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June 2024

TECHNICAL NOTE ON INSURANCE AND PENSION FUND REGULATION AND SUPERVISION

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TECHNICAL NOTE

INSURANCE AND PENSION FUND REGULATION AND SUPERVISION

Prepared By
Monetary and Capital Markets Department

This Technical Note was prepared in the context of the Financial Sector Assessment Program mission for the Netherlands, led by Naomi Griffin. It contains technical analysis and detailed information underpinning the FSAP's findings and recommendations. Further information on the FSAP can be found at https://www.imf.org/en/Publications/fssa

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Glossary

AFM	Autoriteit Financiële Markten
APF	General Pension Fund (*Algemeen pensioenfonds*)
ATM	Risk-based supervision methodology (*Actualisatie Toezicht Methodologie*)
CMG	Crisis Management Group
DB	Defined Benefit
DC	Defined Contribution
DNB	De Nederlandsche Bank
EEA	European Economic Area
EIOPA	European Insurance and Occupational Pensions Authority
EU	European Union
EUR	Euro
FSAP	Financial Sector Assessment Program
GDP	Gross Domestic Product
GWP	Gross Written Premiums
IAIG	Internationally Active Insurance Group
IAIS	International Association of Insurance Supervisors
ICP	Insurance Core Principle
IFRS	International Financial Reporting Standard
IM	Internal Model
IOPS	International Organisation of Pension Supervisors
IORP	Institutions for Occupational Retirement Provisions
LAC_DT	Loss-Absorbing Capacity of Deferred Taxes
MCR	Minimum Capital Requirement
MoF	Ministry of Finance
MoSA	Ministry of Social Affairs and Employment
NCA	National Competent Authority
OECD	Organisation for Economic Cooperation and Development
ORSA	Own Risk and Solvency Assessment
PPI	Premium Pension Institution
PW	Pension Act (*Pensioenwet*)
QRT	Quantitative Reporting Template
SCR	Solvency Capital Requirement
VA	Volatility Adjustment
WFT	Financial Supervision Act (*Wet op het Financieel Toezicht*)

EXECUTIVE SUMMARY

The Dutch insurance sector is undergoing further consolidation, the life sector has been steadily shrinking over the last two decades, and the non-life market is relatively saturated. Sales of new life products, especially individual life business, have decreased since the early 2000s, putting pressure on the business models of life insurers. The non-life market is dominated by compulsory health insurance, which covers medical expenses and has replaced public health insurance in the 1990s. Dutch insurers have also become more domestically oriented–among the large life insurers (or their respective parent groups), those who received government funding during the global financial crisis were required to restructure parts of their business.

Investment exposures to real estate are increasing, and Dutch insurers are large providers of mortgage loans. Over the past years, the allocation to illiquid assets has increased, specifically at larger life insurers. While banks are the biggest mortgage lenders in the Netherlands, insurers are quite active in this segment as well, accounting for around 9 percent of mortgage loans to households. All four biggest insurers have their own mortgage subsidiaries for direct consumer mortgage lending, and several other insurers lend indirectly through mortgage funds. The concentrated mortgage loan exposures contribute to a significant home country bias.

Solvency ratios of Dutch insurers are well above the regulatory threshold, but below the EU average and furthermore distorted by the mechanics of the 'Long-Term Guarantee Measures' in Solvency II. The Volatility Adjustment has a significant impact on Dutch life insurers, resulting in a higher Solvency Capital Requirement (SCR) ratio for those firms using it. This effect—larger than in other EU countries—is driven by certain structural features of the Dutch life insurers' balance sheets: the durations of technical provisions that are considerably longer for Dutch life insurers than for many of their European peers; and the large investment exposure towards mortgage loans that is not properly reflected in the 'representative portfolio' which is used by EIOPA to calculate the Volatility Adjustment (VA).

The Dutch pension system—considered to be among the best according to international comparisons—rests on three pillars. It comprises (i) a public, pay-as-you-go, scheme guaranteeing a minimum pension; (ii) the mandatory occupational schemes; and (iii) voluntary pension savings. The second pillar is provided through occupational pension schemes into which employer and employees pay contributions. It is a fully funded system and, for most employees, participation in a pension plan is automatically linked to the employment contract, resulting in a high coverage of employees; at the same time, very few self-employed people are covered. Total pension fund assets amount to around EUR 1.5trn, making the Netherlands the fourth largest pension fund market globally in absolute amounts, and third if measured against GDP. Consolidation in the pension fund sector is an ongoing process, and the sector is highly concentrated, with the two largest funds holding a combined market share of 47 percent.

Most pension schemes are defined-benefit pensions which have come under pressure since 2008, when low interest rates resulted in declining funding ratio and led to an overall loss in

confidence in the system. Besides the fact that many pension funds have not been able to achieve their ambition of indexing pensions for many years, some funds have actually had to reduce pension benefits. Only with rising interest rates since 2022, funding ratios have improved, and the indexation of benefits was resumed by many pension funds. Furthermore, Dutch people are living longer and requiring a pension for longer, while the membership from younger cohorts paying contributions is declining. Finally, there are more self-employed and freelancers who accrue little or no pension in the second or third pillars and who will therefore rely heavily on the first pillar as a basic pension.

On 1 July 2023, the Future of Pensions Act came into force which brings a transition from the current defined-benefit to a defined-contribution system by 2028. The new system aims at reducing potential tensions between generations and providing a better alignment of how different age cohorts can take and bear risks. The new system is also better suited to the modern labor market, including more flexible work arrangements. The strengths of the current system are maintained, including the collective investment policy and the strong governance framework for pension funds.

The Dutch system for independent state agencies, including De Nederlandsche Bank (DNB) and Autoriteit Financiële Markten (AFM), carefully balances powers and accountability. The yearly budget process is well elaborated by the supervisory authorities, incorporating supervisory objectives and key performance indicators. While the next stages of the budget process are effective in practice, the Dutch authorities are encouraged to further detail its structure, to provide additional safeguards to supervisory independence. As DNB and the AFM compete on the labor market for a similar range of experts as financial institutions, the competitiveness of both authorities' jobs should be measured against similar jobs in the financial industry. Supervisory cooperation between DNB and the AFM is well-established.

Supervision of insurers and pension funds is effective in the Netherlands. DNB's supervisory approach is risk-based, intrusive and transparent. It builds on well-developed supervisory tools which support strategically focused and ongoing supervisory dialogue with insurers and pension funds. The governance, behavior, and culture frameworks have been applied in practice, delivering concrete findings and recommendations that have been enforced and followed up. In this regard, DNB has leveraged the roles of institutions' supervisory boards, including their independent members, to channel messages to insurers' and pension funds' management. The AFM has upgraded its supervisory approach by further leveraging on data and aiming for a more forward-looking perspective.

The FSAP encourages the authorities to maintain their robust supervisory approach and to refine certain aspects of it. DNB's new risk-based supervision methodology should be regularly reviewed with further backstops added, including a few regular on-site inspections even for the smallest insurers. The institutional structure could benefit from a periodic benchmarking of supervisors' salary levels against relevant peers in the financial industry, and an even closer collaboration between DNB and the AFM in their engagement with financial institutions and in data sharing. Generally, it will be increasingly critical to be able to collect data necessary for supervision and to apply advanced technologies to analyze such data—including connecting data from different

sources. On the risk side, insurers' mortgage lending and pension funds' dependence on repo markets call for close monitoring.

Going forward, supervision must reflect a changing market landscape. It will be essential to closely monitor and proactively manage potential risks of the pension system transition for the authorities related to resources and legal risks. In this context, reviewing the role of internal control functions in the pension funds will be key. Furthermore, dealing effectively with cross-border insurance business, striving for greater supervisory convergence in the European Union, and expanding the macroprudential toolkit are recommended.

Table 1 provides the main recommendations to enhance insurance and pension fund supervision in the Netherlands.

Table 1. The Netherlands: Main Recommendations

#	Recommendations	Addressee	Timing*	Priority**
Risks and Vulnerabilities				
1	Intensify the analysis of insurers' mortgage loans and develop suitable stress testing approaches (¶14)	DNB	ST	H
2	Closely monitor pension funds' repo transactions, amend supervisory reporting where necessary, and perform liquidity stress tests which incorporate a drying-up of repo markets (¶33)	DNB	I	H
Institutional and Regulatory Structure				
3	Define intermediate steps in the budgetary process to provide additional safeguards to the independence of DNB's supervisory function and of the AFM (¶41)	MoF, DNB, AFM	ST	M
4	Implement the practice of periodic benchmarking of supervisors' salary levels against relevant peers in the financial industry (¶43)	MoF, DNB, AFM	ST	M
5	Explore further options to benefit from the second and third lines of defense in strengthening supervisory processes (¶48)	DNB	MT	M
6	Ensure maximizing opportunities for collaboration between DNB and AFM, especially to jointly engage with financial institutions and to share data, through systematic measures (¶51)	DNB, AFM	ST	M
Insurance and Pension Fund Supervision				
7	Review the thresholds for impact classes in ATM, and incorporate additional elements of systemic importance. Consider using a slightly larger (and even) number of impact classes (¶79)	DNB	ST	M

Table 1. The Netherlands: Main Recommendations (Concluded)

#	Recommendations	Addressee	Timing*	Priority**
8	Explore opportunities to develop largely automated supervisory tools based on advanced technologies – able to learn and adapt by using algorithms and statistical models – allowing processing of large data sets (¶86)	DNB	MT	M
9	Expand the number of on-site inspections for insurers in the lowest impact class, as a backstop to the risk-based approach (¶91)	DNB	ST	H
10	Further clarify the requirement of independent supervisory board members in law (¶97)	MoF, MoSA	MT	H
11	Enact a clause which would allow the AFM to collect data points relevant to conduct supervision (¶108)	MoF, MoSA	ST	M
12	Expedite work on the Life Insurance Dashboard, and (also for Non-Life) ensure that timely data is available (¶109)	AFM	ST	M
13	Closely monitor and proactively manage potential risks of the pension system transition for the authorities related to resources and legal risks (¶124)	MoSA, DNB, AFM	C	H
14	Closely monitor the effectiveness of internal control functions in the transition process, and emphasize the important role of all pension funds' internal control functions in the transition process, including the actuarial function and internal audit (¶125)	DNB	I	M
15	Require the IAIG to participate in the IAIS's Monitoring Phase for the Insurance Capital Standard (¶130)	DNB	I	M
16	Explore, in collaboration with EIOPA, ways to strengthen supervision of cross-border business, including a review of how cooperation through platforms could be strengthened, and promote further supervisory convergence (¶131)	DNB	ST	M
17	Enact a clause which would allow DNB to cap dividend payments of insurance undertakings, based on macroprudential reasons (¶137)	MoF	ST	M

* C = Continuous; I = Immediate (within one year); ST = Short Term (within 1-3 years); MT = Medium Term (within 3-5 years).

** H = High; M = Medium; L = Low.

INTRODUCTION[1]

1. **This technical note analyzes the key aspects of the regulatory and supervisory regime for insurance undertakings and occupational pension funds in the Netherlands.** The analysis is part of the 2024 Financial Sector Assessment Program (FSAP) and based on the regulatory framework in place and the supervisory practices employed as of June 2023. This note is based on a review of regulations, market analyses, and meetings with the Dutch authorities, in particular De Nederlandsche Bank (DNB) and Autoriteit Financiële Markten (AFM). The FSAP team also met with representatives from the Ministry of Finance (MoF), the Ministry of Social Affairs and Employment (MoSA), insurance undertakings, pension funds, industry associations, and other private sector bodies. The work benefited greatly from their readiness to openly discuss critical issues and share information.

2. **The FSAP reviewed recent developments and the structure of the Dutch insurance and pension fund sector.** The insurance sector, in particular the life business, has been in a consolidation phase for the last two decades, but is still sizable. A mandatory health insurance system results in a high non-life penetration. The occupational pension fund sector is very large, well developed, and currently undergoing a transition from a defined-benefit to a defined-contribution regime.

3. **The note does not include a detailed assessment of observance of the global standards for insurance or pension fund oversight; instead, the FSAP carried out a focused review of the legislative framework and supervisory practices.** For insurance oversight, the Insurance Core Principles (ICPs)[2] as published by the International Association of Insurance Supervisors (IAIS) in November 2019 provided the relevant benchmark, including the standards on the Common Framework for the Supervision of Internationally Active Insurance Groups. The ICPs selected for review are broadly those with macrofinancial relevance[3] and those where material regulatory changes have occurred since the last FSAP. They include the ICPs on solvency requirements (ICP 17), corporate governance and risk management (ICPs 7, 8, 16), supervisory approach (including supervisory authority, supervisory review, and macroprudential surveillance; ICPs 1, 2, 9 and 24), conduct of business (ICP 19), group supervision and cross-border cooperation (ICPs 23 and 25). In respect of the eleven ICPs analyzed in the note, the Dutch authorities provided a full self-assessment, supported by examples of actual supervisory practices and assessments. As the Principles of the International Organisation of Pension Supervisors (IOPS)[4] are not very detailed, the review of pension fund oversight was also guided by selected ICPs, and relevant legislation in the

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[1] The main author of this note is Timo Broszeit, IMF external expert on insurance and pension fund regulation.

[2] IAIS Insurance Core Principles, November 2019.

[3] A Macrofinancial Approach to Supervisory Standards Assessments, IMF, August 2014.

[4] IOPS Principles of Private Pension Supervision, November 2010.

European Union, including the Institutions for Occupational Retirement Provisions (IORP) Directive II[5] and the Solvency II framework for insurers.[6]

4. The previous FSAP in 2017 made several recommendations to strengthen the regulatory framework and supervisory practices. Regarding insurance oversight, it was recommended to closely monitor the Solvency II implementation, specifically on the methodology for the ultimate-forward rate, the loss absorbance capacity of deferred taxes, and the volatility adjustment—pillar 2 powers, such as dividend payout restrictions and capital add-ons, should be exercised if necessary. It was further recommended to establish mechanisms to credibly enforce national market conduct regulation with regard to incoming cross-border business. Regarding pension fund oversight, it was recommended to strengthen certain aspects of the pension law, such as the requirements for advice provided by a pension fund, or the rules on the amount of costs or the suitability of pension products. The FSAP further noted that the pension law did not require supervision of service providers to which activities of pension funds have been outsourced, and that direct oversight of their governance and staff qualifications at group level should be considered.

5. Further technical notes of this FSAP elaborate on aspects specific to the insurance and pension fund sectors. The Technical Note on Systemic Risk Analysis summarizes stress test results and elaborates more on risks and vulnerabilities for both sectors. In the Technical Note on Climate Risk Oversight, the regulatory and supervisory framework is reviewed—inter alia—against the IAIS Application Paper on the Supervision of Climate-related Risks in the Insurance Sector.

INSURANCE MARKET STRUCTURE[7]

6. The Dutch insurance sector is undergoing further consolidation: the life insurance market in the Netherlands has been steadily shrinking over the last two decades and also the non-life market is relatively saturated (Figure 1). As of end-2022, 22 life insurers were licensed (including third-country branches and funeral insurers), down from 36 five years earlier and from 138 in 2002. In the non-life sector, the number declined from 251 in 2002 to 107 at end-2022 (including third-country branches). Furthermore, seven reinsurers were established in the Netherlands in 2022. Mergers and acquisitions to improve operational cost efficiency have been the driving factor both in life and non-life. At the same time, Dutch insurers have become more domestically oriented: especially the large life insurers which some received government funding during the global financial crisis were required to restructure parts of their business. As a result, the

[5] Directive (EU) 2016/2341 of the European Parliament and of the Council of 14 December 2016 on the activities and supervision of institutions for occupational retirement provision (IORPs)

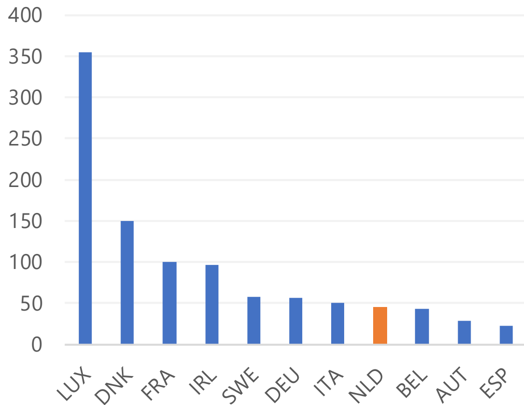
[6] Directive 2009/138/EC of the European Parliament and of the Council of 25 November 2009 on the taking-up and pursuit of the business of Insurance and Reinsurance (Solvency II)

[7] A detailed discussion of risks and vulnerabilities in the insurance sector is included in the Technical Note on Systemic Risk Analysis.

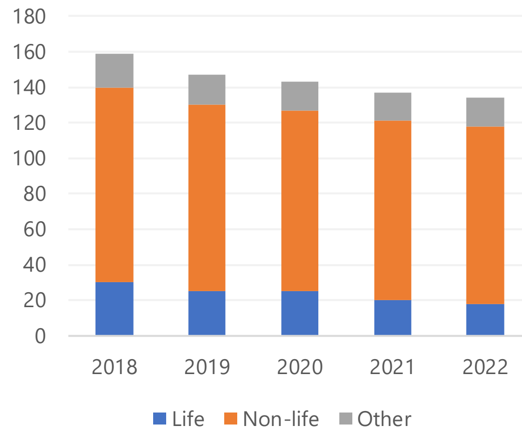
total amount of balance sheet assets (EUR 445bn as of mid-2023) corresponds to only 43 percent of GDP, lower than for several of the European peers.

Figure 1. The Netherlands: Size and Structure of the Insurance Sector

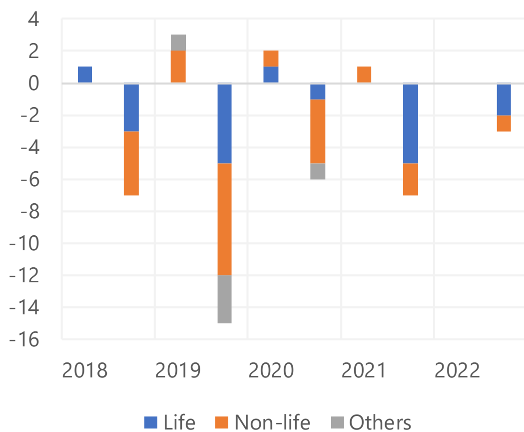
Given the dominance of non-life business, the insurance sector in the Netherlands has not accumulated a very high amount of assets compared to peers: relative to GDP only 43 percent in 2023 (2022: 46 percent).



