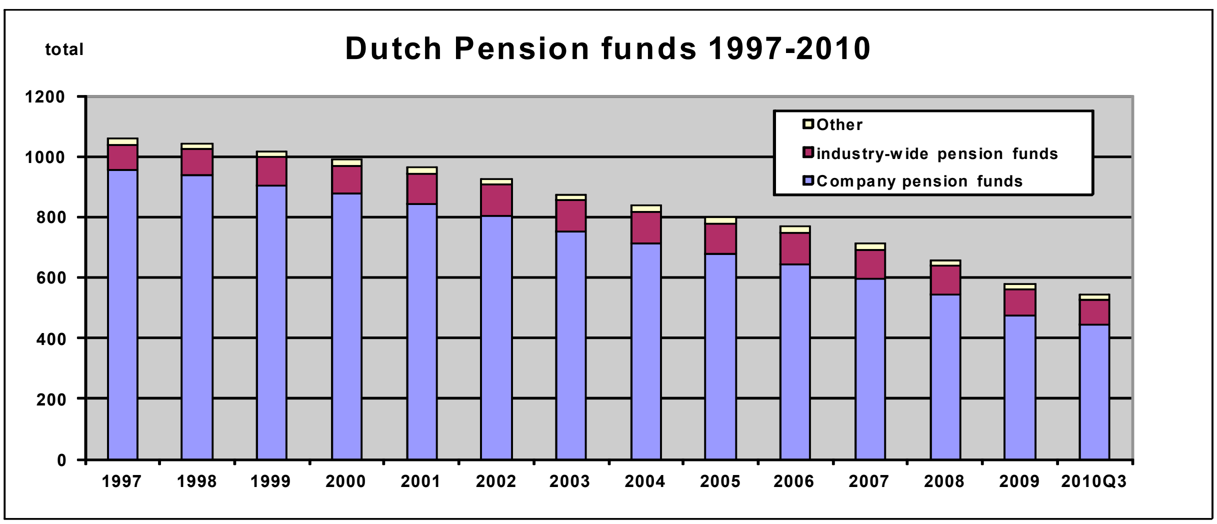
27. **Consolidation in the industry has been taking place leading to a reduction of 30 percent in the past 5 years from 800 pension funds in 2005 down to 545.** The major drop in the number of pension funds is from amongst the company pension funds, where the reduction was around 40 percent (Figure 2).

Figure 1. The Netherlands: Assets Under Management of Pension Funds
(In millions of Euros)



Source: DNB.

Figure 2. The Netherlands: Number of Pension Funds



Source: DNB.

28. **Pension funds are currently servicing 5.8 million participants and 2.7 million beneficiaries.** The total contributions paid in 2009 amounted to € 30 billion, of which 70.5 percent was paid by the employer (Table 7). On average, the benefits paid are still lower than the contributions, but as the pension funds become older this situation is expected to be reversed. Already some initial signs of this have been seen as a pension fund recently experienced liquidity issues.

Table 7. The Netherlands: Contributions and Benefits

Total pension funds	2007	2008	2009
Contributions from employers	17,136	19,029	21,331
Contributions from employees	7,746	8,189	8,918
Total contributions	**24,883**	**27,220**	**30,252**
Benefits			
Retirement pension (temporary, lifelong)	14,323	15,414	17,044
Dependants' pension	4,007	4,175	4,300
Disability	730	681	643
Other	1,479	1,577	952
Total benefits	**20,539**	**21,847**	**22,939**

Source: DNB.

29. **The mandatory character of the systems does not require marketing activity and guarantees a steady inflow of participants, furthermore the contribution collection is also cost efficient, through payroll deduction.** These two factors, together with the market concentration in a few funds, allowing for economies of scale, result in a relatively low cost operation (Table 8). However, when the economies of scales is not available, as is the case for several pension funds, the fixed costs can be five times higher and expenses in these funds have been growing at the same pace as the assets.[4] It is expected that new standards on internal controls and risk management will result in an increment in costs.

30. **Pension funds are organized in the Dutch legal form of a foundation (Stichting).** Company pension funds are legally independent of their respective companies. However, companies remain at least morally obliged to attend any financial deficits of the pension funds that could lead to benefit reduction, as recent experience is showing where the companies are topping up to avoid reductions in benefits.