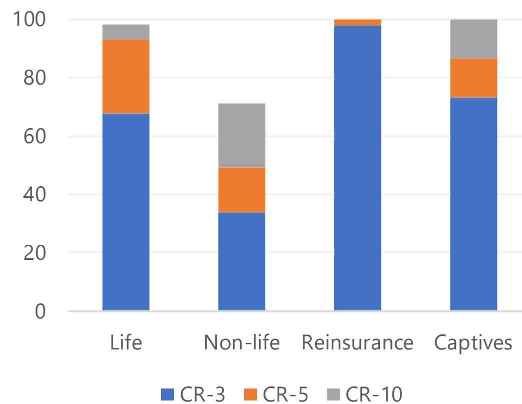
A consolidation trend in the sector started around two decades ago and has decelerated recently. Still, 136 insurers are licensed in the Netherlands, of which are 107 non-life insurers.



While new insurers still enter the market occasionally, the number of exits has been much larger in recent years, mostly driven by mergers and acquisitions.



Especially the life sector is rather concentrated with the three largest firms reaching a market share of two thirds. In the non-life sector, the ten largest insurers reach a market share of 71 percent.



Source: IMF staff calculations based on DNB, EIOPA, Eurostat, European Commission.

7. Due to the consolidation, the concentration in the sector has increased. The three largest life insurers already account for a market share of 67 percent, and the largest ten cover almost the entire market. In the non-life sector, the market is less dominated by the largest firms: the top three firms account for a third of the market, and the top ten hold a cumulated market share of 70 percent.

8. Sales of new life products, especially individual life business, have decreased since the early 2000s, putting pressure on the business models of life insurers. Legislative changes like the Dutch Bank Savings Act of 2008 allowed banks to offer tax-friendly savings products, while the favorable tax treatment of savings-linked and unit-linked insurance was restricted. The cost of life insurance also rose due to falling interest rates and increased life expectancy. As a result, the Dutch life market is currently relatively small. Unlike in other markets, the Netherlands has not seen a significant shift from guaranteed life products to unit-linked products in recent years. In 2022, 31 percent of gross premiums were collected for unit- and index-linked products, just a little more than for 'other life' products which include term life insurance and immediate annuities (Table 2). A major loss of confidence was caused after certain life products sold in the 1990s and early 2000s had charged more costs than communicated to policyholders and had made unrealistically high return promises (the "usury policies scandal"). The collective (pension) business has developed more positively, as declining interest rates and the pension scheme reform resulted in some significant transfers, especially from small single-employer pension funds towards insurance providers. With the new pension system, life insurers might gain further market shares in the pension market.

9. After some years of stagnant growth, Dutch non-life insurers' premiums have recently returned to modest growth. The non-life market is dominated by compulsory health insurance, which covers medical expenses and has replaced public health insurance in the 1990s. Health insurance premiums for hospital care and other cure-based health claims keep rising and reached EUR 52bn in 2022 (79 percent of the total non-life market). The Covid-19 pandemic led to a breach of structural growth patterns, though: in 2020/21, hospitals and health professionals had to cancel regular medical treatments because of lockdowns and revenues were guaranteed through a system of so-called continuity schemes. In the other large non-life lines of business—motor and fire, accounting for 8 and 6 percent of total non-life premiums—profitability has gradually improved recently. Although losses are still regularly incurred in third-party motor liability, these have become less significant and can be more easily absorbed with proceeds from fully comprehensive motor insurance. Profitability of property and casualty insurers took a hit in 2021 due to the flood in the provinces of Limburg and Noord-Brabant. In addition, there are signs of a rising trend in cyber claims.

Table 2. The Netherlands: Insurance Premium Income

The non-life sector records annual premiums more than four times higher than in the life sector, with 79 percent of premiums coming from (mandatory) medical expense insurance. Non-life insurance generates only a very low amount of reinsurance premiums.

Premiums - Life business 2022, in EUR million	Gross written premiums	Net written premiums
Index-linked and unit-linked insurance	4,572	4,458
Other life insurance	4,466	2,867
Health insurance	2,495	2,154
Insurance with profit participation	1,993	1,814
Health reinsurance	138	69
Life-reinsurance	948	926
Total	**14,612**	**12,289**

Premiums - Non-life business 2022, in EUR million	Gross written premiums - direct business	Gross written premiums - proportional reinsurance accepted	Gross written premiums - non-proportional reinsurance accepted	Net written premiums
Medical expense insurance	52,222	13	--	52,167
Fire and other damage to property insurance	3,946	310	--	3,762
Motor vehicle liability insurance	2,993	14	--	2,895
Other motor insurance	2,322	0	--	2,138
Income protection insurance	1,856	5	--	1,818
General liability insurance	1,014	47	--	998
Legal expenses insurance	676	167	--	545
Assistance	348	0	--	347
Miscellaneous financial loss	324	7	--	320
Marine, aviation and transport insurance	310	4	--	281
Credit and suretyship insurance	32	0	--	20
Workers' compensation insurance	0	4	--	4
Non-proportional reinsurance	--	--	279	80
Total	**65,952**	**571**	**279**	**65,375**

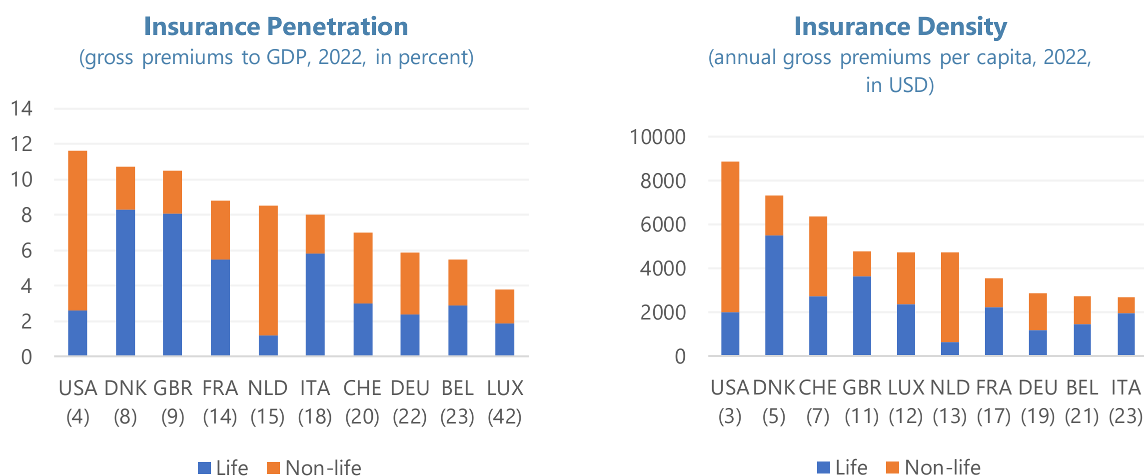
Source: DNB.

10. The Netherlands records the 15th highest insurance penetration globally, mostly driven by the large premium income generated in health insurance (Figure 2). With EUR 81bn of gross written premiums in 2022, the Netherlands hosts the fifth largest insurance sector in the European Union (EU). The Dutch life insurance penetration rate (premiums to GDP) of 1.2 percent ranges considerably below the average for advanced markets (3.7 percent) and the EU (3.4 percent); however, non-life penetration reaches 7.3 percent and stands out in comparison with other advanced markets and EU member states (5.8 and 3.0 percent, respectively). The insurance density (premiums per capita) reached USD 657 (life) and USD 4,074 (non-life) in 2022.

Figure 2. The Netherlands: Insurance Penetration and Density

Insurance penetration (premiums to GDP) in the Netherlands is the 15th highest globally, with a particularly high amount of non-life (health) insurance.

The Netherlands ranks 13th in insurance density with annual premiums per capita reaching more than USD 4,700, of which more than 4,000 are spent on non-life insurance.



Source: Swiss Re Sigma.

11. There is an increasing share of foreign insurers in the Dutch non-life market. About five years ago, there was strong interest of private equity firms in taking over ownership of insurers, at prices above the business priced on the swap curve. The investors aimed at bringing forward profits and receiving dividends. Occasionally, this was accompanied by asset-intensive reinsurance, that would transfer both assets and liabilities to a group-internal reinsurer located in a jurisdiction with a less strict supervisory regime compared to Solvency II. DNB has pointed out the risks involved in asset-intensive reinsurance. Furthermore, in order to address supervisory concerns and to better protect policyholders, it is no longer possible for non-EU/EEA insurance undertakings to carry out insurance activities in the Netherlands without a local establishment of an insurance undertaking.

12. In the Netherlands, insurtechs have developed rather gradually and are not seen as disruptive to the traditional insurance sector. Insurtechs are active in the Netherlands with a wide range of services, from insurance pricing to robo advice and prevention. They also offer digitalization services and assist in areas such as fraud detection and claims handling. One example of innovation is a motor insurance policy that rewards safe driving with discounts and penalizes risky driving through a surcharge—measured by a device installed in the policyholder's car. First robo-advice concepts have been launched in the Netherlands, e.g., automated advice on disability insurance, developed for one of the largest Dutch insurers by a small insurtech start-up. The AFM has formulated points for attention for automated advisory services in the insurance sector and has recently outlined how technology could affect the insurance sector in the next decade.[8] DNB has

[8] Technology towards 2033, the future of insurance and supervision, AFM April 2023.

also been monitoring insurtech developments: starting with explorative research in 2017/18, followed by a thematic identification of issues related to risk management and business models, and an investigation into the development of artificial intelligence and its application by insurers. So far, insurtech-related innovations such as cloud solutions have been used for operational excellence, e.g., to make the administrative handling more convenient, personalized and less labor-intensive. The study on artificial intelligence shows that advanced data analysis allows insurance agencies to differentiate premiums and customer acquisitions to the point where uninsurability may become a problem. Insurers might use this possibility for targeting specific (more profitable) groups of clients.

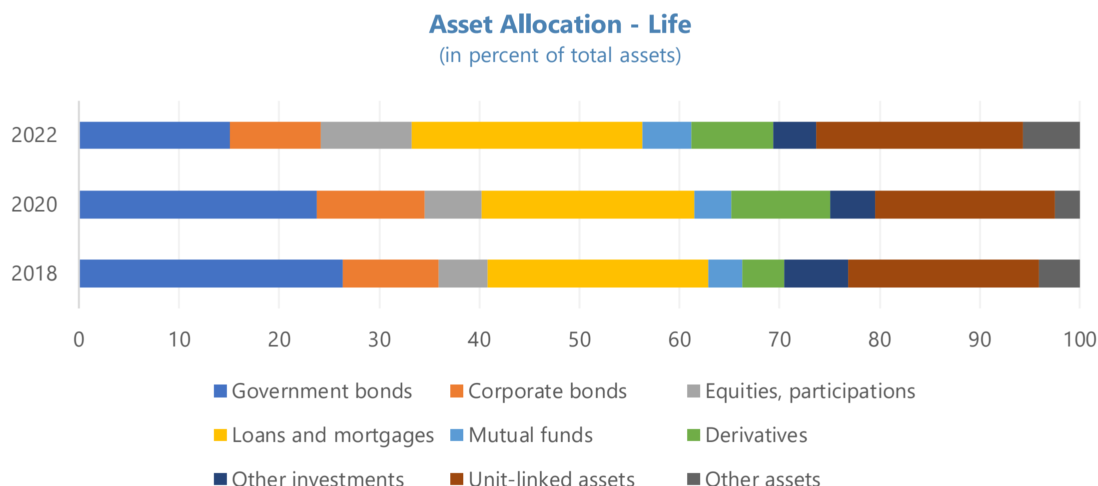
13. Investment exposures to real estate are increasing, and Dutch insurers are large providers of mortgage loans (Figure 3). The investment asset allocation is characterized by sovereign bond and equity holdings which are relatively in line with the average allocation of EU/EEA insurers—in the life sector, these account for 15 and 9 percent of total assets as of end-2022, and in the non-life sector, these account for 14 and 13 percent, respectively. Especially in 2022, the relative share in bonds has declined significantly due to the decline in bond prices, and even before then insurers reduced their holdings in this low-yielding asset class. Notable is the large amount in real estate and mortgage loans: since 2016 there has been a steady increase from about 13 percent of total assets exposed to direct real estate (including mortgage exposures) and 1.2 percent to indirect real estate to 18.5 and 3.5 percent, respectively in 2022. While banks are the biggest mortgage lenders in the Netherlands, insurers are quite active in this segment as well, accounting for around 9 percent of mortgage loans to households. The four biggest insurers each have mortgage subsidiaries for direct consumer mortgage lending, and several other insurers lend indirectly through mortgage funds. Insurers typically take vertical slices of these mortgage funds on their balance sheet. In 2023, DNB analyzed exposures, risk management and lending conditions. It also collects data from the larger insurers on loan-to-value ratios.

14. Recommendation 1: Intensify the analysis of insurers' mortgage loans and develop suitable stress testing approaches. This should include an obligation for insurers providing mortgages to periodically update the information about the interest-only mortgage client's financial situation.

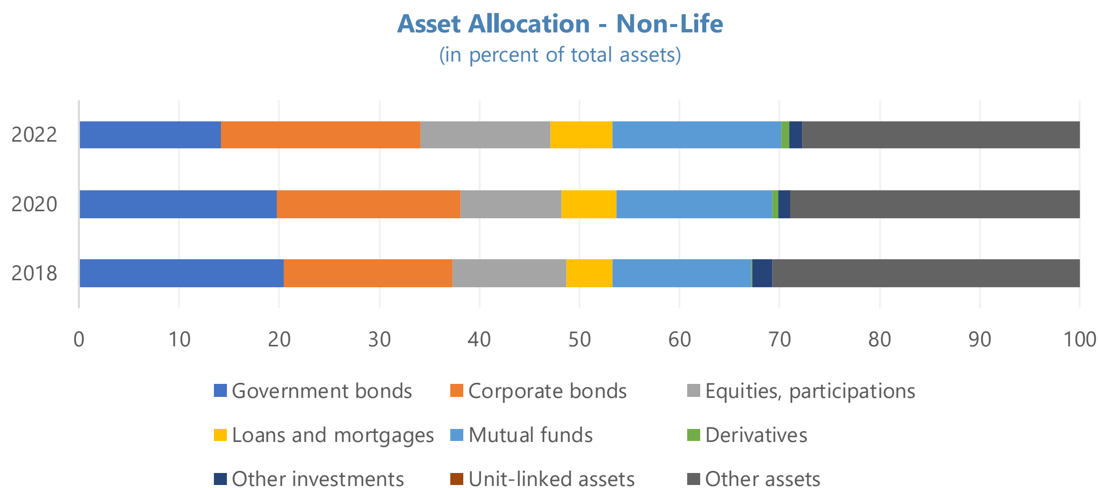
15. The concentrated mortgage loan exposures contribute to a significant home country bias. Domestic investments account for 42 and 50 percent of all life and non-life insurers' investments, respectively. Other relevant investment markets are Germany (9 percent), France (8 percent) and the United States (6 percent). Home bias is not only driven by domestic mortgage loans, but also visible in other asset classes, e.g., 54 percent of equity holdings and participations are domestic. Bond exposures are more diversified, with only 22 percent of government bonds and 16 percent of corporate bonds being domestic; moreover, the credit quality of the bond portfolio is very high.

Figure 3. The Netherlands: Insurers' Investment Asset Allocation

Since 2018, life insurers have expanded their holdings in equities (from 5 to 9 percent of total balance sheet assets), while reducing their exposure to (low-yielding) government bonds (from 26 to 15 percent)—the recent price declines in the bond market have also contributed to this relative shift. Loans and mortgages account for a rather constant share of 23 percent.



Non-life insurers invest around one third of their total assets in government and corporate bonds and hold a considerably lower share of loans than life insurers.



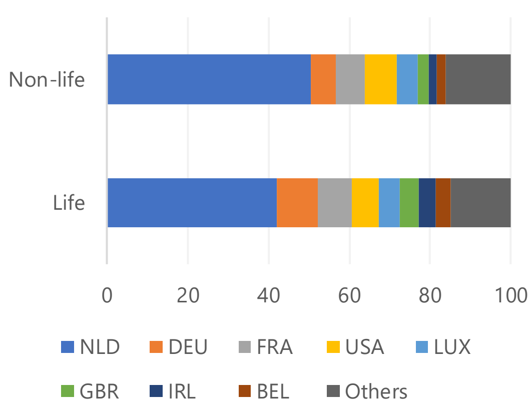
Source: IMF staff calculations based on DNB.

Figure 3. The Netherlands: Insurers' Investment Asset Allocation (Concluded)

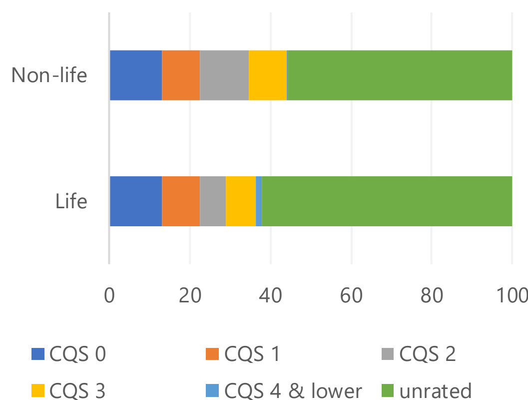
The geographic breakdown of assets is biased domestically, mainly through holdings of government bonds and mortgage loans. Foreign assets are well diversified across the Euro area and globally.

Fixed-income assets are of a very high credit quality, but loans and mortgages naturally do not have an external rating.

Insurance Assets: Country Allocation (in percent of total assets)



Insurance Assets: Ratings (in percent of total assets, fixed-income only)



Source: IMF staff calculations based on DNB.