31. **There is no general statutory obligation for employers to make pension commitments to employees, but once the commitment is made, the Pension and Savings Funds Act (PSW) safeguards the rights of members and beneficiaries.** The Pension and Savings Funds Act (1952) has been be replaced by the Pension Act (Pensioenwet), with effect from January 1, 2007. The Pension and Savings Funds Act was amended several times

[4]Vereniging van Bedrijfstakpensioenfondsen-CEM Benchmarking Algemene Rapportage for the year ending December 31, 2009. Published November 16, 2010.

Table 8. The Netherlands: Pension Fund Costs
(In percent)

Ratios		2007	2008	2009
Top 5	Expenses in % of total assets	0.3	0.4	0.3
Total	Expenses in % of total assets	0.3	0.4	0.3
Top 5	Expenses in % of investments	0.3	0.4	0.3
Total	Expenses in % of investments	0.3	0.4	0.3
Top 5	Expenses in % of contributions	8.2	8.3	7.2
Total	Expenses in % of contributions	8.8	8.4	7.3

Source: DNB

since its introduction in 1954, and this has made the Act less clear. The Pension Act has created a clear statutory framework, overhauling the Pension and Savings Funds Act, implementing changes in policy and introducing the supervisory framework for pension funds, the Financial Assessment Framework (FTK). Article 151 of the Law of December 7, 2006 of the Pension Act provides for two pension supervisors: the Authority on Financial Markets (AFM) and the Dutch Central Bank (DNB). The AFM is charged with conduct of business supervision, and DNB is charged with prudential supervision and material supervision.

32. **A pension fund may be established by a company, an industrial sector (branch) or a professional group.** If an employer's organization and a trade union in an industrial branch wish to establish an industry-wide pension fund, they may request the government to declare the pension agreement binding on all employers and employees in the branch, under the Mandatory Membership of an Industry-wide Pension Fund Act of 2000. The law requires a representative portion of the employers[5] in an industrial branch to agree. By making the "collective" pension agreement binding, the law aims to avoid excessive competition among companies in the same branch on terms and conditions of pensions.

33. **According to Article 5 Section 1 Subsection b of the corporation tax act (Wet op de Vennootschapsbelasting), pension funds are not liable to pay corporation taxes.** This includes the investment income and the profit of the fund. Article 3 of the implementation decree on the corporation tax (Uitvoeringsbesluit vennootschapsbelasting 1971) lists the provision that a pension fund must use its profits solely for the benefit of the policy holder.

[5]This is interpreted to mean employers of at least 60 percent of the employees in the branch.

34. **Contributions of the employees or policy holders of the pension funds are excluded from income tax according to Article 11 of the act on income tax (Wet op de loonbelasting 1964).** Pension contributions are deemed as deferred income, and therefore are liable for taxation at the moment the pension is paid to the retiree.

Investments

35. **The most recent data show that some 35 percent of the total assets are invested in equities (down from the 1999 peak of 45.8 percent), 50 percent in fixed income instruments, 10 percent in real estate and 5 percent in other alternative investments (Table 9).** Around two thirds are Euro nominated investments and 19 percent are in sovereign bonds. The volatility of the market is constantly changing the investment portfolios, and it is not clear what the mix will look like in the next months. Some pension funds have hedged the low interest rate environment, and have asset durations longer than liability durations. Appendix 1 contains a detailed table of the asset investment portfolio for the industry.

Table 9. The Netherlands: Pension Funds Investments

Pension Funds	1999	2004	2009
Total assets	**469,440**	**553,069**	**692,900**
		In percent	
Equities	45.8%	41.0%	36.3%
Fixed income securities	30.2%	41.6%	49.0%
Real estate investments	9.3%	10.0%	9.8%
Other	14.7%	7.4%	4.9%
Total investments at the Fund's risk	100.0%	100.0%	100.0%

Source: DNB

The financial assessment framework

36. **The financial assessment framework for pension funds (FTK) was introduced with the Pension Act in 2007.** The FTK lays down the statutory financial requirements for pension funds. The FTK is built around the principles of market valuation, risk-based financial requirements and transparency. The technical provision is determined by discounting expected future cash flows against the current nominal term structure of interest rates provided by DNB and by using the latest available mortality information. The calculation of regulatory own funds is risk-based, so that the requirements increase and decrease in line with the fund's exposure to risk. Finally, transparency is aimed at obtaining and disclosing a clear and objective view of the fund's financial position. Contributions

should be cost effective and actuarially sound with respect to the obligations assumed, including the administrative expenses. The solvency capital is calculated with a confidence level of 97.5 percent, over one year period. On average this leads to a cover ratio or total market value of the assets of the pension funds as a percentage of their pension commitments of 125 percent. The minimum regulatory own funds requirement is the lower limit of the regulatory own funds requirement and is derived from the implementation of the European Pensions Directive. This requirement translates into a cover ratio of 105 percent.

37. **A recovery plan is required when the fund balance falls below the regulatory requirement. A fund that has fallen below the regulatory own funds requirement but is still above the minimum regulatory own funds requirement has a reserve deficit.** Such a fund must draw up a long-term recovery plan within three months, outlining how it will eliminate the reserve deficit within 15 years via a gradual recovery. A fund that has fallen below the minimum regulatory own funds requirement has a funding shortfall and must draw up a short-term recovery plan within two months, outlining how it will eliminate the funding shortfall within three years.

38. **The FTK contains provisions on the actuarial and market consistent sufficiency of the contributions to cover acquired liabilities and also on conditional obligations, such as the indexation of the accrual benefits and pensions.** Requirements on sound regular reporting, and on the establishment of appropriate controls and governance in accordance with the risks and fiduciary responsibilities that they carry, are also included and spelled out in detail.

39. **The future solvency of the pension fund is tested by a continuity analysis using stochastic methods to assess the financial development of the fund over a period of fifteen years.** It shows whether the fund can satisfy its financial obligations in the long term, and takes into consideration the various instruments available in case of financial strain, such as adjusting payments, additional contributions and conditional indexation. The analysis does not require the valuation of future indexation, but it must be based on consistency between expectations raised and the level of the financial means. This analysis plays an important role in determining expected future indexation.

40. **As a measure of last resort, the FTK allows pension funds to reduce benefits and pension entitlements.** A pension fund may only reduce pension entitlements and rights if:

- the technical provisions and the minimum regulatory own funds are not covered by the investments,
- the pension fund is not in a position to recover this situation without disproportionately harming the interests of members, deferred beneficiaries, pension beneficiaries, other entitlement beneficiaries, or the employer, and

- all other available means of influence, except investment policy, have been applied in order to comply with the minimum regulatory own funds within three years.

Reporting requirements

41. **The reporting requirements of pension funds are comprehensive, and DNB is making appropriate use of this information in the form of industry wide analysis, top down stress tests, and implementing supervisory action through timely recovery plans.** Under Article 147 of the Pension Act and 142 of the Obligatory Occupational Pension Schemes Act, pension funds have to provide the supervisory authority with periodic statements, comprising:

a. information on the organization of the pension fund;

b. a management report;

c. a balance sheet;

d. information on the financial contacts and transactions of the pension fund;

e. an account of income and expenditures;

f. information on the cover ratio;

g. information on the regulatory own funds;

h. actuarial statements, authenticated by a competent actuary, including an actuarial report accompanied by an actuary's statement;

i. information on the scheme member file;

j. information concerning the pension scheme implemented and any other schemes implemented by the pension fund;

k. premium information;

l. re-insurance information; and

m. information on obligations of the pension fund at the risk of the scheme members.

42. **The quality of the reporting is certified by actuaries.** Paragraph 4 of Article 147 of the Pension Act and paragraph 4 of Article 142 of the Obligatory Occupational Pension Schemes Act state that an actuary, in his/her statement as referred to in point h above, will confirm that he/she has ascertained to his/her satisfaction that the provisions of Articles 126 up to and including 140 have been met. He/she is authorized to provide more detailed information on his/her statement, or to make a reservation on any point. Pursuant to Article 148 of the Pension Act and 143 of the Obligatory Occupational Pension Schemes Act, the