16. Over the last years, an increase in the allocation to illiquid assets has been observed, specifically at larger life insurers. The increase in these assets is predominantly funded by reducing the allocation to listed bonds and equity. Increases in the allocation have occurred mainly in direct lending, private equity and debt (funds), infrastructure, and collateralized loans. While the ease of access to illiquid assets through funds increases (mortgage and private loan funds) access to some illiquid asset categories remains uneven between the largest insurers. Partnerships with asset managers with illiquid asset expertise and access is seen by the biggest insurers as a requirement to access illiquid asset categories. Lastly, DNB observes that institutional investors in general are adding illiquidity by turning to private assets in the field of sustainable and impact investments.

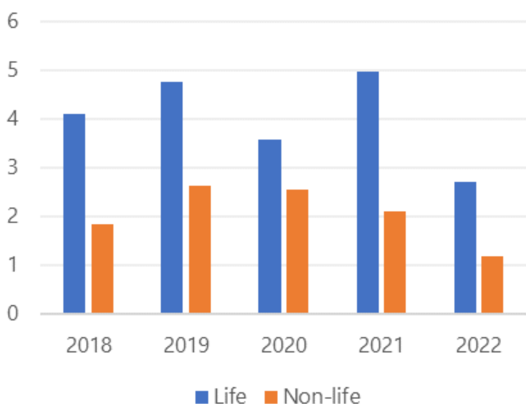
17. The main types of derivatives used by insurers are interest rate swaps and FX forwards, and—to a lesser extent—equity put options. New derivative positions are almost exclusively centrally cleared, as the largest six insurers—accounting for 97 percent of the outstanding notional—fall under the central clearing obligation. Out of all open-interest rate derivative positions, about a third has a central counterparty as counterpart.

18. The profitability of Dutch insurers took a hit in 2022, after a few years of moderate profits (Figure 4). Investment yields of life insurers fell to 2.7 percent after having fluctuated between 3.6 and 5.0 percent since 2018; a similar trend was seen in the non-life sector. More relevant for non-life insurers is the combined ratio—the sum of claims and expenses divided by premiums—which has been rather stable and below 100 percent since 2018, although higher than the EU/EEA average. The return on equity of the median life insurer was still positive in 2022, but

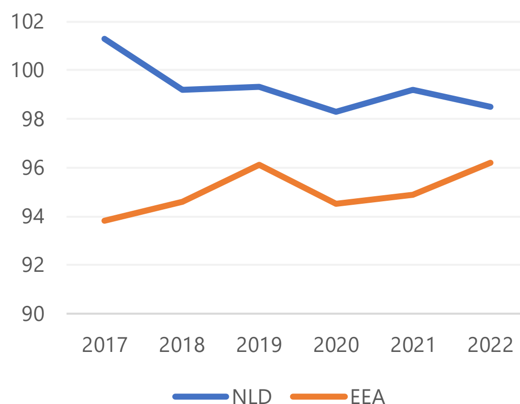
with only 1 percent significantly below the values of previous years. In the non-life sector, the median company recorded a negative return on equity (-3 percent).

Figure 4. The Netherlands: Insurance Profitability

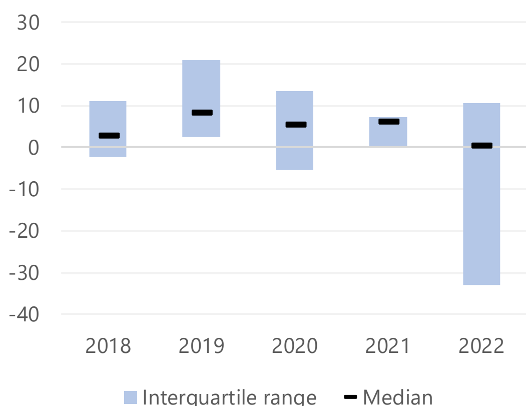
Investment yields of life insurers have been fluctuating between 2.7 and 5 percent since 2018, with a slight dip in 2022. Non-life insurers have earned a yield of 1.2 percent in 2022, also below the 5-year average.



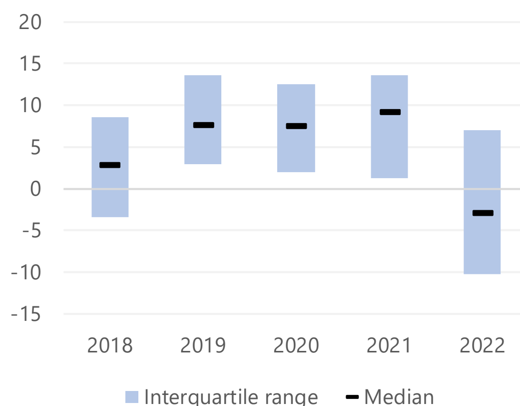
The underwriting performance of the non-life sector is profitable with combined ratios below 100 percent. However, hovering between 98 and 99 percent, it is above the EU/EEA average.



Return on equity of many life insurers has taken a hit in 2022—for the median insurer it stood at 1 percent, after fluctuating between 2 and 9 percent in previous years.



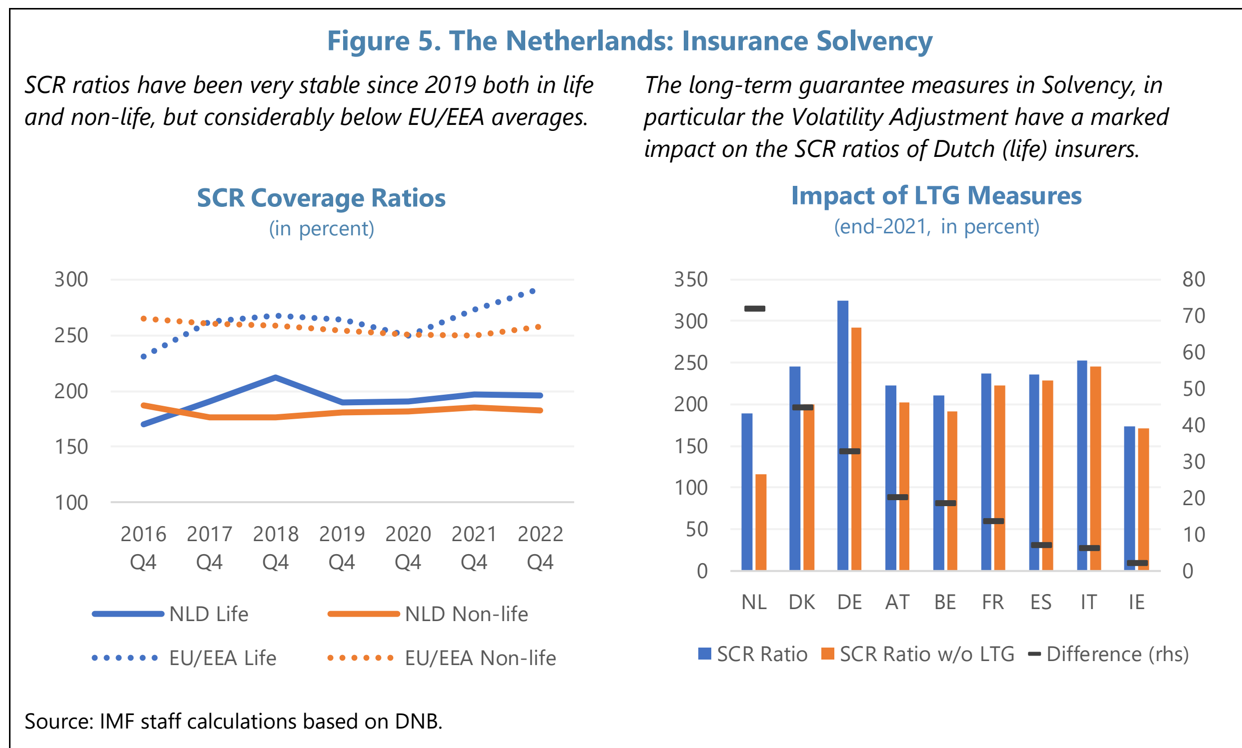
In the non-life sector, the median return on equity even turned negative, with -3 percent after an average of 7 percent in prior years.



Source: IMF staff calculations based on DNB.

19. Solvency ratios of Dutch life and non-life insurers are well above the regulatory threshold, but below the EU average and furthermore distorted by the mechanics of the 'Long-Term Guarantee Measures' in Solvency II (Figure 5). The coverage ratio of the Solvency Capital Requirement (SCR) has only marginally changed over the past three years, standing at 196 and 183 percent for life and non-life insurers, respectively. These numbers are significantly lower than the EU/EEA average. Furthermore, the Volatility Adjustment (VA) has a significant impact on Dutch life insurers, resulting in a higher SCR ratio for those firms using it. For VA users, the SCR ratio would have been around 70 percentage points lower without this measure, but still above the regulatory threshold of 100 percent. No other EU country recorded—on average—such a large benefit from using the VA. To some extent, this is driven by structural features of the Dutch life insurers' balance sheets which result in some distortions how the VA works. First, the durations of technical provisions are considerably longer for Dutch life insurers than for many of their European peers; and second, the large investment exposure towards mortgage loans is not properly reflected in the 'representative portfolio' which is used by EIOPA to calculate the VA.[9]

Figure 5. The Netherlands: Insurance Solvency



Source: IMF staff calculations based on DNB.

[9] The trilogue agreement on the Solvency II review introduces a modified methodology for the calculation of the VA. The amended Solvency II Directive will need to be transposed into national law, presumably by the second quarter of 2026.

Box 1. The Impact of COVID-19

In 2020, the initial uncertainties about the consequences of the Covid-19 pandemic had a major, though temporary, impact on the value of insurers' investment assets and thus posed a large financial risk. While financial markets subsequently recovered, insurance claims rose in some lines of business, particularly travel insurance and legal assistance; also new business in short-term travel insurance took a hit. At the same time, with lower mobility, claims in motor insurance and P&I declined.

During the pandemic, DNB urged insurers not to pay any dividends or buy back shares, following recommendations by the European Systemic Risk Board (ESRB) and the European Insurance and Occupational Pensions Authority (EIOPA). Furthermore, DNB allowed health insurers to provide liquidity support to health care providers.

PENSION SYSTEM STRUCTURE

Three-Pillar Structure

20. The Dutch pension system rests on three pillars (Table 3), comprising: (i) a public, pay-as-you go, scheme guaranteeing a minimum pension (Algemene Ouderdomswet, AOW); (ii) the mandatory occupational schemes as the main form of pension savings; and (iii) voluntary pension savings.

21. The AOW is the statutory pension in the Netherlands, a pay-as-you-go scheme that provides basic old-age income to all citizens. Residents of the Netherlands accrue 2 percent of the flat-rate pension annually for 50 years until reaching the required retirement age. Being in paid work is not a prerequisite to accrue the AOW. The flat-rate pension benefit is linked to the statutory minimum wage. The AOW retirement age reflects increases in life expectancy: since 2015, it has been raised in steps, reaching 67 years in 2024. From 2026 onwards it will be increased in line with the rise in life expectancy. Around 3.6 million pensioners received total benefits of EUR 43bn in 2021. The AOW is administered by the Sociale Verzekeringsbank and funded through tax revenues.

22. In international comparisons, the Netherlands ranks among the three best pension systems globally. A study conducted by consulting firm Mercer and the CFA Institute ranks the country as number two in a comparison of 44 countries, just behind Iceland.[10] In each of the three sub-categories—"adequacy", "sustainability", and "integrity"—the Netherlands receives the top grade 'A' which overall characterizes the pension system as a "first-class and robust retirement income system that delivers good benefits, is sustainable and has a high level of integrity."

[10] Mercer CFA Institute Global Pension Index 2022, October 2022

Table 3. The Netherlands: Pension System Structure

	Pillar I	**Pillar II**	**Pillar III**
Type	Tax-financed public pension	Occupational pension schemes	Voluntary individual pension savings
Contri-butions	Funded through state budget 2 percent accrued per year of residence in the Netherlands	Mandatory contributions for employees (excl. self-employed) Contribution determined by collective labor agreements Contributions deductible from taxable income up to EUR 128,810 (2023) 6.0m active members, 9.4m deferred members (end-2022); 87 percent of employees covered	Voluntary contributions
Pension payments	For each year of residence 1/50th of the full entitlement Basic pension linked to the statutory minimum wage Retirement age: 67 years (as of 2024) with planned increases later in line with improvements in life expectancy Around 3.6m recipients, EUR 43bn payments in 2021	Primarily DB, transition to DC until 2028 Conditional indexation based on wage growth or prices Pension benefits also for widowed spouses/partners and children (until age 18); disability benefits Benefits are treated as taxable income upon payout 3.7m beneficiaries, EUR 35bn payments in 2022 (o/w 29bn for retirement benefits)	Various types
Providers	State	174 pension funds (end-2022), o/w 47 industry-wide pension funds, 109 company pension funds, and 18 others Insurers and other institutions such as premium pension institutions	Various providers (banks, life insurers, asset managers)
Assets (end-2022)	Not applicable (unfunded)	EUR 1.59trn	Not available

Source: IMF staff based on DNB, OECD.

Demographics

23. The population of the Netherlands has grown steadily over the last decades, from around 13 million in the early 1970s to 17.6 million in 2022. It is expected to increase further to more than 20 million by the early 2060s. Labor participation has increased, particularly since 2015

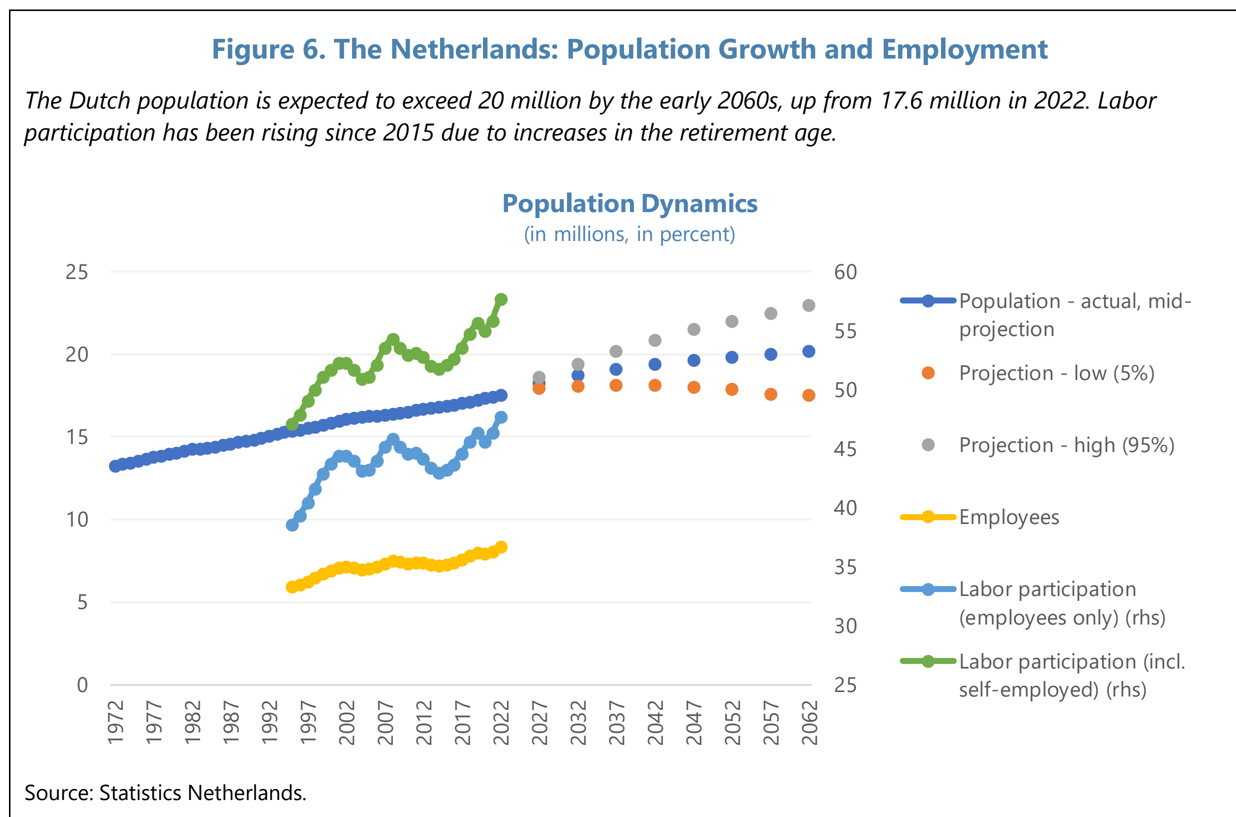
and has reached 57.7 percent in 2022, including the self-employed. This is driven by a higher retirement age which has been raised sequentially since 2014. The Covid-19 pandemic had only a minor impact on the labor market, and the decline seen in 2020 was fully recovered in the following year.

24. The Dutch population is slightly younger than the European average, with a median age of 42.7 years as compared to 44.4 years. As a consequence, the old-age dependency ratio, measured as the share of the population aged 65 years and older to the population aged 15 to 64 years is projected to remain below the EU average. According to Eurostat, the ratio in the Netherlands stood at 30.1 in 2020, compared to 32.0 in the EU. For 2080, the ratios are projected to be at 52.6 and 55.7, respectively. The population pyramid currently peaks at around 52 years (Figure 7), indicating a significant increase in retirees in the late 2030s.

25. Pension fund members in the Netherlands generally reflect the Dutch socio-demographics, given the mandatory nature of the scheme. Since the second pillar is a funded system, the aging of the population does not have such an impact on contribution levels as it would have in an unfunded system. Nonetheless the increase of the average age of plan participants and the increased life expectancy had an upward effect on contribution levels in past decades. About 8 percent of pension fund members (active and inactive) live abroad, mostly in other EU countries. These mostly involve retirees and deferred members, while the share of contributions paid for members living abroad is only about 1 percent of total contributions.