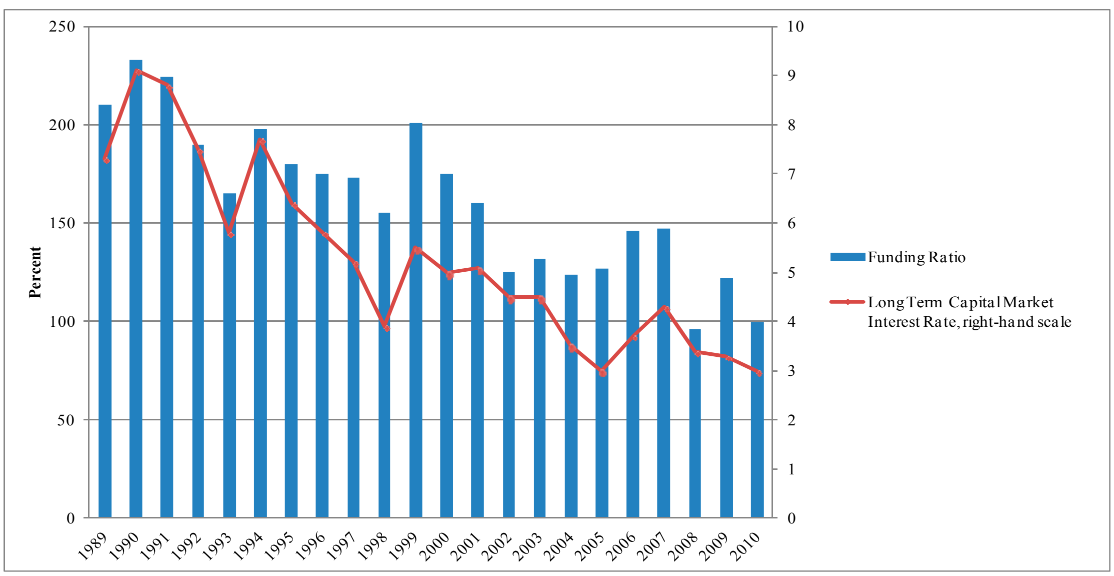
competent actuary authenticating the actuarial report is independent of the pension fund and will carry out no other work for the pension fund.

43. **Furthermore, the statements will be periodically accompanied by a statement concerning their reliability, issued by an auditor.** The auditor will authenticate the statements as evidence of the auditor's review of the statements.

Vulnerabilities and issues of the Second Pillar pension funds

44. **The recent financial crisis and interest rate decline have put the financial sustainability of the Dutch occupational pension system under severe strain.** The cover ratios or total market value of the assets of the pension funds as a percentage of their pension commitments have dropped from 130 percent in 2007 to an average of 95 percent in 2008, recovered to 110 percent at the end of 2009 and are now in the second quarter of 2010 down again around 100 percent, below regulatory solvency requirements. Figure 3 shows the development of the cover ratios, as well as the strong correlation with long term interest rates.

Figure 3. The Netherlands: Funding Ratio Development and Long Term Interest Rate

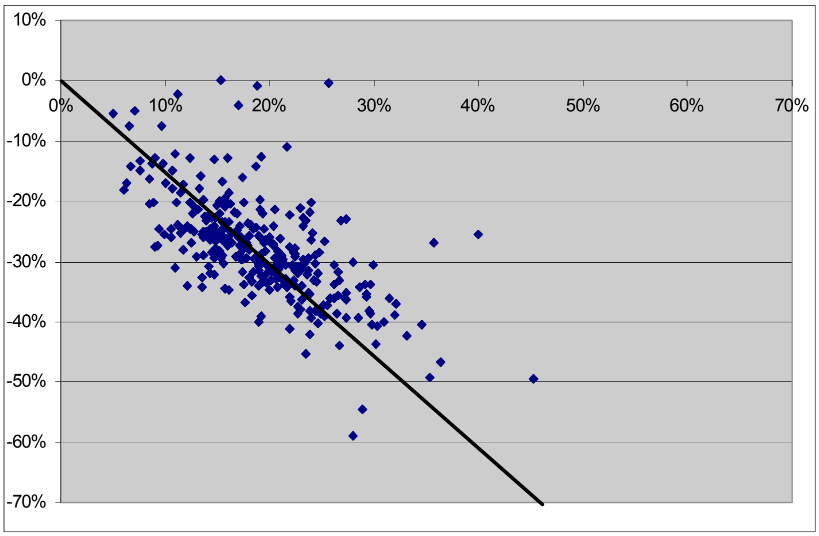


Source: DNB.

45. **The solvency requirements have proven to be in most cases in line with the amount of risk assigned to the portfolio.** Figure 4 indicates the strong correlation between the riskiness of the portfolio as expressed by the required solvency capital and the losses experienced by the pension funds. However there are major dispersions indicating the limits of the standard model to capture the risk of the existing pension fund portfolios.

46. **Cover ratios below 105 percent have triggered unprecedented technical and supervisory measures.** With a few exceptions pension plans stopped the conditional indexation of the accrued benefits for the last two years, 308 pension funds had to file supervisory recovery plans during 2008, and 7 of them are required to cut benefits in the next months.

Figure 4. The Netherlands: Solvency Requirements and Corresponding Losses During 2008



Source: DNB
Note: x-as: required capital in percentage of liabilities
y-as: decrease in funding ratio as a percentage of initial funding ratio

47. **Table 10 presents the progress of pension funds with their recovery plans.** The table is based on the number of pension funds which had a deficit in 2008. As of 2010 this group consists of 308 pension funds. Of these, currently 20 pension funds might have to reduce their accrued benefits or lower the future pension base. This decision will be made according to their progress with their existing recovery plans. Another option opened to DNB if a pension fund can not comply with its recovery plan is to request a mandatory transfer of the reserves to an insurer.

48. **The benefit cutting measures, all in congruency with the Pension Act, have been received by the public as an unexpected and almost unknown option in the pension contracts.** While the first pension fund that was scheduled to cut benefits has avoided the situation by adding solvency capital into the fund, the general belief of the Dutch population in the safety of their pensions and the untouched image of the pension funds is undergoing a major crisis.

Table 10. The Netherlands: Pension Funds Under Recovery Plans

	June 2010	July 2010	Aug 2010	Sept 2010	Oct 2010
Percentage funds in report	304 (97%)	302 (97%)	308 (99,7%)	308 (99,7%)	297 (96,4%)
Average funding ratio	100,3%	102,9%	96,0%	98,8%	99,9%
Percentage funds in funding ratio deficit	224 (71%)	181 (58%)	261 (87%)	233 (76%)	217 (71%)
Percentage funds in reserve deficit	71 (23%)	101 (33%)	34 (11%)	65 (21%)	65 (21%)
Percentage funds without deficit	9 (3%)	20 (6%)	5 (2%)	10 (3%)	15 (5%)
Percentage funds below existing recovery plan	196 (63%)	115 (37%)	267 (86%)	233 (76%)	209 (68%)
Percentage funds above existing recovery plan	108 (34%)	187 (60%)	41 (13%)	75 (24%)	88 (28%)

Source:DNB.

49. **Adding to the strain on the pension funds generated by the market risk and the image crisis, longevity risk materialized during 2010 as a result of the new mortality tables reflecting an unexpected important increment in the longevity of the Dutch population and their impact on pension fund liabilities.** The impact has resulted in the reduction in their cover ratio in average by seven to ten percentage points, implying an additional capital need of around € 50 billion.

50. **The transparency and risk sensitivity of the pension funds regulation, and the degree to which the supervisors have focused on these, have brought the sustainability issues of the second pillar system to the discussion table.** In June 2010 the social partners signed a pension accord highlighting the strategy to cope with the sustainability challenge. This Agreement also contains proposals regarding the future stability of the related state pension in the first pillar. The state pension and occupational pensions should be adapted to reflect the fact that the average Dutch citizen is living longer. The report states further commitment to collectivity, solidarity and compulsory membership, but opens the negotiations to strike a new balance between aim, security, solidarity and costs. Increasing contributions is ruled out, but the willingness to lower expectations and sureness of the pension benefits is open for discussion.

51. **The challenges facing the pension funds have lead the Minister of Social Affairs and Employment to set up a committee to examine the sustainability of Supplementary Pension Schemes.** The Goudswaard commission was charged with analysis as to whether, and to what extent, the current system of supplementary pensions is sustainable, and to suggest possible solutions to increase the system's ability to withstand financial shocks against the background of population ageing. The committee confirmed the need for adjustments to cope with current expectations, level of contributions, ageing population and

financial market conditions. Two possible approaches were suggested. Both modifications will require amendments to the Pension Act.

- The first solution would be based on the reduction of the cover ratio of currently 70 percent, together with a linkage of the retirement age to the life expectancy of the population.

- The second approach is a transfer to the participants of the longevity and investments risks, introducing soft guarantees and entitlements that will depend on the financial condition of the pension fund.

52. **Another area for consideration could be to improve the effectiveness of the pension system by separating the risk management strategy of the two major risks affecting pension funds, i.e. market risk and longevity risk.** One possibility would be to assign to current pension funds the responsibility to provide stronger guarantees and entitlements, but for only 20 or 25 years of payments. (The starting age of retirement would still be flexible). The pension's tail would have to be provided by another mechanism that could be more effective and tailor-made for the elderly, combining a larger base of participants and adjusting down the income but providing assurances on health expenses.

53. **This approach would require careful study to properly assess the cost gains.** As an indicator for the costs associated with the payments of the pension's tail, the FSAP stress test exercise included a proxy calculation of that cost. The results indicate a cost of 10 percent of the technical reserve for the payment of pensions beyond age 85, and 25 percent for pensions paid beyond age 80. A new mechanism to cover the tail risk must have a lower cost than the existing costs (including the gains related to an improved effectiveness of the pension funds linked to the reduced risk management responsibility).