Figure 6. The Netherlands: Population Growth and Employment

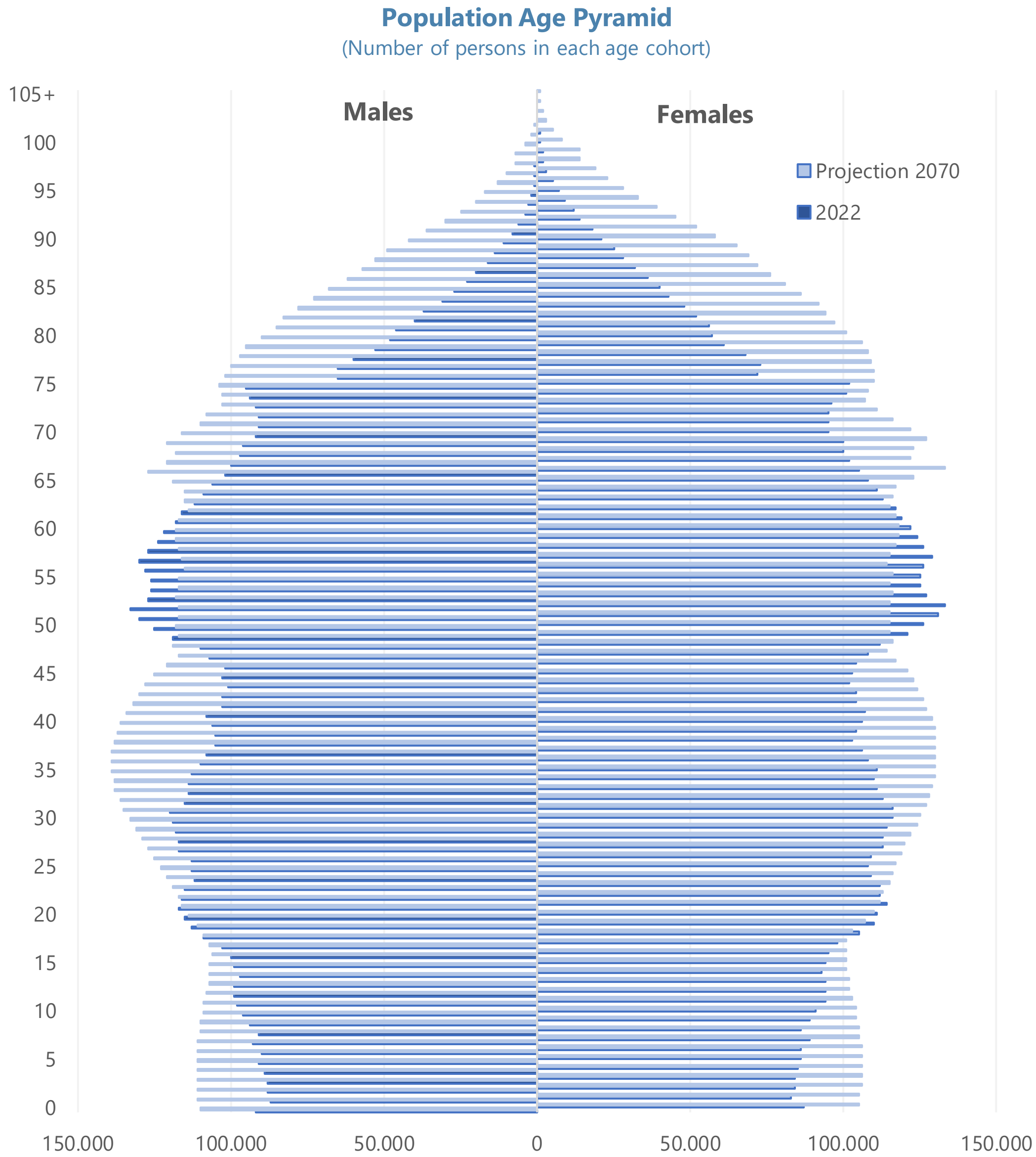
The Dutch population is expected to exceed 20 million by the early 2060s, up from 17.6 million in 2022. Labor participation has been rising since 2015 due to increases in the retirement age.



Source: Statistics Netherlands.

Figure 7. The Netherlands: Population Statistics

With a median age of 42.7 years, the population pyramid currently peaks at 52 years, both for males and females, resulting in a significant increase in the number of people reaching the retirement age in the late 2030s.



Source: Statistics Netherlands.

Pillar II: Occupational Pension Funds

26. The second pillar is provided through occupational pension schemes into which employers and employees pay contributions. 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 a high coverage of 89 percent of employees in 2022. The approximately 900,000 self-employed are covered at a much lower degree with only about 6 percent. Pension contributions are deductible

from income tax (up to a salary cap of EUR 128,810 as of 2023), but pension payments are taxed.[11] The set-up of each occupational pension scheme is negotiated individually between social partners, usually as part of collective labor negotiations. Pension entitlements arise from contributions paid in and returns realized through the collective investment of these contributions. Besides old-age pensions, the system also provides for disability and survivor benefits. Occupational pensions can also be provided by insurers, but pension funds are the dominant vehicle in the second pillar. The total amount of occupational retirement benefits paid by pension funds in 2021 equaled EUR 28.9bn (not including benefits paid by insurers).

27. Most pension schemes are defined-benefit pensions. They typically use the career average salary up to a maximum (up to a salary cap of EUR 128,810 as of 2023) as the pension basis and provide an annual accrual at a maximum of 1.875 percent. Every pension fund member accrues a fixed percentage of their pay each year as a future pension entitlement, irrespective of age, gender, health, or income. DB schemes usually feature conditional indexation, i.e., pension entitlements will be adjusted annually in line with inflation, or the wage increase in the sector. This adjustment may, however, not be made if the financial position of the fund is not sufficient to do so. The board of a pension fund will decide annually whether the fund's financial position allows for the indexation of pensions and accrued entitlements. Many pension funds, including the largest, have not been able to afford indexation since the global financial crisis and have only in 2022 re-started indexation again.

28. Pension funds may cater to all businesses in a particular industry/profession or an individual company—the dominant type is the industry-wide multi-employer pension fund (Table 4). Participation in an industry-wide pension fund may be made mandatory for the entire sector by the MoSA on request of social partners in that industry—a common practice by now. Such mandatory participation allows employees to change jobs within their industry without affecting their pensions. Companies not subject to mandatory participation may incorporate their pension scheme in a company pension fund or place it with an insurer. In 2012, the Premium Pension Institution (PPI) was introduced—of which currently seven exist—as a specific pension provider of DC schemes to provide a lump sum payment at retirement to purchase a pension annuity from a different pension provider. In 2016, General Pension Funds (Algemeen pensioenfonds, APFs) were introduced, a pension fund that can apply ring-fencing. APFs allow company pension schemes, non-mandatory schemes and schemes for self-employed to be administered by the same entity without changing the collectivity within which risks are shared. An APF consists of a general layer in which the management of the scheme is performed, and one or more collectivity circles. Risks are shared within a collectivity circle, but not between circles. There are five APFs with total assets under management of around EUR 25bn.

[11] The taxation system is "Exempt-Exempt-Taxed" (EET), i.e. contributions and investment returns up to retirement are tax-exempt, while pension payments are taxed.

Table 4. The Netherlands: Types of Pension Funds

Pension Funds *(2022, in EUR billions, change since 2017 in percent)*	**Defined benefit**	**Defined contribution**	**Other and hybrid**	**Total**
Company pension funds	234	5	39	**278**
	+10%	*+23%*	*-19%*	*+5%*
Industry-wide pension funds	1.222	6	22	**1,250**
	+30%	*+353%*	*+105%*	*+31%*
Other pension funds	44	13	0	**57**
	+78%	*+269%*	*-100%*	*+101%*
Total	**1,500**	**24**	**61**	**1,585**
	+27%	*+169%*	*+3%*	*+27%*

Source: IMF staff based on DNB.

29. Total pension fund assets amount to EUR 1.59trn as of end-2022, making the Netherlands the 4th largest pension fund market in the world in absolute amounts (Figure 8). The sector size is only topped by the United States, the United Kingdom and Australia. As a share of GDP, the Netherlands ranks third with 154 percent[12], only behind Denmark (191 percent) and Iceland (183 percent). The Dutch pension fund system is still in an accumulation phase where cash inflows exceed outflows. In 2021, inflows (comprising contributions and net transfers into the sector) amounted to EUR 48bn, compared against outflows (benefits and expenses) of EUR 38bn.

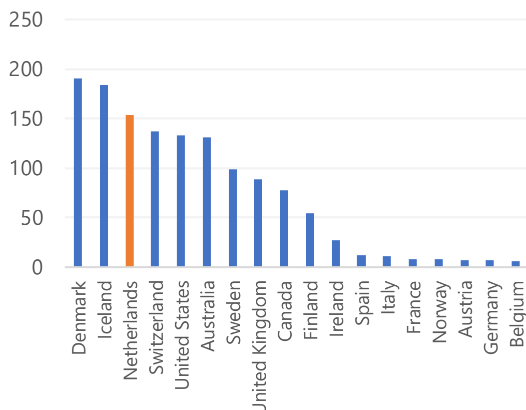
30. Consolidation in the pension fund sector is an ongoing process. The number of pension funds has declined sharply in the past 20 years, from 926 in 2002 to 174 in 2022. In the same period, pension fund assets have more than tripled to EUR1.59trn. The consolidation is driven mostly by small (mostly single-employer) pension funds which are transferring their business to larger funds (or insurers); likewise, APFs have grown as a result of the consolidation. More recently, the speed of consolidation has slowed down a bit. Concentration is high, and the two largest funds hold a combined market share of 47 percent.

31. Investment assets of Dutch pension funds are dominated by stocks and fixed-income assets (Figure 9). While life insurers have reduced their allocation to bonds, pension funds have kept their exposure stable since 2020 at 41 percent of total assets. Shares and other equity (including alternative assets) are another dominant asset class, accounting for 34 percent at end-2022 and down from 36 percent six years earlier. While the bond portfolio comprises mostly Euro-denominated assets, other asset classes are more diverse in their currency composition. Fixed-income assets are of a very high quality: one third of fixed-income assets is rated in the highest rating category, and another 48 percent in investment grade.

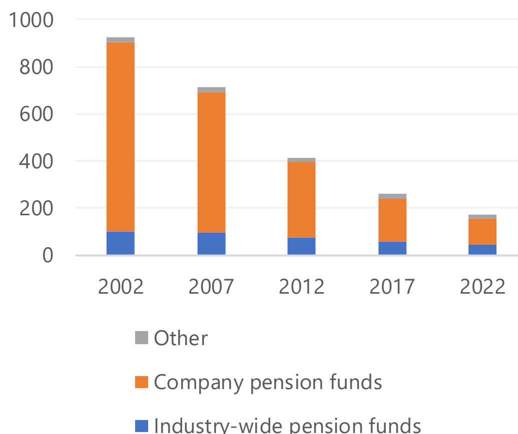
[12] 142 percent as of mid-2023

Figure 8. The Netherlands: Size of the Pension Saving Sector and Cashflows

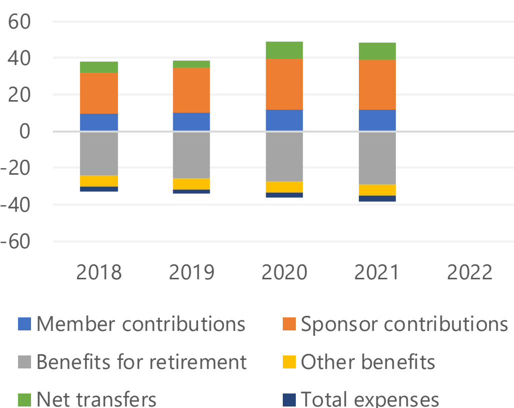
Measuring assets against GDP, the Dutch pension fund sector is the third largest in the world (154 percent), only behind Denmark and Iceland.



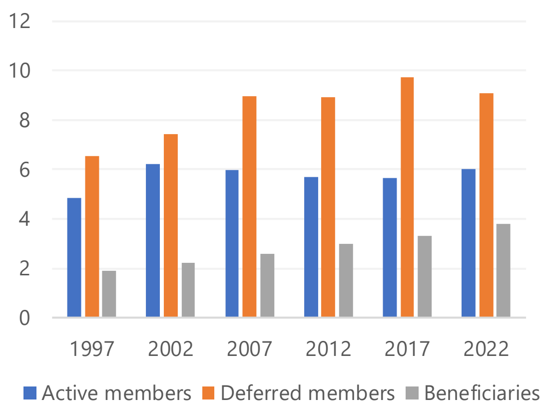
The number of pension funds has declined significantly, from more than 900 in 2002 to 174 in 2022 (of which 109 are company pension funds).



Inflows consistently exceed outflows, and specifically since 2020 net transfers into the system are significant.



As of end-2022, pension funds had 6.0 million active and 9.1 million deferred members, as well as 3.8 million beneficiaries.

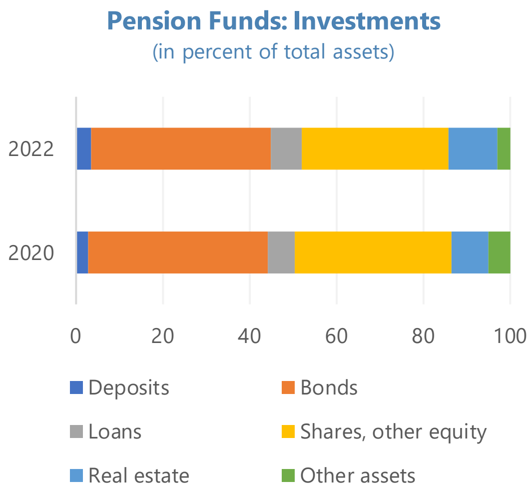


Notes: “Pensioners" includes retirement pensions, disability pensions, partner pensions, and orphan pensions.

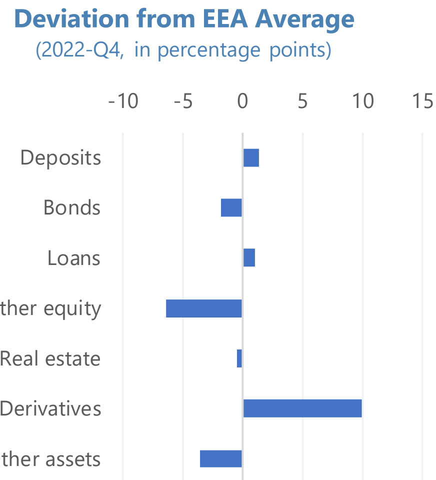
Source: IMF staff calculations based on DNB data.

Figure 9. The Netherlands: Pension Fund Investments

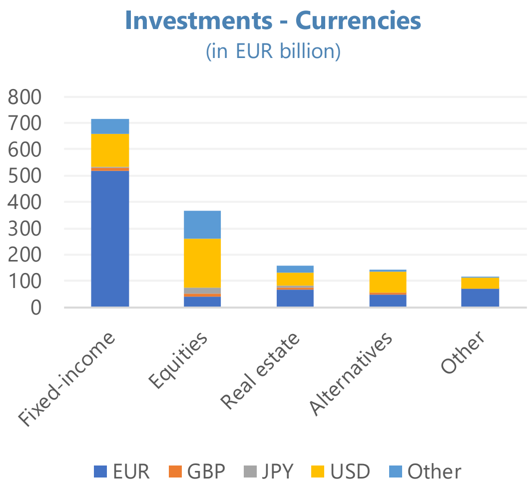
During the market turbulences in 2021/22, pension funds kept their asset allocation rather stable. Bonds and shares are the most relevant asset classes with 41 and 34 percent.



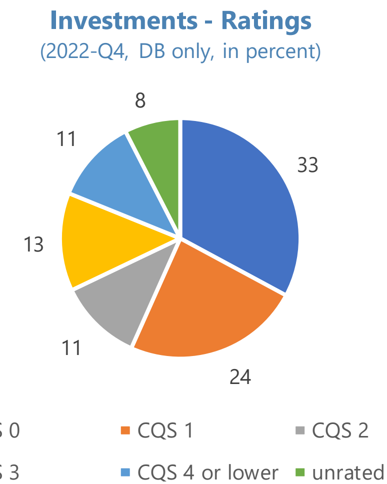
Compared to the EEA average, equity holdings are significantly lower, while derivatives exposures are considerably higher.



While the Euro is the dominant currency in the fixed-income asset class, allocations to equity and alternatives are more biased towards the U.S. dollar.



One third of fixed-income assets are rated in the highest rating category, and another 48 percent in investment grade.



Source: IMF staff calculations based on DNB and EIOPA data.

32. Dutch pension funds hold substantial amounts of derivatives, primarily to hedge their interest rate and currency risks—margin calls could therefore pose a liquidity risk. The notional value of interest rate swaps amounted to EUR 442bn at end-2022, up from 171bn two years earlier. Since end-2020, the market value of these swaps has declined from EUR 112bn to -87bn. DNB estimates the aggregate interest rate sensitivity of the funds' derivatives portfolio at EUR 600m per basis point. In addition, pension funds hold forward-rate agreements for their currency risk with a nominal value of EUR -392bn and a market value at end-2022 of EUR 14bn. Under normal

circumstances, pension funds have various sources of liquidity, in particular cash, to meet margin calls. In extreme market situations, however, pension funds might be dependent on secondary liquidity through the repo market. While currently only few Dutch pension funds are active in the repo market (with limited amounts), individual transactions can potentially be substantial due to the large size of some of the funds.