54. **During the FSAP, the IMF staff, working closely with DNB, has carried out a top down stress test to assess the fragility of the Dutch second pillar system to particular financial market shocks.** The pension stress test consists of a series of single parameter top down tests to gain insight into the sensitivity of the system and on the cost of the tail of the pension payments.

55. **The stress testing exercise carried out highlights continued pension funds vulnerability to market risks.** They are particularly sensitive to low interest rate, equity and real estate risks. Furthermore, given their already low solvency coverage, in particular a continued low interest rates environment would appear to be detrimental for the system. Japan and the 50 percent low interest scenarios even lasting for only two years generate an average drop in cover ratio of 12 percent and 22 percent for each scenario on the large 10 pension funds. However, there are already pension funds that are hedging the low interest risk effectively, at least for a shorter duration of such a financial environment.

56. **The stress test also calculated the cover ratios assuming indexation of the future benefits.** The additional drop in cover ratio that resulted is over 30 percent underscoring the urgency of the discussions currently being carried out on the needed changes towards a strong and explicit conditionality of the indexation of future benefits including the accrued benefits.

Risk management and controls on investment policy

57. **Another area of vulnerability is the lack of risk controls prevalent in the pension funds, with a few exceptions.** The large number of small pension funds appears to pose a challenge to the compliance with regulation and supervision. At the request of the minister of Social Affairs and Employment, the Frijns Report examined how the investment policy, risk management, administration and governance of pension funds have developed since 1990 in relation to the aim and the risk acceptance level of pension funds. The relevant findings are in the areas of investment policy, risk controls, and governance:

- The importance of risk policy and how investment policy is implemented structurally undervalued.
- Management of the assets is outsourced without due attention to the outsourcing risks.
- The governance model is in need of improvement with respect to independence, expertise and accountability.

58. **The Pension Act and the FTK have clear and comprehensive requirements with respect to the investment activities of pension funds, and assign the responsibility to the board.** Pursuant Article 135 of the Pension Act, a pension fund must have an investment policy which is compliant with the prudent person rule. This article is based on Article 18 of the European Pension directive (2003/41/EG). The investment policy based on the prudent person rule is specifically based on the following premises: (i) the assets are invested in the interest of pension beneficiaries; (ii) investments in the contributing company are limited to a maximum of 5 percent of the portfolio as a whole, and if the contributing company belongs to a group, investments in the companies belonging to the same group as the contributing company are limited to a maximum of 10 percent of the portfolio. If a group of companies pays premiums to the pension fund, investments in these contributing companies will be made prudently, taking into account the need for appropriate diversification; (iii) the investments are valued at market price.

59. **Article 13 of the FTK contains further requirements to guarantee a prudent investment policy.**

- The assets are invested in such a way as to guarantee the safety, quality, liquidity and the return of the portfolio as a whole.

- Assets held as coverage for technical provisions are invested in a way that fits with the nature and duration of the expected future pension payments.

- Assets will primarily be invested in a regulated market. Investments in assets in non-regulated market will be restricted to a prudent level.

- Investments in derivatives are permitted in so far as they contribute to a reduction of the risk profile or increase the effectiveness of the portfolio management. Pension funds limit the concentration risk.

- Diversification of assets is required to prevent any dependence in certain assets and concentration risk.

60. **However the Report identified a series of inconsistent issues with the regulatory requirements in the industry.** In particular, the investment strategies do not appear to be aligned with the benefit expectations and demographic profile of the pension funds, and deficiencies in effective outsourcing controls and countervailing power at the board level were identified. DNB has responded to the findings by assigning resources and expertise to boost compliance in this area. A series of detailed analyses of the financial structure, the investments strategy, and risk controls of pension funds have been, and continue to be carried out. The supervision of investment firms and managers of investment funds is part of the 2010–2014 DNB supervisory themes.

Governance issues

61. **The responsibility assigned to board members is stated in the Pension Act.** The board of directors is ultimately responsible for the governance of the pension fund. Directors of pension funds should take care of (i) a solid financial structure and position to face the financial obligations to the participants, (ii) the risk-management within the pension fund, (iii) the governance of the pension fund, (iv) the operational management, (v) the asset management, (vi) pension fund's compliance with regulation, (vii) the external communication, and (viii) the contact with the supervisory authorities. Further, according to paragraph 1 of Article 33 of the Pension Act and Article 42 of the Obligatory Occupational Pension Schemes Act, pension funds have to set up their organization so as to guarantee sound management, in which, at a minimum (i) is given account to the entitlement and pension beneficiaries and the employer, for which purpose an accounting body is established, and (ii) is provided for internal supervision. Pursuant to paragraph 2 of these articles, further rules with respect to the first paragraph may be set out by Order in Council. These rules may specifically relate to compliance with the principles for sound pension fund management set

out in the Order in Council. Article 11 of the Decree on the Implementation of the Pension Act and the Obligatory Occupational Pension Schemes Act indicates the Guidelines for Pension Fund Governance of the Labour Foundation (Stichting van de Arbeid) as good principles for sound pension fund management. These guidelines relate inter alia to:

(i) the board (articles of association, regulations, segregation of functions, careful and fair weighing of stakeholder interests, transparency, communication, expertise);

(ii) accountability (active members, retired members, employee(s), assessment of past management and of policy projections); and

(iii) internal supervision by at least three independent experts (critical assessment of the performance of (the governing body of) a pension fund—its policy and governance procedures and processes—the way the fund is governed—assessment of the approach taken by the board vis-à-vis longer-term risks).

62. **The current regulation of the board structure puts stronger emphasis on the composition of a balanced board protecting the interest of all stakeholders.** With respect to industry-wide pension funds, Article 99 paragraph 1 of the Pension Act requires that the representatives of employers' associations and of employees' associations in the relevant sector or sectors hold equal numbers of seats on the board. As to company pension funds, Article 99 paragraph 3 of the Pension Act requires that employees' representatives hold at least as many seats on the board as employers' representatives, provided that if representatives of pension beneficiaries hold seats, then these representatives, together with the employees' representatives, must hold at least as many seats as the employers' representatives. Paragraph 5 of Article 99 of the Pension Act states that the appointment of the employees' representatives to the board of directors of a company pension fund takes place (i) after election of the representatives by and from the ranks of the scheme members, (ii) at the nomination of the representatives of the scheme members in a scheme members' council as defined in Article 110 of the Pension Act, (iii) at the nomination of the works council, or (iv) in another manner, so long as the works council has consented to the method of appointment.

63. **There are also provisions in the Pension Act with regard to the level of knowledge and expertise for the board of pension funds.** Article 99 and 105 of the Pension Act include requirements as to the composition of the board of industry-wide pension funds (*bedrijfstakpensioenfondsen*) and company-pension funds (*ondernemingspensioenfondsen*) and requirements in relation to policy, expertise and trustworthiness of their board members.

64. **With respect to the policy, expertise and trustworthiness of board members of industry-wide or company pension funds, Article 105 of the Pension Act requires that**

the matters of everyday policy of such pension funds will be determined by at least two natural persons who will, in the performance of their duties, follow the interests of the scheme members; former scheme members; other pension right-entitled persons; the pension beneficiaries and the employer; and/or the employees relevant to the pension fund, and will ensure that these parties can feel that the representation of these persons is balanced. Furthermore, Article 105 of the Pension Act requires that the policy of such pension funds will be determined, or partly determined, by persons with expertise relating to the operation of the pension fund's business (paragraph 3), and that the board of directors bears the responsibility for ensuring that the trustworthiness of persons co-determining the policy of the pension fund is beyond question (paragraph 5). Pursuant to Article 110 of the Obligatory Occupational Pension Schemes Act, the requirements with respect to the expertise and trustworthiness of board members apply equally to occupation pension funds (*beroepspensioenfondsen*). Chapter 7 of the Decree on the Implementation of the Pension Act and the Obligatory Occupational Pension Schemes Act (*Besluit uitvoering Pensioenwet en Wet verplichte beroepspensioenregeling*) amplifies the terms expertise and trustworthiness.

65. **Existing regulation does not require mandatory board committees.** The presence of board committees varies per pension fund; the board of directors of each fund decides whether it considers specific board committees necessary. Many pension funds have a pension committee, an asset management committee, an audit-committee and a committee for complaints/individual cases. Mandatory board committees, depending upon the pension fund's size and complexity, should be considered.

66. **The results of the Frijns Report, and the observations of the FSAP mission indicate, that more needs to be done in the area of expertise and knowledge at the board level.** In particular, due to the complexity of the product and the mandatory character of participation in the schemes, the effectiveness and accountability of the board needs to be significantly raised to provide better protection to the participants. In the light of the findings, DNB is currently elaborating new requirements that will mandate the incorporation of professional board members for pension funds above a certain size. This proposal will be ready for approval and transcription into regulation in the next months.