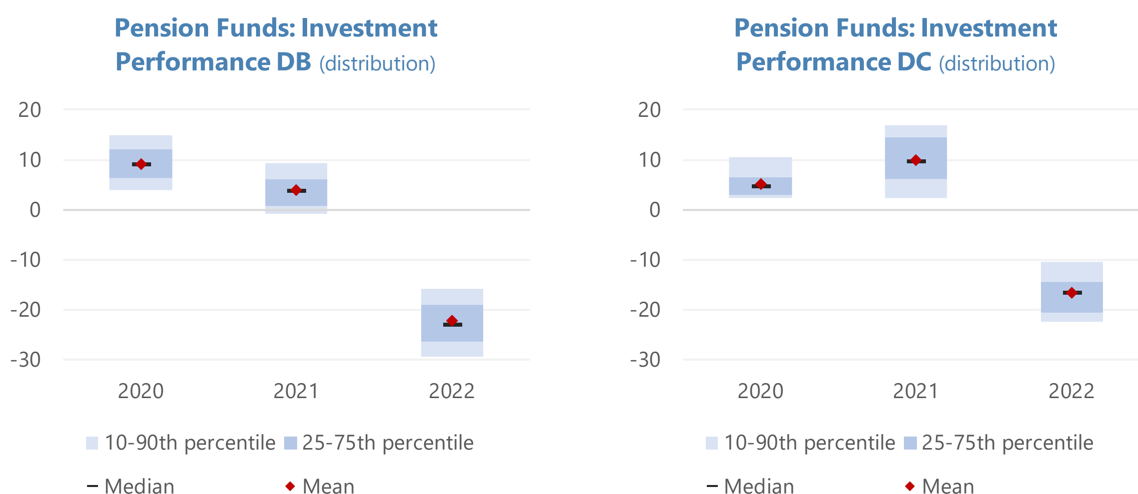
33. Recommendation 2: Closely monitor pension funds' repo transactions, amend supervisory reporting where necessary, and perform liquidity stress tests which incorporate a drying-up of repo markets.

34. Investment returns in 2022 were extremely negative given the weak performance both on the bond and the stock market. For DB schemes, the median fund recorded a performance on its investment assets of -23 percent, while the median DC fund performed a little better with -17 percent. The distribution across pension funds has not widened substantially in 2022, so basically all funds were affected by the market turbulences in a similar way.

Figure 10. The Netherlands: Pension Funds' Investment Return and Net Acquisitions

In 2022, the median DB fund recorded an investment performance of -23 percent, driven by weak bond and stock returns.

DC schemes performed slightly better both in 2021 and 2022, with median investment returns of 9.7 and -16.7 percent, respectively.



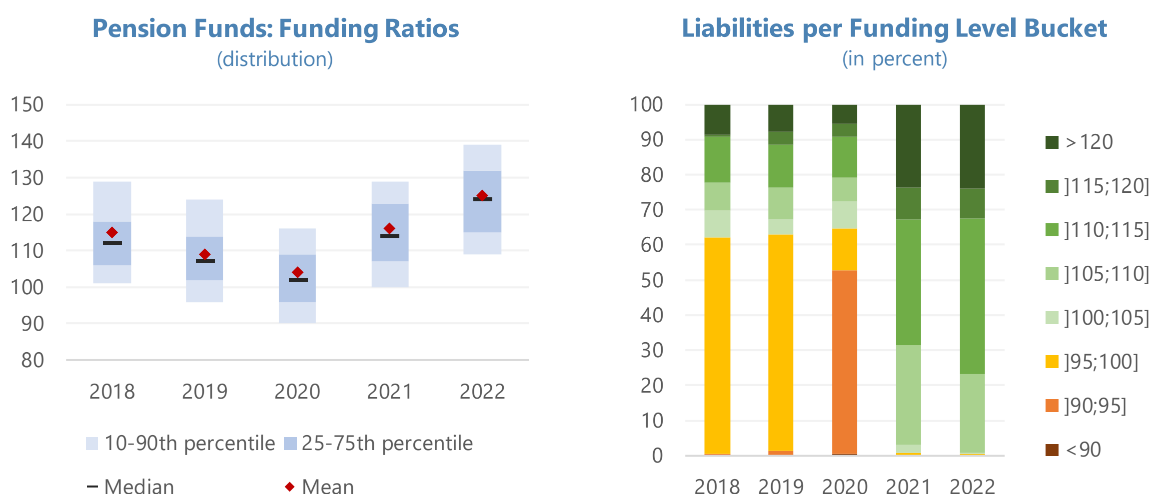
Source: IMF staff calculations based on DNB data.

35. Typically, the funding ratio is sensitive to equity and interest rate developments as many pension funds hold material equity investments and typically hedge their interest rate risk only partially. The funding ratio development in the past decades reflects these sensitivities. Since 2008, low interest rates have put pressure on the funding ratio, pushing many funds below the legally required levels. More recently, funding ratios have recovered strongly due to higher interest rates—at the end of 2022, the median pension fund recorded a funding ratio of 125 percent, and only 0.5 percent of all pension liabilities were managed by funds with a funding ratio below 100 percent.

Figure 11. The Netherlands: Pension Funds' Funding Ratios

Funding ratios have considerably improved in 2021/22 amid rising interest rates and accordingly lower pension liabilities.

In 2022, almost all pension funds recorded a funding ratio above 100 percent.



Source: IMF staff calculations based on DNB data.

Pillar III: Voluntary Individual Pension Savings

36. **The third pillar covers the provision of pensions through annuity products and retirement savings plans issued by insurers, banks and asset managers.** Income from these annuity products can supplement the income from the AOW and occupational pension schemes. It is also used by those who are not in permanent employment or who are self-employed. There are several types of products in third-pillar schemes that are tailor made to the customer's needs and risk profile. Insurers offer unit-linked products, with-profit policies, and products with minimum return guarantees. The payout of these products can be in the form of an annuity or in the form of a lump sum that must be used to purchase an annuity. The tax treatment is comparable to the treatment in the second pillar.

INSTITUTIONAL AND REGULATORY STRUCTURE

A. Supervisory Independence, Powers, and Resources

37. **The Netherlands has developed a system for independent state agencies, including DNB and the AFM, which carefully balances powers and accountability.** The operational independence, accountability and governance of DNB as a prudential supervisor, and the AFM as a conduct supervisor, are anchored in national legislation,[13] the Articles of Association of DNB and the

[13] The Financial Supervision Act (Wet op het Financieel Toezicht, WFT), the Government Accounts Act 2001, the Autonomous Administrative Authorities Framework Act, Act on Funding Financial Supervision.

Articles of Association of the AFM. DNB and the AFM are accountable for their supervisory activities, primarily to the Minister of Finance (MoF) and the Minister of Social Affairs and Employment (MoSA), and their operations can be audited by the Court of Audit.

38. The four-year budget limits of DNB and the AFM are informed by multi-year strategies. The supervisory authorities are subject to the Cost Framework that limits the growth of their budget for a period of four years.[14] The multi-year limits in the Cost Framework contribute to financial certainty for supervisory authorities and supervised institutions, as well as administrative and political rest. The limits build on the Supervisory Strategy[15] of each authority which sets the strategic agenda for a four-year term.

39. The yearly budget process is well elaborated by the supervisory authorities, incorporating supervisory objectives and key performance indicators (KPIs).[16] The yearly budgets of DNB and the AFM identify the objectives and KPIs of financial supervision for the upcoming year, based on the government wide framework of outcome orientated budgeting. The draft budgets for the supervisory activities of DNB and the activities of the AFM are (i) submitted for consultation to panels of representatives of supervised institutions, (ii) subsequently approved by the Supervisory Board of DNB and the AFM, then (iii) before December 1,[17] submitted to the MoF and the MoSA for their approvals, and (iv) after the approval, published on the websites of DNB and the AFM. At the end of the budget year DNB and the AFM have to draw up an annual report relating to the duties assigned under the Financial Supervision Act (Wet op het Financieel Toezicht, WFT), including the evolution of meeting KPIs, and send it to the MoF, the MoSA and to Parliament.

40. While the next stages of the budget process are effective in practice, the Dutch authorities are encouraged to further detail its structure, to provide safeguards to supervisory independence. The ministries assess the budget proposals based on the following aspects (i) formal compliance with law, (ii) procedural agreements,[18] (iii) the definition of key performance indicators,[19] and (iv) factual or procedural errors. The ministries can return the budget proposals to the supervisory authorities to fix any shortcomings related to the mentioned aspects. In practice, the budgetary process is cooperative and informal and potential deficiencies are corrected during ongoing consultations between the ministries and supervisory authorities. While this practice has proved to be operational under normal circumstances, it does not provide sufficient safeguards to the supervisory authorities in the case of a disagreement between the ministries and supervisory authorities and it does not provide a sufficient shield against political interventions.

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[14] Article 4, Wbft 2019

[15] Supervisory Strategy 2021-2024 (DNB) and Strategy 2023-2026 (AFM)

[16] https://www.dnb.nl/en/about-us/organisation/budget-and-accountability/

[17] Article 3 Wbft 2019 and Article 26 Kaderwet zbo

[18] To what extent have the outcomes of the budget discussion between Ministers and supervisory authorities been taken into account? To what extent have the outcomes of the financial statement discussion between Ministers and supervisory authorities been taken into account? Where applicable, have other agreements between Ministers and supervisory authorities been taken into account?

[19] Controleprotocol.

41. Recommendation 3: Define intermediate steps in the budgetary process to provide additional safeguards to the independence of DNB's supervisory function and the AFM.

42. As DNB and the AFM compete on the labor market for a similar range of experts as financial institutions, the competitiveness of both authorities' jobs should be measured against similar jobs in the financial industry. DNB and the AFM derive the salary levels from the mid-point for the economy. While this practice can be relevant for some jobs, it may disadvantage supervision in hiring experts for areas with specific skill sets. Since financial institutions are major competitors to DNB and AFM supervision on the labor market, not all positions with them provide relevant benchmarks, hence only the positions requiring the same level of expertise as supervision should be selected for regular comparisons. Additionally, gender, as well as broader, diversity aspects can be taken into account.

43. Recommendation 4: Implement the practice of periodic benchmarking of supervisors' salary levels against relevant peers in the financial industry.

B. Organization of Supervision

44. The Financial Supervision Act (Wet op het financieel toezicht, WFT) defines the authorities responsible for insurance supervision.

- Article 1:24(2) WFT stipulates that DNB is tasked with the licensing and prudential supervision of financial undertakings, including insurers (article 1:1 WFT). Article 1:24(1) Wft stipulates that prudential supervision is focused on the solidity of financial undertakings, including insurers, and the stability of the financial system. Furthermore, DNB is also tasked with supervision of insurers on a group-wide level, and as coordinator in accordance with Article 10 Financial Conglomerate Directive (2002/87/EC) for the group supervision of insurers where the group qualifies as a financial conglomerate (articles 1:1, 3:289 and 3:290 WFT). Other tasks of DNB with regards to certain insurers, are to counter money laundering and terrorism financing and to contribute to the exercise of (inter)national sanctions, so therefore to contribute to fighting financial crime.

- Article 1:25(2) WFT stipulates that the AFM is tasked with the conduct supervision of financial undertakings and the licensing of financial undertakings. Article 1:25(1) WFT stipulates that market conduct supervision is focused on orderly and transparent financial market processes, integrity in relations between market participants and due care in the provision of services to clients, including policyholders, also in view of the stability of the financial system. Although both supervisors are tasked with the licensing of financial undertakings, chapter 2 of the WFT assigns the sole authority to DNB to grant and withdraw licenses to pursue the business of insurer.

45. Similarly, Article 151 of the Pension Act (Pensioenwet) defines the supervisory responsibilities in the pension fund sector:

- DNB is responsible for prudential supervision, overseeing the financial soundness of pension funds, contributing to financial stability of the pension fund sector, and protecting the rights of members and beneficiaries.

- The AFM oversees compliance with the legal standards on the provision of information to pension scheme members and beneficiaries and the provision of advice to scheme members of DC schemes with investment freedom.

46. DNB has established a clear and robust organization, including the internal governance framework of three lines of defense. The organization of supervision[20] clearly defines responsibilities of specific units with a logical hierarchy. At the same time, it supports proportionate allocations of expertise and sharing of general supervisory experience. To measure and report on its performance DNB uses 'Planning & Control Cycle'. Internally, DNB tracks detailed performance of objectives, goals, strategies and measures set by the Supervisory Board. Overall, DNB implemented an adequately elaborated strategy and planning process which is firmly anchored in the policy objectives of supervision. Furthermore, internal governance is fostered by internal evaluations and audits on DNB's supervisory performance which are done on a regular basis by the Risk Management & Strategy department (the 2nd line of defense) and the Internal Audit department (the 3rd line of defense).

47. While the existing functions of the 2nd and 3rd line of defense already provide valuable feedback to supervision, their contribution could be further expanded. The Risk Management & Strategy department provides independent views on various supervisory topics as well as on the supervisory practice. A possibility to reflect at the time of the review is extremely useful for strengthening the supervisory process, however its extension in time could offer additional opportunities to discuss a respective issue–in other words, implementing the practice of regular follow-ups could significantly improve the existing good practice. Similarly, internal audit could provide support outside of the current thorough audits, which typically occur annually. A concise and focused format of audits ('quick scans') where the primary objective would be a consultancy to supervision could be extremely helpful. Additionally, some audits–for instance, on information security–could be recurrent, with a pre-defined frequency.

48. Recommendation 5: Explore further options to benefit from the second and third lines of defense in strengthening the processes of supervision.

C. Supervisory Cooperation

49. The domestic supervisory cooperation is primarily represented by well-established cooperation among DNB and the AFM. WFT provides a framework for the cooperation, including the exchange of information between DNB and the AFM, and it is complemented by a cooperation

[20] Appendix IV; also: https://www.dnb.nl/en/about-us/organisation/organisational-structure/ and DNB organization chart as of 1 August 2023.

agreement between the two supervisors.[21] Article 1:46 WFT stipulates that DNB and the AFM cooperate with a view to establish rules and guidance that are as similar as possible in so far as they relate to matters falling within both prudential supervision and conduct supervision, such as the use of supervisory powers, and the supervision of the application of remuneration and fit and proper rules. There are also numerous situations in which both authorities consult each other, e.g., when granting or withdrawing a license or when imposing a formal remedy. DNB's and the AFM's management boards meet periodically, the cooperation at lower levels is fluent, considered seamless, including the information exchange. Smooth cooperation is supported by a shared view that prudential and conduct regulation are intertwined by common long-term goals.

50. Several modifications to the cooperation framework could enhance its efficiency, further promote the perception of supervision speaking with one voice and acting in accord and extend information sharing. Although domestic cooperation is strong, it could be further developed. The cooperation focuses on dialogue among supervisors, but this dialogue typically does not include simultaneous interactions with the industry. Joint meetings, joint examinations, and similar opportunities to work together while engaging with the industry could increase the effectiveness and efficiency of supervision. These interactions could bring additional insights and stronger emphasis on messages communicated to the industry. Additionally, supervisors could create a standardized, but flexible IT solution for sharing data and information, which would facilitate regular exchanges as well as ad hoc sharing of even larger sets of information in a flexible and secure way.

51. Recommendation 6: Ensure maximizing opportunities for collaboration between DNB and the AFM, especially to jointly engage with financial institutions and to share data, through systematic measures.

52. International cooperation is facilitated through an extensive set of Memoranda of Understandings (MoUs) which are updated as needed. DNB enters MoUs[22] with supervisory authorities and other governmental institutions in order to provide a formal framework for the exchange and handling of supervisory information while considering a substantial interest of the Dutch financial system. DNB facilitates available EU cooperation frameworks and modalities, including colleges of supervisors. DNB operates in both home and host modes, actively engaging with other supervisors.

53. Following the Brexit, two MoUs took effect on January 1, 2021, and form the basis of continued cooperation with the authorities of the United Kingdom:

- A multilateral MoU on supervisory cooperation, enforcement and information exchange between the EEA National Competent Authorities and the UK authorities.

[21] Samenwerkingsconvenant tussen de Stichting Autoriteit Financiële Markten en De Nederlandsche Bank N.V., from 2016.

[22] Memoranda of Understanding

- A bilateral MoU between EIOPA and the UK authorities on information exchange and mutual assistance in the field of insurance regulation and supervision.

Furthermore, a Coordination Agreement was signed between DNB and the UK Prudential Regulation Authority.

D. Enforcement

54. DNB and the AFM have implemented procedures to ensure consistency and transparency of enforcement action. Enforcement activities are framed by the AFM-DNB Enforcement policy which introduces essential principles and is available online[23]. Also, administrative sanctions are published, enhancing transparency (predictability of public authority) and ensuring the consistency of decision-making. DNB and the AFM are sufficiently agile in taking enforcement action, spanning across a variety of formal and informal enforcement measures (including moral suasion).

55. Furthermore, DNB and the AFM updated the internal processes marking good governance, avoiding inaction and emphasizing the objectivity of enforcement action. Internally, the enforcement process is well organized, supporting the cooperation of examiners and lawyers at all stages. Also, both authorities implemented measures supporting efficiency and preventing a long processing of individual cases. Decisions to start an informal or formal enforcement process are taken by the division director responsible for Supervision and the division director of the Intervention and Enforcement Department. The decision can also be taken by the Executive Director of DNB who is responsible for Supervision. The level at which the decision is taken is dependent upon a specific decision and the risk category to which a particular insurer or pension fund is classified. Final draft decisions to impose a penalty and/or administrative fine are always submitted, via the division director of the Legal Services Division, for the approval of the director of DNB who is responsible for Supervision. Before taking a final decision, the interested party can raise an objection, which is independently assessed. Finally, the offender may appeal the decision at the District Court in Rotterdam. Lodging a writ of objection, appeal or higher appeal does not have suspensive force except in the case of provisional relief, granted by a judge.

56. The powers by which DNB and the AFM are able to enforce compliance with rules and requirements of the WFT and subsequent Royal Decrees and Supervisory Rules are found in the WFT, mostly in part 1.4.2 WFT. Such enforcement powers include the power to:

- Issue an instruction to adhere to a particular line of conduct (article 1:75, WFT);
- Impose an instruction to prevent an insurer from conducting its business from a branch-office, through the performance of services, or from providing financial services in another EU Member State (article 1:77, WFT);

[23] DNB has a dedicated website for Enforcement: Enforcement (dnb.nl).

- Issue an instruction to adhere to a particular line of conduct under penalty (article 1:79, WFT);
- Impose an administrative fine (article 1:80, WFT);
- Modify, withdraw or limit, either fully or in part, or attach further conditions to the license (article 1:104, WFT);
- Impose an instruction to increase the technical provisions (article 3:67, WFT);
- Impose a temporary capital add-on (article 3:132, WFT);
- Request for a recovery plan (article 3:135, WFT) in case of a breach of an insurer's SCR;
- Request for a short-term finance scheme (article 3:136, WFT) in case of a breach of an insurer's minimum capital requirement (MCR); and
- Restrict the activities of the insurer (for example to limit an insurer's power of disposal over its assets to cover the technical provisions, article 3:137, WFT).