67. **While the principles of good governance are part of the Pensions Act (Article 33), the findings of the Frijns Report and a number of interviews carried out during the FSAP mission indicate that stronger implementation also in this area needs to happen.** DNB again has responded to these findings, making pension fund governance a central theme of its supervisory activities from 2010 to 2014. Allocating resources and new supervisory models to achieve a higher degree of compliance will be important.

68. **An additional area that needs to be addressed in this context is the exemption from the supervision that pension administration companies enjoy.** Most pension funds

outsource their pension operations to related pension administration organizations. Pension administrators are allowed to serve other pension funds, as well as to provide additional services like insurance. This cross selling strategy, in particular for the large industry-wide pension funds, has stagnated since the 2008 crisis, but has created institutions that are providing all the services to pension funds but are not subject to direct supervision. It is recommended to include a direct supervisory regime for these institutions.

D. Third Pillar

Framework of the system

69. **The third pillar is the provision of pensions through annuity products and retirement saving plans issued by insurers and banks, mainly for self-employed workers and higher income workers who would like to see an increased pension at retirement age.** Income from these annuity products can supplement the AOW and/or an occupational pension. Although anyone can enter into a private pension arrangement with an insurer, this system is often used by higher earners as a mean for deferring income tax, as much as to supplement other pensions. Compared to the second pillar, total assets under such annuity contracts are relatively small. The size of this pillar is estimated around € 7.5 billion, where two thirds of the assets are managed by insurers and one third by banks after only 2 years some banks have been allowed to sell similar tax deferred retirement saving products. The trend to increase the banking share in this activity appears to be confirmed.

70. **There are several types of products in third pillar schemes that are tailor-made to the customer's needs and risk profile.** The industry offers unit linked products, with profit policies, and products with fixed interest guarantees. The payout of these products can be in the form of an annuity or a lump sum to purchase an annuity:

- Annuity insurance: A fixed term, consistent and periodical payment for either a fixed period of years sold by insurers and banks, or having a lifelong payment period offered only by insurers.

- Retirement saving plans: A lump sum payment to purchase annuity. The interest components can remain free from taxation, if certain conditions on premium payments are met. This product can be offered by banks and insurers. The insurance product adds a death benefit protection.

APPENDIX I: PENSION ASSETS INVESTED AT PENSION FUND'S RISK

Pension assets invested at pension funds' risk EUR Million, end of period	Total pension funds			Share in %
	2009Q4			
	Excl. Derivatives		Incl. Derivatives	
Real estate investments				
By type				
Direct investments in real estate	17,155	0	17,155	2.6%
Indirect investments in real estate	49,116	-53	49,063	7.4%
By currency				
Euro	47,795			
Non euro	18,476			
Total real estate investments	**66,271**	**-53**	**66,218**	**10.0%**
Equities				
By type				
Mature markets	172,488	490	172,979	26.1%
Emerging markets	32,550	5	32,555	4.9%
Private equity	18,668	-5	18,664	2.8%
Investment funds	11,379	6	11,385	1.7%
By currency				
Euro	85,259			
Non euro	149,826			
Total equities	**235,085**	**497**	**235,582**	**35.5%**
Fixed yield securities				
By type				
Government bonds, Non index-linke	119,996	6,750	126,745	19.1%
Index-linked bonds	42,509	-266	42,243	6.4%
Mortgage loans	31,807	26	31,833	4.8%
Credits	104,452	1,981	106,432	16.0%
Investment funds	8,738	67	8,805	1.3%
Short term claims on banks	14,190	-1,265	12,926	1.9%
By currency				
Euro	255,154			
Non euro	66,538			
By rating				
AAA	149,940			
AA	50,952			
A	46,172			
BBB	27,924			
Lower then BBB	24,515			
No rating	22,187			
Total fixed yield securities	**321,692**	**7,293**	**328,985**	**49.6%**
Other investments				
By type				
Hedge funds	20,338	29	20,366	3.1%
Commodities	10,019	737	10,756	1.6%
Investments funds	3,301		3,301	0.5%
Liquid assets	9,005	-320	8,685	1.3%
Other	-10,511	528	-9,983	-1.5%
By currency				
Euro	15,155			
Non euro	16,997			
Total other investments	**32,152**	**974**	**33,125**	**5.0%**
Total investments at funds' risk				
By currency				
Euro	403,364			
Non euro	251,836			
Total investments at funds' risk	**655,200**	**8,710**	**663,910**	**100.0%**

Source: DNB