INSURANCE REGULATION

A. Solvency II Implementation

57. The Netherlands has transposed the EU's Solvency II Directive (2009/138/EC) including secondary legislation into national law, and it has been applicable to the large majority of Dutch insurers since 2016. Solvency II does not, however, apply to funeral expenses and benefit-in-kind insurers, nor to the majority of small insurers; instead, these fall under the Dutch 'Basic Regime', a risk-based supervisory framework comparable to Solvency II in its set-up, but specifically tailored to this target group. The framework has been evaluated in a report submitted to the Dutch Parliament in 2020. The smallest insurance undertakings active on the Dutch market have been exempted from prudential supervision but are still bound by obligations stemming from legislation. Exempt insurers are required to inform prospective policyholders of their exempt status (Table 5).

58. Nine insurance undertakings (belonging to three groups) have been authorized to use a partial internal model for the calculation of their capital requirements. The main risks are mostly covered (interest risk, spread risk, equity risk, non-life premium and reserve risk, life trend risk and life level risk). There is a process in place for monitoring ongoing appropriateness of internal models. This includes annual reporting on the overall appropriateness and issues identified during the year. DNB has implemented new quantitative reporting templates on internal models, as a frontrunner in the EU. These are already fully operational ahead of the official implementation at the EU level in 2024. This allowed DNB to develop a dashboard for detailed analysis of internal model results. Over the past years, DNB has also conducted several specific on-site inspections and sector-wide studies on topics related to internal models, such as expert judgments or aggregation models. These activities resulted in findings that required follow-up, including model changes.

Table 5. The Netherlands: Insurance Regulation Regimes

	Solvency II insurers	Solvency II basic insurers	Exempted insurers
Number of insurers	113	23	n.a.
Gross written premiums (GWP)	EUR 80.1bn	EUR 55m	n.a.
Thresholds (in EURm)	GWP > 5 Technical provisions (TP) > 25	GWP > 2.2 and < 5 TP > 10 and < 25	GWP < 2.2 TP < 10 Max coverage: EUR 12,500

Source: DNB.

B. Accounting and Valuation Standards

59. DNB has no role in approving or promulgating professional accounting standards. The Dutch accounting standards are prepared and approved by the *Raad van de Jaarverslaggeving* whereas the international accounting standards are prepared and approved by the International Accounting Standards Board. Application of IFRS within the EU is covered by EU Regulation (EC) No 1606/2002. However, Solvency II was created in line with the latest developments in risk management, in the context of the International Association of Insurance Supervisors, the International Accounting Standards Board and the International Actuarial Association and with recent developments in other financial sectors. This led to the adoption of an economic risk-based approach which provides incentives for insurers to properly measure and manage their risks. IFRS 17 was implemented as of January 1, 2023, and provides for a valuation methodology similar to the Solvency II principles. The valuation according to Dutch GAAP follows Civil Code title 2 (BW title 2). Solvency II valuation follows Directive 2009/138/EC article 75. Since the introduction of Solvency II, no changes to general purpose accounting or to Solvency II valuation have been introduced (Table 6).

Table 6. The Netherlands: Insurance Valuation Rules			
	IFRS	**General Purpose Accounting**	**Solvency II**
Assets	IFRS 9 for financial instruments which mainly covers the assets of insurance entities. Both fair value accounting and amortized cost accounting are accepted valuation methods depending on application criteria (mainly business model and 'solely payments of principal and interest' test).	RJ 290 for financial instruments which mainly covers the assets of insurance entities. Both fair value accounting and amortized cost accounting are accepted valuation methods depending on application criteria (mainly classification of instruments).	Assets shall be valued at the amount for which they could be exchanged between knowledgeable willing parties in an arm's length transaction.
Liabilities	Per 1 Jan 2023 IFRS 17 for insurance liabilities which mainly covers the liabilities of insurance entities. IFRS 17 applies a fulfillment principle to valuation of insurance liabilities using a building block approach (best estimate, risk margin, contractual service margin). For financial liabilities, IFRS 9 is applied which predominantly is amortized cost valuation.	RJ 605 for insurance liabilities which mainly covers the liabilities of insurance entities. RJ 605 allows valuation of insurance liabilities according to Solvency II principles (for as far as it does not contradict Dutch legal requirements).	Liabilities shall be valued at the amount for which they could be transferred, or settled, between knowledgeable willing parties in an arm's length transaction.

Source: DNB.

C. Governance, Internal Controls, and Risk Management

60. The requirements for governance, internal controls, and risk management are laid out in the Solvency II Directive and the delegated acts and are transposed into Dutch legislation. Aiming to safeguard adequate risk management and governance, the Pillar 2 provisions are related mainly to the system of governance, including the Own Risk and Solvency Assessment (ORSA). The requirements are closely aligned with the provisions of the WFT governing sound and ethical operational management. They cover insurers' organizations and their operational management in general, the expertise and trustworthiness of their directors and key officers, their risk management, internal control, key functions and outsourcing. The ORSA forms part of the risk management system and focusses on insurers' own assessment of the risks they run and their associated capital needs.

D. Group Supervision

61. The Solvency II Directive has a clear focus on group supervision and the powers of a group supervisor, which contribute to achieving the objectives of supervision. There are three regimes in the WFT for the group supervision of insurers: a regime for the group supervision regarding (i) limited risk insurers, (ii) insurance groups, and (iii) financial conglomerates.

62. DNB has additional powers both as a group supervisor of an insurance group and as a host supervisor. As the group supervisor, DNB can issue an instruction to a mixed financial holding company or an insurance holding company to adhere to a particular line of conduct, when the holding or one of the insurers in the group violates a provision of the WFT. As a host supervisor, DNB is entitled to impose various measures on request of the group supervisor on a mixed financial holding or insurance holding with its registered office in the Netherlands, which is part of an insurance group, when one of the insurers in the group breaches a provision of other member states. The measures include the power to issue an instruction to adhere to a particular line of conduct (with or without penalty) or to impose an administrative fine.

PENSION FUND REGULATION

63. The Pension Act (PW) for company pension funds and industry-wide pension funds, and the Mandatory Occupational Pension Scheme Act (Wet verplichte beroepspensioenregeling) for occupational pension funds form the main primary legislation. Together with secondary legislation based on these laws, the two acts impose prudential requirements on pension funds to promote financial soundness. They also set out material requirements that focus on control structures and the relationship between employees, employers and pension funds.

64. In January 2017 the revised IORP II Directive came into effect which introduced stricter requirements in the area of pension fund governance, namely the 'key functions'—the risk, audit and actuarial functions that were not legally required for pension funds in the Netherlands. Another new element was the Own Risk Assessment. Currently, the European Commission is scheduling a review of the IORP II Directive. Likely themes are (i) governance and prudential standards, (ii) cross-border activities and transfers, (iii) information to members and beneficiaries and other business conduct requirements, (iv) shift from defined-benefit to defined-contribution, (v) sustainability, and (vi) diversity and inclusion.

65. Over the last decade, confidence in the pension system – in particular, in the second pillar – has declined, calling for a reform of the system. In the low interest rate environment, many pension funds were not able to achieve their ambition of indexing pensions for many years, and some funds have actually had to reduce pension benefits. Furthermore, Dutch people are living longer and therefore also need a pension for longer, while at the same time the number of younger scheme members paying contributions is declining. Finally, there are more self-employed and freelancers who accrue little or no pension in the second or third pillar and who will therefore rely

heavily on the AOW as a basic pension. The new pension system aims at reducing potential tension between generations and providing a better alignment of how different age cohorts can take and bear risks (Box 2).

Box 2. Transition to a Defined-Contribution Pension Regime

On 1 July 2023, after a decade-long debate about the future of the Dutch pension system, the Wet Toekomst Pensioenen (Future of Pensions Act, WTP) came into force. The main implications for pension funds are:

1. Pension funds can only administer DC contracts from 1 January 2028 onwards,

2. In these DC pension plans the contribution will be age-independent,

3. The default is that current DB entitlements of pension funds will be converted into DC capital in the new DC contracts.

The transition to the new pension system requires material decision-making and implementation efforts that involve many parties (social partners, pension funds, pension administrators, supervisors) in the period between 1 July 2023 and 1 January 2028. The WTP includes a transition framework in order to safeguard the quality of this decision-making and implementation.

Main elements of new DC contracts

Pension funds have to establish age dependent risk profiles for their plan participants based on specific uniform measures. There are two types of DC plans that pension funds can administer, a solidarity scheme or a flexibility scheme. Solidarity DC also involves personal investment accounts, but the difference with flexible DC is that solidarity DC does not involve explicit stakes in specific investments funds at the individual level; the return on the collective assets of the fund is split across individual pension accounts according to specific rules. Legal conditions apply to this splitting. Flexible DC is a product that is close to DC plans already known in the Dutch market. They involve personal investment accounts with explicit stakes in specific investment funds. Both flexible DC and solidarity DC offer annuities that allow plan participants to continue to be exposed to investment risk during the disbursement phase. The new contracts involve a separate collective reserve, apart from the individual DC accounts. This is a compulsory element in solidarity DC and an optional element in flexible DC. This reserve is intended for collective risk-sharing within the pension fund. Legal conditions for the maximum level of this reserve apply.

Transition framework

The WTP includes a "transition framework" in order to safeguard the quality of the decision-making on the transition and its implementation. It comprises governance, the financials, the operational implementation, and the bridging plan.

Box 2. Transition to a Defined-Contribution Pension Regime (Concluded)

- *Governance*: Social partners are required to support their decision-making by formulating a transition plan. Pension funds are required to support their decision-making and implementation by formulating an implementation plan. The role of each party involved in the decision-making has been made explicit in the law. Pension funds have accountability in accepting the decision of social partners and should consider the fairness and manageability of risks. Objection to the conversion of accrued pension benefits is not possible at the individual level.

- *Financial*: The conversion splits the collective assets of pension funds into individual pension accounts. For the conversion of past accrual, two methods can be considered, either the standard method, or the value-based asset-liability management method. Both set limits to the value allocation while allowing for a certain amount of freedom in the decision-making. Transparency requirement on intergenerational effects: Parties involved have to consider the effects for participants in terms of (i) a market consistent valuation of the old vs. the new contract, (ii) a benefit projection of the old vs. the new contract in a positive, neutral and adverse scenario. The transition to age-independent contributions implies a plan change compared to the current "average premium system" in most career average plans that in general involves intergenerational effects. These effects have to be considered explicitly in the transition, including the effects of potential compensation arrangements in case the conversion results in a detrimental outcome for individual members.

- *Implementation*: In their implementation plans, pension funds have to explain how they control financial and non-financial risks. Relevant non-financial risks in the transition are governance, process, operational and IT risks. Specifically pension funds have to explain how they manage risks related to the pension administration. The legislation requires pension funds to have an external auditor review the data quality and requires pension funds to consider what remedial actions are necessary before they implement the transition.

- *Bridging plan*: In anticipation of the decision to convert the past pension into the new system, under certain conditions pension funds can opt to apply an amended version of the current prudential framework ("transition FTK" rather than "nFTK") that relaxes conditional indexation and benefit-cutting regulations until the conversion. If they choose to do so, pension funds are required to draw up a bridging plan.

A. Investments

66. Investment regulations for pension funds follow the prudent-person principle. According to article 13a of the Decree FTK, a pension fund has to set a long-term strategic investment policy that meets its objectives and policy principles, including the risk appetite of the fund and is based on thorough research. The strategic investment policy has to contain a description of the investment objective, the composition of the proposed investment portfolio and the room for deviation from that portfolio (i.e., limits). The pension fund translates the strategic investment policy to an investment plan. In the investment plan, the fund specifies specific and detailed target levels and ranges for each investment category. The fund sets out policies for the management of the relevant risks.

67. Only a few specific limitations to the construction of the investment portfolio are included in the Pension Act (article 135). Pension funds are prohibited to invest more than 10 percent of assets in the parent company. Investments in derivatives are permitted only if they contribute to a reduction of the risk profile (hedging purposes) or facilitate effective portfolio management.

68. Dutch pension funds have the obligation to report their full investment portfolio including the target levels and upper/lower bounds. This enables DNB to assess on a periodic basis whether there are no (structural) deviations between actual and target investment allocation. Furthermore, during on-site investigation, the limit setting process is researched in more detail.

69. The pension law uses the prudent-person principle to safeguard the segregation and safe custody of pension fund assets. It does not make the use of a depositary as defined in the IORP Directive Chapter 3 mandatory, because rules around internal controls and processes are deemed stringent enough. The appointment of an external custodian is not subject to regulatory approval. There is no explicit requirement for a custodian to be independent in Dutch pension law. However, DNB demands that IORPs design their operations in a way that 'controlled and sound business operations' (article 142 Pension Act) is guaranteed. DNB interprets assets not being kept safe and segregated from the asset manager in a custody account as not controlled or sound.

B. Accounting Principles, Valuation, and Funding Rules

70. Assets and liabilities of pension funds are valued at fair value for general accounting purposes. The Dutch accounting guideline RJ 610 furthermore specifies that the valuation of pension liabilities is based on the yield curve of risk-free nominal rates which is published by DNB. No separate valuation standards for prudential supervisory purposes apply (e.g., funding ratios are calculated on fair-value for minimum funding requirements).

71. The rules related to the required funding levels of pension funds are laid down in the Pension Act and the Decree on the Financial Assessment Framework (FTK) and include two capital requirements:

- The minimum funding requirement, derived from the EU's IORP Directive, is equal to around 105 percent of the value of the liabilities. A 12-month moving average of the funding ratio is used ('policy funding ratio').

- The risk-based capital requirement is calibrated in a way that, given the specific risks a pension fund has taken up, the probability of underfunding (when liabilities exceed the assets) within one year is no more than 2.5 percent. On average, the capital requirement is approximately 25 percent of liabilities, but this can be significantly different between pension funds.

72. In case of underfunding, a pension fund has to submit a recovery plan to DNB. The FTK provides a flexible recovery period that is effectively not restricted by a fixed end date, as the recovery plan must be revised annually, using a new recovery period (of the same length) in the revised plan. The recovery period can be no more than 10 years, and the recovery plan should show

that the pension fund would be fully covered by the end of that period. Under the FTK, reducing accrued pension rights and pension benefits are a measure of last resort. This means that the pension fund should prove to the supervisor that it is not able to recover from an underfunded situation in any other way without disproportionately harming the interests of active members, deferred members and/or pensioners, or of the employer. This means that all other available means of influence, except for the investment policy, must have been applied in the recovery plan as far as possible. The reduction of benefits can be spread ('smoothed') over the full recovery period of the plan. The intention of this smoothing is to prevent sudden significant benefit reductions. Furthermore, there is a backstop requirement: if the funding ratio stays below the minimum funding requirement for five consecutive years, the pension fund will have to reduce benefits immediately to recover to the minimum funding requirement.

C. Governance, Internal Controls, and Risk Management

73. The principle of sound and ethical business operations plays an important role in relation to governance, risk management and risk controls (article 143 Pension Act). This principle and further regulations require pension funds to have adequate administrative and accounting procedures and adequate internal control mechanisms, a clear organizational structure and clear reporting lines. Pension funds need to: (i) document and implement policies with respect to the control of risks; (ii) have a policy in place that is aimed at sustainable control of financial and non-financial risks (the latter includes compliance risks); (iii) implement procedures and measures in relation to the documentation of incidents and to take measures when an incident occurs, aimed at controlling the materialized risks and prevention of repetition of the incident; and (iv) provide for a systematic analysis of integrity risks and to document and implement an integrity policy. Also, clear and comprehensive requirements exist with respect to the prevention of conflicts of interest. Pension funds need to ensure that for the purposes of assessing the creditworthiness of its assets, one does not exclusively or mechanically rely on ratings issued by a rating agency (section 21b FTK). Pension funds are required to periodically assess the consistency between the financial business structure, the estimated pension results and the relevant risks under the so-called feasibility test (section 22 FTK).

74. A pension fund's board is required to document the objectives and principles, including the risk appetite, of the pension fund after consultation with the other bodies of the pension fund (Article 102a of the PW). The documented objectives and principles are used for the purposes of the pension fund's internal decision-making, accountability, advising and the supervision within the pension fund. As such the documented objectives and principles are guiding to all bodies within the pension fund as well as staff and thus important in the context of sound and ethical business operations including the total risk management and risk control within the pension fund. Article 31, part 1 and Article 143 of the Pension Act and the Code Pension Funds provide further rules for the corporate governance framework of pension funds.

75. DNB's supervisory approach of the internal control systems is based on the IORP directive (EU 2016/2341). A pension fund is required to have administrative and accounting

procedures, an internal control framework, and appropriate reporting arrangements at all levels of the institution. The supervisor requires the pension fund to have an effective risk management function capable of assisting the pension fund to identify, assess, monitor, mitigate and report on its key risks in a timely way; and promote and sustain a sound risk culture.

D. Transparency

76. The Pension Act requires pension scheme administrators to provide information to various types of beneficiaries both on a regular basis and in specific cases—this includes active members, deferred members, pensioners, former spouses, and other dependents.

- When joining the pension scheme, the employer of pension administrator is required to provide to the member the details of the pension arrangement (so called 'Pensioen 1-2-3').

- Members receive once a year a statement indicating the level of the pension entitlement for old age pension and—if included in the scheme—the entitlement to survivor's pension. Additional information is provided including on indexation and on the expected level of pension benefits under a normal, pessimistic, and optimistic scenario. This information is included in the Pension Benefit Statement.

- When leaving the employer's employment, the (former) member will receive confirmation of the end of his/her membership as well as information on the accrued capital / benefits and future indexations.

- If the employee reaches his/her pensionable age, the pension administrator will provide him/her with a confirmation including relevant information on the level of its benefit and - if included in the scheme- the entitlement to survivor's pension.

- The pension administrator has to provide each pensioner with a variable pension annually with an overview of the benefit paid over the past year as well as about the payment for the coming year.

- Pension administrators are required to provide information on members' pension entitlements to the online pension status overview where everyone can check his or her pension status on-line.

- There are also requirements to inform the member and other beneficiaries at specific instances, for example in the case of indexation, if the employer is failing to pay premiums or if there is a change in the regular rate of accrual.

INSURANCE AND PENSION FUND SUPERVISION

A. Risk-Based Supervision

DNB

77. The supervisory method used by DNB (ATM) is risk-based; supervisory priorities are derived from the risks supervised institutions are exposed to, in conjunction with macroprudential developments and risks that can have an impact on the sector. In a bottom-up way, risks are translated into supervisory priorities, from which the supervision plan is derived. DNB considers proportionality to be important and applies supervisory capacity mainly according to size—only to a lesser extent also to complexity and substitutability. Proportionality typically results in simpler supervisory practice towards smaller institutions. The supervision method is, where possible, data-driven and automated. Working with automatic scores, and enforcing justification for deviating from these scores, allows for consistent supervision.

78. Each year, institutions are classified into impact classes with differing intensities of supervision (classes I1, I2 and I3). The impact classes result from the Risk Tolerance in Supervision Statement. This statement aims at a supervision which reduces the likelihood and impact of an institution's failure rather than preventing such failure at all times. The 'basic program' reflects the starting level of supervisory activities and involvement and identifies an institution's risk profile. The 'risk-based program' includes supervisory activities (including off-site and on-site assessment) that are aimed at investigating risks identified in the basic program in further detail, and mitigating activities that aim at the lowering of an institution's excessive risk ratings, so they conform to the supervisory risk tolerance. As of end-2022, there were 90 class 1 insurers, 31 in class 2, and five in class 3.

Table 7. The Netherlands: Supervisory Impact Classes

	Impact on trust	Risk tolerance of failure[3]	Supervision effort
Impact class 1	Low	We accept the likelihood of failure	**Adaptive supervision** ■ We recognise that this approach allows risks to go unnoticed. ■ We only get in touch with an institution if we have reason to do so. ■ Mitigation measures in the event of heightened risk are more limited in duration and scope compared with institutions in impact classes I2 and I3.
Impact class 2	Medium	We accept the likelihood of failure to a small extent	**Active supervision** ■ To a small extent, we accept the likelihood of risks going unnoticed, because they do not appear from the available data. ■ We get in touch with an institution on a regular basis to identify risks, even if its reports give us no reason to do so. ■ The duration and scope of drill-down examinations and mitigation measures in the event of heightened risk is more extensive than for institutions in impact class I1.
Impact class 3	High	We accept the likelihood of failure to a very small extent	**Proactive supervision** ■ To a very small extent, we accept the likelihood of not noticing risks. ■ We supervise the institution intensely to identify less obvious risks. ■ We take immediate action if risks are heightened using potentially labour-intensive instruments.

Source: DNB

79. Recommendation 7: Review the thresholds for impact classes in ATM, and incorporate additional elements of systemic importance, e.g., complexity, interconnectedness, and

substitutability. Consider using a slightly larger (and even) number of impact classes, e.g., four, in order to allow for a more granular approach.

80. DNB has implemented a largely data-driven supervisory framework, both on the risk level and on risk management. DNB has developed (early-warning) risk indicators based on the quantitative reporting templates (QRTs) submitted by insurers, ad-hoc data-requests and on annual qualitative information that insurers are obliged to report to DNB. Using these indicators, (re)insurers are benchmarked, in order to determine the riskiest undertakings. Apart from the annual risk assessment, the quarterly quantitative reports are used to calculate more frequently used risk indicators, such as solvency ratio, capital score, liquidity score, economical calculated capital ratio, combined ratio, interest rate risk ratios and others. These ratios are also shown in dashboards per (re)insurer that are available to all supervisors. Both the annual and quarterly calculated ratios are also available on a (sub)market scale (life, health, non-life). The reports are assessed on an individual basis by the data specialists and, if needed, by the specific supervisor. The overview on market level is discussed in the management team of the Insurance Supervision Division. Where needed, questions are asked to (re)insurers, action is taken to mitigate risks (on an individual level or at market level), and additional research is performed.

AFM

81. The AFM's supervisory approach is centered around the effects on consumers and markets. Even harmful behavior that is not illegal could be prioritized if the AFM feels action is needed, e.g., through moral suasion. The medium- and long-term strategy forms the starting point of each yearly supervisory planning and control cycle. For the yearly planning of activities, the AFM carries out an integral risk analysis of the most important trends affecting supervisory work, called Trendmonitor[24], and analyses of (sub-)sectors (top down). This analysis is combined with information from supervisory activities (bottom up) to determine a heatmap—an overall picture of the cross-sectoral assessment of the most important risks in financial services. Annual supervisory priorities for both the insurance and the pension fund sector are mapped against the Heatmap to ensure that the most relevant risks are tackled.

82. For the five largest insurance companies, the AFM carries out firm-specific supervision (account management) with dedicated supervisors for each firm. These firms together represent almost 80 percent of the retail market. Whether an insurer is included in the AFM's account management is decided mostly on size and market share, but also on criteria such as risk and impact on the consumer market. The Account Management team determines the supervisory intensity of the five largest insurance companies. The starting point is the general Heatmap with the overall retail risks. This Heatmap is then customized into separate heatmaps for each company according to its product portfolio and associated risks. On the basis of the company-heatmaps the supervisor sets up an annual calendar for each company which contains appointments with the board, compliance and other key functions as well as (on-site) investigations. In addition to the Account Management

[24] AFM Trend Monitor 2024.

team, the AFM's Insurance Team is responsible for the thematic supervision of all insurance companies and intermediaries.

83. The planning, as well as the findings on governance, culture, strategy, supervisory relationship, incidents and interventions for the five largest insurers are included in the 'Company Canvas'. This is an internal tool to compile characteristics, observations, diagnosis and results of projects and supervisory investigations. The Company Canvas is being digitized into an 'Institutional View' and further developed with integrated market data on each company. At the end of each year, the overall view of the AFM on each of the five largest insurance companies is described in a comprehensive report–the Annual Review. This annual review is discussed with board members of the insurance company in order to get their commitment to the AFM's expectations for specific changes to be made by that company regarding consumer aspects and compliance.

Data-driven Supervision

84. In its new supervision methodology, DNB now works with automatic risk scoring in the risk assessment of insurers and pension funds. Risk scoring models were developed to measure the most important elements of the different risks (both inherent risk and risk control). These models are based on regular supervisory reports and on data from qualitative surveys. DNB has developed a platform that calculates the models when new data arrive. Specifically for the non-financial risks, DNB just introduced a survey tool which improved data quality and user friendliness for the undertakings. Additionally, DNB is planning to build in 2023 a 'low code' solution in which the experts in the business can build and manage their risk models for non-financial risks. This will improve the efficiency and time-to-market for building models (currently this is done by IT teams). These developments improve the data-driven work, bringing it closer to business and less dependent on IT resources. DNB is experimenting with innovative techniques like Natural Language Processing. Currently, different use cases are developed for insurance supervision, e.g., (i) a use case where in on-site inspections the minutes of the Board of an insurer or pension fund are examined on the influence of the different key function holders; (ii) a use case in which the reports of accountants are being searched for material findings; and (iii) a dashboard in which insurance supervisors can select a word that they want to look for in all qualitative regulatory reporting.

85. DNB uses several dashboards, based on the QRTs, to monitor the developments for each insurer and as well at sector level. Each quarter a report based on the data analyses is discussed in the management team, also a report has been developed for senior management. DNB's Insurance Supervision Department is experimenting with the use of pattern recognition and outlier analyses based on machine learning to improve reporting quality. By pattern recognition, new data quality validation rules have been developed. Also, a pilot has been done with some insurers to make it possible for insurers to use DNB's package of validation rules in their own systems, before sending them to DNB. This improves data quality and timeliness of the availability of data.

86. Recommendation 8: Explore opportunities to develop largely automated supervisory tools based on advanced technologies – able to learn and adapt by using algorithms and statistical models – allowing processing of large data sets.

87. The development towards more data-driven supervision is an AFM-wide priority aiming for forward-looking supervision to the utmost extent possible. For the non-life sector, the AFM has developed a 'Data Dashboard Non-Life' in which it combines several data sources on the non-life market and provides risk indicators. Such data-driven analysis has also informed the AFM climate report from 2021. Regarding life insurance, the AFM is about to initiate work on a 'Data Dashboard Life'. While there are considerably fewer players in the life market than in the non-life market, at the same time products are more difficult to monitor in a data-driven manner. This renders a simple adaptation of the non-life dashboard unfeasible and will require more sector-specific parameters. An analysis has been carried out in 2023 to determine which data are necessary to properly monitor the risks and to detect risks as early as possible. Regarding insurance distribution, the AFM uses survey data in order to identify trends in the intermediary market and to detect specific risks by combining data sources, e.g., the supervision of remuneration policy, which has been set up and implemented using web scraping techniques.

B. On-Site Inspections

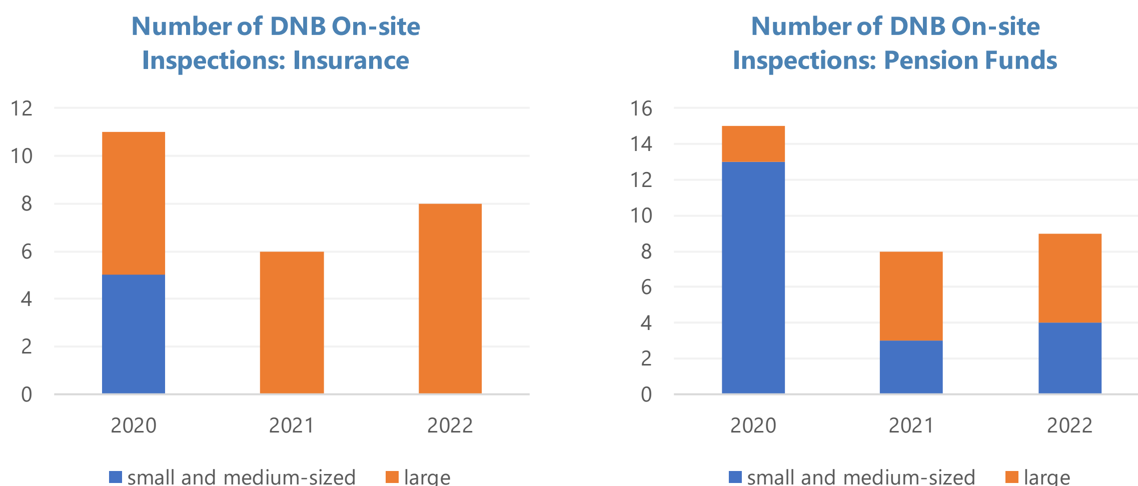
88. There is no minimum frequency of on-site inspections at insurers and there are no targets in terms of a specific percentage of insurers inspected annually. DNB's methodology is risk-based in a way that on-site inspections are only scheduled if an account supervisor deems it necessary based on the risk assessment. In addition, on-site inspections are not a standard component of DNB's methodology for small insurers. The introduction of the ATM in 2021 resulted in a declining number of on-site inspections for small and medium-sized insurers (Figure 12).

89. The findings of on-site inspections are communicated to the management of an insurer via the final on-site report and a closing meeting. DNB's account supervisor of the specific institution also receives the final report and is also present at the closing meeting. After this meeting, the follow-up of the on-site report is performed by the account supervisor of the institution, which is usually done via a letter addressing the required follow-up. If an on-site report of DNB results in findings, a risk-mitigation program is started by the account supervisor. Depending on the situation, the risk management program can—but does not always—require the insurer or pension fund to follow-up on each separate inspection finding. In some cases, findings with lower risk scores are deprioritized—the insurer or pension fund is still expected to follow-up on the inspection findings, but without specific monitoring by DNB's supervisors. Also, the AFM asks for feedback from the supervised institution on its findings. In the case of a formal enforcement measure aimed at recovery (i.e., the violation continued), the AFM always monitors the effect of the measure. In the case of an informal enforcement measure aimed at recovery, the choice of follow-up depends on the violation, the chance of recidivism, and the importance of the subject.

Figure 12. The Netherlands: On-Site Inspections

After the implementation of the new supervisory approach (ATM), no on-site inspections have been performed at small and medium-sized insurers.

Also in the pension fund sector, the number of on-site inspections at smaller entities has declined, but at the same time, the overall engagement with the sector is quite intense during the transition phase.



Source: DNB.

90. While DNB would have the legal possibility to conduct ad-hoc, unscheduled inspections, institutions are almost always informed at least eight weeks before an on-site inspection. In addition, every insurer receives a 'supervisory calendar' in December which contains all supervisory activities scheduled for the coming year, including planned on-site inspections. The AFM also has the possibility to carry out unscheduled inspections. These are, however, only carried out when needed, mostly in cases of illegal market practices. In recent years there has been no need to carry out unscheduled inspections in the insurance or pension fund sector.

91. Recommendation 9: Expand the number of on-site inspections for insurers in the lowest impact class, as a backstop to the risk-based approach.

C. Governance, Internal Controls and Risk Management

92. Insurers' and pension funds' governance is supervised both on a day-to-day basis and through thematic reviews and on-site investigations:

- Day-to-day supervision: the governance, risk management and risk control of individual insurers and pension funds is also subject to general day-to-day supervision, especially in the case of larger pension funds. Supervisors have regular meetings with the board, and in some cases also the accountability body, as well as the senior management, or with companies to which activities have been outsourced, such as an investment manager.

- Thematic sectoral reviews: Such reviews typically include desk research and interviews and may, e.g., result in an overview of good practices, as done in the field of liquidity risk management.
- On-site investigation aimed at the governance process.

93. The assessment by DNB is based on the risk-based ATM approach. Insurers and pension funds in Impact Class 3 are always assessed through an annual review which consists of desk research and interviews to verify risks. In case the risks are outside DNB's risk appetite as supervisor, a risk mitigation process is started. In practice, at least two to four meetings per year are held by the supervisor with each of the large institutions as part of the annual review. Key function holders are included in these meetings. Additional meetings can take place in the case of an ongoing risk mitigation program.

94. Board members and key function holders of insurers and pension funds are required to be 'fit and proper' individuals who have the necessary knowledge, experience, and integrity to carry out their duties effectively. DNB ensures the persons who effectively run the institution are fit and proper by assessing new holders. Key function holders are always assessed when assuming a new position. When assessing the fitness and propriety of board members and key function holders, DNB considers—inter alia—the individual's professional qualifications, experience in the insurance or pension fund industry, time commitment, track record of compliance with laws and regulations and personal integrity. This assessment is done by reviewing the application and a potential interview. From their different perspectives, DNB and the AFM work closely together on 'fit and proper' assessments of board members and key function holders of entities they both supervise, such as insurers. For these entities, AFM advises DNB on all these assessments and can participate in the assessment interview. Both supervisors must agree to the appointment of such candidate. The result of an individual's propriety assessment is valid until new facts or circumstances arise, regardless of the individual's (future) role. DNB assesses if new circumstances should result in a reassessment of propriety. Again, if this individual falls under the supervision of both supervisors, DNB informs the AFM of its decision to reassess and the AFM may then decide to participate in the reassessment. When the propriety of an individual is severely impacted, this may lead to the release of the individual's responsibility within the insurer or pension fund. The result of the fitness assessment is applicable to a specific role. Individuals are to be assessed whenever their role changes or when they are proposed for a different role which is in scope of DNB's fit and proper assessment. Also, for fitness, new facts or circumstances could lead to a reassessment of the individual and ultimately the removal of the individual from his or her role. New facts or circumstances are to be notified to DNB by both the individual and the insurer or pension fund.

95. The collective competence of the board provides input for the individual assessment as well, to assure that sufficient collective suitability is maintained. DNB also takes into account the individual's potential conflicts of interest and the potential impact if the individual were to act inappropriately. In addition, DNB reviews the governance structure to ensure that there are sufficient checks and balances in place to prevent conflicts of interest and ensure proper oversight. In 2022, DNB reviewed the board effectiveness of a board that changed from a two-tier to a one-tier board.

Furthermore, DNB conducted a deep dive to assess a board after they made changes that impacted the board's effectiveness.

96. **Additionally, DNB has established a dialogue with insurers' and pension funds' supervisory boards**, leveraging their role to oversee the implementation of proper governance by Boards, in order to convey important messages and receive feedback on strategic developments. Especially, in crisis situations, the role of independent members was invaluable. While the current practice of appointing independent supervisory board members is already well established, its further clarification in law would ensure consistency across institutions and in time.

97. **Recommendation 10:** Further clarify the requirement of independent supervisory board members in law.

98. **Insurers and pension funds are required to have a written remuneration policy in place.** Remuneration should reflect the size of the organization and the nature, size and complexity of its operations and should add to the good governance. Remuneration should not encourage taking on more risk than what is acceptable. Furthermore, insurers and pension funds are required to ensure that the principles of the remuneration policy also apply to outsourcing partners.

99. **Behavior and culture are explicit elements of DNB's supervisory methodology, and various deep dives into the system of governance as well as into the effectiveness of internal control functions have been undertaken.** The annual assessment of non-financial risk includes behavior and culture. DNB issued a good practice on insurance risk management in 2018. For several insurers, DNB performed on-site inspections on the design and operation of the risk management function. Internal control functions were also assessed at the group level for Internationally Active Insurance Groups (IAIGs).

Figure 13. The Netherlands: Internal Governance and Risk Management Assessment

Source: DNB

100. The governance, risk management and risk controls of major pension administrators and asset managers may be subject to DNB's supervision either pursuant to the outsourcing rules contained in the PW or pursuant to the WFT, if the third parties to which activities are outsourced are themselves supervised entities. In the latter case, the focus will be on the solidity of the relevant third party, i.e., governance, risk management and risk control will be assessed from the third-party's point of view rather than the pension fund(s) that outsource activities to it. In preparing for the transition to a new pension system, in 2022 on-site inspections have been conducted to look into the governance of pension funds.

D. Conduct Supervision

Insurance

101. The AFM does not mediate between an individual customer and a financial enterprise; instead, this is the role of the independent Financial Services Complaints Institute (Klachteninstituut Financiële Dienstverlening, KIFID) which helps solve problems between consumers and their insurer, bank, intermediary or other financial service provider, either through mediation or through a (usually) legally binding decision by its Disputes Committee, as an easily accessible alternative to the courts. Nonetheless the AFM analyses complaints from consumers to determine where problems arise in the market. Annual complaints data submitted by financial institutions are therefore one of the sources for the AFM's risk-based work.

102. Key risks relating to market supervision in the insurance sector are a combination of dealing with legacy issues and alertness to new evolving risks, e.g., technological developments. The focus of the AFM's supervisory activities is that the legacy is cleared and that in this way the focus will be more on the new challenges (from reactive to proactive supervision). Legacy issues still relate to unit-linked business (the "usury policies scandal"), profit-sharing policies, closed-books, and life insurance in general. This also includes subjects such as enforcement of the ban on commissions and professional competence and remuneration. In order to restore consumer confidence, the AFM has conducted research into profit-sharing insurance policies, and also continuously monitors the settlement of unit-linked insurance policies.

103. Developments like climate change and the rise of cyber crime have a great impact on the possibilities to insure certain risks. Uninsurability and unfair competition from abroad could potentially lead to a race to the bottom. In 2021, the AFM conducted a study into the impact of climate change: damage and losses caused by climate change are increasingly uninsurable. In 2023, the AFM published its main conclusions of an exploratory study into the growing market for cyber insurance: 'Cyber insurance: comparability requires attention of insurers'.

104. In 2020/21, the AFM has investigated the compliance with product development rules with regard to the implementation of the Insurance Distribution Directive and the ban on commission by authorized agents. Shortcomings and offences have led to both informal and formal enforcement actions. Furthermore, the AFM conducted investigations into the

compliance with professional competence standards and the obligation for intermediaries to publish their remuneration policy.

Pension Funds

105. The new Pension Act introduces requirements with regard to complaints handling by pension funds. Pension funds and insurers are required to introduce and maintain an internal complaints and disputes procedure. The new act also introduces a definition of a complaint (any expression of dissatisfaction) and requires pension providers to have and maintain a complaints administration and make a general description of the complaints procedure available to (former) participants and scheme members, former partners of scheme members, and pension beneficiaries. In the preparation phase, the AFM will discuss the focal points of AFM's supervision with the pension sector and communicate good practices to ensure that the sector is able to meet the new legal requirements.

106. The AFM considers it important that pension scheme members can raise their complaints or concerns with their pension provider and enjoy adequate legal protection. Therefore, the AFM conducted research on this topic in 2022. Key recommendations in this context were (i) evaluate your own complaints procedure and review in particular the definition of 'complaint'; (ii) ensure that the complaints procedure is easy to find on the pension fund's website via a maximum of one or two clicks and explain in simple language how the complaints procedure is structured; (iii) measure satisfaction after handling a complaint.

107. The AFM Trend Monitor identifies important trends and related risks in the financial sector and is used to inform the development of the strategy and annual planning process. The Trend Monitor offers context, detail and explains the links between relevant subjects of supervision. As an example, the AFM initiated a survey into the use of pensions products with variable benefits and the extent to which such a product is in the consumer's best interest.

108. Recommendation 11: Enact a clause which would allow the AFM to collect data points relevant to conduct supervision.

109. Recommendation 12: Expedite work on the Life Insurance Dashboard, and (also for Non-Life) ensure that timely data is available.

E. Supervision of the Pension Transition

DNB Supervisory Program and Priorities for Pension Transition

110. In the past years, DNB has been preparing intensively for its supervisory role in the transition to the new pension system through a number of projects. Since 2019 with the installment by the MoSA of a Steering Group for a new pension system, DNB has acted externally in two main roles, both as economic advisor of the government (to advise on financial stability and sustainable welfare aspects) and as the pension fund supervisory authority (to advise on the

feasibility of the new system from a supervisory perspective). Since mid-2021, after the publication of the first draft of the new pension law, DNB has started a series of internal projects:

- Development of assessment frameworks for risk-based supervision
- Development of guidance for pension funds
- Setting up a supervisory program
- Setting up the internal organization
- Monitoring and nudging the pension sector to prepare for the transition

DNB Supervisory Tasks for Transition Supervision

111. DNB supervises pension funds' compliance with the law regarding the transition, in particular (i) the quality and governance of the decision-making, (ii) the adequate management of financial risk, and (iii) the adequate management of operational and IT risk. With respect to the conversion of past pension accrual into the new pension system, pension funds have to report their intent for the conversion to DNB, after which DNB has to take a formal decision whether or not to impose a prohibition on the conversion.

112. To achieve a fair and adequately managed transition, DNB aims to ensure sufficient supervisory capacity, avoiding procedural bottlenecks, and transparency towards the pension sector, and supervisory remedial actions should take place as early as possible in the transition period to help avoid the piling up of required amended decision-making at the end of the transition period.

113. Separate assessment-frameworks have been developed for five main building blocks of the transition that pension funds will address in their decision-making and implementation: (i) bridging plan, (ii) defining the participants' risk profiles, (iii) the new DC contract, (iv) the conversion decision, (v) non-financial risk management. These risk-based frameworks describe how DNB will assess whether pension funds' decision-making and implementation comply with the law and regulations. The assessment frameworks will be updated continuously during the transition period.

114. In parallel with the assessment frameworks, DNB has developed guidance (Q&A's, factsheets, good practices) for the pension sector regarding these five themes in order to provide as much transparency as possible on DNB's interpretation of the new law and regulations. This guidance has been discussed with the pension sector through roundtables, informal consultation with stakeholders (e.g., the MoSA, the Dutch association of pension funds, the Dutch association of insurers), and public consultation.

Supervisory Program in Four Phases

115. In preparing for its transition supervision, DNB distinguishes four separate phases that every pension fund that converts its past benefits into the new system will go through:

- Phase 1: The preparatory phase, in advance of a fund's reporting their intent to convert.
- Phase 2: The phase starting with a fund's reporting of the intent to convert and ending with DNB's decision whether or not to impose a prohibition.
- Phase 3: The phase between DNB's decision and the actual implementation of the conversion.
- Phase 4: The phase after the conversion (the execution of the new DC contracts).

116. For Phase 1 (preparatory phase) supervision, DNB has set up a risk-based supervisory program and procedures with the aim to take any required remedial actions as early as possible. Activities will include, amongst others, monitoring the pension sector's progress and nudging the pension sector to take the necessary preparations; sector communication, including round tables and seminars; and risk identification and mitigation efforts on pension fund / pension administration organization level, including through on-site inspections.

117. In Phase 2 (conversion assessment phase), efficient assessment processes are to be set up, in order to prepare for the assessment of many conversion intents in a relatively short period of time. Activities include: IT processes for processing a pension fund's reporting of the conversion intent and supporting information; internal processes for the assessment, record-keeping, decision-making and communication with the pension fund; identifying knowledge/skill profiles and required staff capacity; and seeking IT opportunities to automate elements of the assessment.

DNB Supervisory Program: Organization

118. Necessary steps are being taken to provide for additional supervisory capacity, organizational changes, internal education, and further cooperation with the AFM:

- *Additional supervisory capacity*: In consultation with the government and based on an analysis of the required number of supervisory staff, additional resources to carry out DNB's supervision have been secured.
- *Organizational changes*: Specifically, two new departments have been established: (i) a department that will be central in resource planning, and (ii) a department that will steer the process of the assessments of pension funds' conversion decisions.
- *Internal education*: A training program is already on-going; further training for specific roles will likely be necessary.
- *Cooperation with the AFM*: The above activities will be conducted in close cooperation with the AFM in order to ensure that the supervisory roles of the AFM and DNB align.

AFM Supervisory Program and Priorities for Pension Transition

119. The AFM has carried out an analysis to identify the main conduct risks under the new pension framework and during the transition phase:

- Pension scheme members have an insufficient understanding of what happens to their pension (entitlements) during the transition phase;
- Pension scheme members have an insufficient understanding of the status of their pension at the retirement date;
- The pension scheme does not meet the needs and risk preference of the scheme members;
- Scheme members possibly do not make the appropriate choices concerning their pensions;
- Unrealistic expectations are raised in communications;
- Scheme members cannot understand the developments related to their pensions; and
- The quality of pension advice is inadequate.

120. During the Preparatory Phase, the AFM was in an advisory role involved in the development of the new regulatory framework for pensions and has particularly advocated for more transparency and understandability of the framework to consumers. The AFM has also—in cooperation with DNB and in consultation with the pension sector—developed guidance material such as good practices for pension administrators' communication plans and principles for effective communications with pension scheme members. The AFM's expectations and guidance are shared with the pension sector through roundtables and the AFM's Transition Bulletin. In addition, the AFM will during this phase raise attention to the timely, correct, clear, and balanced information letters on the recalculation of DC schemes; discuss with the Dutch Pensions Register the impact of the future supervision of its operations; and conduct exploratory research to prepare for the new pension framework, e.g., the survey into the correctness of pension information for scheme members; the information provision concerning indexation of benefits / entitlements, complaints handling, and transparency and accountability in respect of pension funds' operating costs.

121. In the Transition Phase, the AFM plans to focus on the observance of the new rules through thematic sector-wide reviews, **e.g., on:**

- communication during the transition phase including on the consequences of the transformation of the pension entitlements;
- the implementation of the risk preference inquiries;
- the timely, correct, clear, and balanced information provision of the transition Pensions Benefit Statements;
- the guidance for scheme members' decision-making regarding their pension;
- the pension fund's statement on the establishment of its pension schemes;
- complaints handling; and
- the quality of pension advice.

122. In the Post-Transition Phase, the AFM plans to supervise the timely, correct, clear, and balanced information provision of the Pensions Benefit Statements for DC schemes and the recalculation letters. It plans to supervise the online pension status overview to ensure that information will be timely and completely available for everyone. Finally, the AFM has scheduled the supervision of the risk preference inquiries, the provision of guidance to scheme members in decision making regarding their pension (options), and the pension fund's statement on the establishment of its pension schemes (clarifying the objectives, structure, risk appetite and options in respect of the scheme).

123. Activities will be conducted in cooperation with DNB, with biweekly meetings of both authorities in the Transition Management Broad. Activities are communicated regularly, e.g., through the monthly transition bulletin. Further, DNB and the AFM have launched a Platform with experts from pension funds and insurers (including representatives of the relevant associations) to regularly discuss practical questions throughout the transition period. In addition, DNB and the AFM are jointly surveying the pension sector to understand the progress in preparing for the new framework. This survey is sent out twice a year as of 2022, and relevant findings are being communicated with the sector.

124. Recommendation 13: Closely monitor and proactively manage potential risks of the pension system transition for the authorities related to resources and legal risks. In particular, any communication from the authorities during the transition phase needs to be carefully phrased in order to minimize the risk of litigation.

125. Recommendation 14: Closely monitor the effectiveness of internal control functions in the transition process, and emphasize the important role of all pension funds' internal control functions in the transition process, including the actuarial function and internal audit. Effective systems of internal controls will be essential to ensure a high quality and good governance of the conversion decision-making and adequate management of financial and non-financial risks.

F. Consolidated Supervision and Supervisory Cooperation

126. For insurance groups under the supervision of DNB, coordination arrangements are established in accordance with the provisions of the Solvency II Directive. During the college of supervisor meetings which take place at least annually, there is open and transparent communication and exchange of information. In these meetings, all significant risks of the group and all (relevant) legal entities are assessed to arrive at a mutual understanding of the risks the insurer faces, culminating in a joint risk assessment.

127. Until 2023, two Dutch insurance groups were designated as Internationally Active Insurance Groups (IAIGs) before one of them moved its legal domicile to Bermuda, resulting in a change of the group supervisor. Both IAIGs were, however, not participating in the IAIS monitoring period for the implementation of a global Insurance Capital Standard, despite being asked by the DNB to participate. For the IAIG remaining under DNB supervision, a Crisis Management Group (CMG) was established several years ago.

128. The AFM is currently not participating in the supervisory colleges of Dutch insurance groups but is an active member in relevant working groups at the European and the global level. The AFM is represented in the IAIS Market Conduct Working Group and in the EIOPA Committee on Consumer Protection and Financial Innovation. Where necessary, it cooperates with foreign authorities on an ad-hoc basis, e.g., in an EIOPA working group in 2020/21 in relation to a product intervention by an EU NCA. DNB closely coordinates with the AFM where conduct of business matters is concerned.

129. DNB welcomes initiatives of supervisory convergence which lead to a level playing-field in the EU, while still being concerned about some practices in cross-border business. As a host supervisor, DNB has in the past occasionally been concerned about incoming cross-border business, in particular when foreign insurers and their respective home supervisors might have lacked a full understanding of certain specificities in the Dutch market and regulatory practices, e.g., related to the prudent person principle or contract boundaries. In 2021, the Netherlands introduced a ban on the provision of cross-border services by third-country insurers. As a result, insurers having their registered office outside the EU were no longer permitted to carry on direct insurance business on a cross-border basis to the Netherlands. In total, 38 insurers were affected by this measure.

130. Recommendation 15: Require the IAIG to participate in the IAIS's Monitoring Phase for the Insurance Capital Standard.

131. Recommendation 16: Explore, in collaboration with EIOPA, ways to strengthen supervision of cross-border business, including a review of how cooperation through platforms could be strengthened, and promote further supervisory convergence.

G. Macroprudential Supervision

132. The Solvency II reporting data contain key financial and risk data (e.g., balance sheet, solvency position, composition of capital requirements) that are used for macroprudential supervision. Besides the regular supervisory data, DNB occasionally uses ad hoc data requests to assess a particular risk. As an example, DNB has recently requested data on (i) return guarantees and (ii) mortgage exposures, as the regular templates did not enable a detailed analysis of these. Moreover, DNB participates in the bottom-up insurance stress tests of EIOPA, which provide insights into the sensitivity of large Dutch insurers to specific shocks. Finally, DNB contributes to the annual global monitoring exercise of the IAIS, which comprises data collection, both at the individual insurer level and the sector level.

133. DNB conducts macro risk analyses in collaboration between the Financial Stability Department and the supervisory divisions. In the so-called 'micro-macro dialogue', DNB identifies the most important macro risks for Dutch financial institutions twice a year in an internal risk report. Microprudential risks are assessed for systemic importance, and vice versa, macroprudential risks are identified which could be relevant for microprudential supervision including suggestions for supervision priorities and actions. The Financial Stability Report—

published twice a year—contains an identification of market trends and potential future risks for the financial sector, e.g., in the edition of autumn 2022 the impact of inflation on insurers' technical provisions was discussed. The publication also includes messages for the industry and announces and discusses policy measures. Finally, large Dutch insurance companies participate in bottom-up EIOPA stress test exercises—most recently in 2021—which cover forward-looking risks in various stress scenarios.

134. DNB publishes part of the Solvency II reporting data at an aggregate and individual entity level on its website. These data include, amongst others, balance sheet data, investments, profit and loss accounts, solvency data, benefits, and premiums.

135. Currently, insurers are not subject to macroprudential requirements based on Solvency II. The trilogue agreement on Solvency II introduces some macroprudential tools, in particular related to the management of liquidity risks. This also includes a ban on dividend payments. The amended Solvency II Directive will need to be transposed into Dutch law, presumably by the second quarter of 2026. More generally, the supervisory intensity, e.g., the frequency and depth of on-site investigations, also depends on the systemic relevance of an insurance company. In 2019, the Act on the recovery and resolution of insurers came into force, which requires systemically relevant insurers to draft a resolution plan.

136. DNB performs a systemic relevance assessment of individual insurers every three years based on the IAIS's guidance. In this exercise, DNB considers the size, interconnectedness, substitutability and non-traditional activities to decide on which companies can be considered systemically relevant. Systemic relevance is used as input for the supervisory classification of insurers and therefore also for the intensity of supervision. Systemic relevance is also used as input for the public interest test for resolution. The IAIS methodology was used for the identification of Global Systemically Important Insurers until 2017 and is currently used in the Individual Insurer Monitoring exercise of IAIS based on the Holistic Framework approach. There is no separate legislation for domestic systemically important insurers. In 2015, Aegon Group was designated as a Global Systemically Important Insurer by the Financial Stability Board (FSB). As a consequence, DNB implemented the requested standards of enhanced supervision and started recovery and resolution planning for Aegon Group. In 2019, the FSB suspended the designation of insurers as systemically important, with a final discontinuation in 2022. Instead, the FSB now bases its considerations on the IAIS Holistic Framework for Systemic Risk in the Insurance Sector.

137. Recommendation 17: Enact a clause in the WFT which would allow DNB to cap dividend payments of insurance undertakings, based on macroprudential reasons.

Appendix I. Financial Soundness Indicators of the Insurance Sector

(In percent)

	2018	2019	2020	2021	2022	2023-Q3
Capital adequacy						
Assets / liabilities	114.5	112.8	112.6	113.7	115.0	114.8
SCR coverage ratio (Solvency II) – life, median	216	199	187	187	204	193
SCR coverage ratio (Solvency II) – non-life, median	186	180	186	192	188	175
MCR coverage ratio (Solvency II) – life, median	518	452	433	451	448	426
MCR coverage ratio (Solvency II) – non-life, median	422	402	414	422	400	393
Unrestricted Tier 1 capital / eligible own funds	91.0	90.0	90.7	91.5	90.9	91.0
Tier 3 capital / eligible own funds	2.4	3.3	2.8	2.8	3.3	3.1
Profitability						
Growth in gross written premiums - life	...	5.2	-1.5	-2.0	-4.3	...
Growth in gross written premiums - non-life	...	4.3	3.3	2.0	3.2	...
Combined ratio (loss ratio plus expense ratio) - non-life, median	99.2	99.3	98.3	99.2	98.5	...
Return on equity – life, median	3.1	8.5	5.6	6.4	0.7	...
Return on equity - non-life, median	2.9	7.7	7.5	9.2	-2.9	...
Asset composition and quality						
Bonds / total assets excl. unit-linked	44.9	44.6	42.9	41.9	32.9	31.0
Equity, participations / total assets excl. unit-linked	6.9	6.5	7.4	10.3	11.6	12.1
Loans, mortgages / total assets excl. unit-linked	23.3	21.7	22.6	24.0	24.1	23.5
Below-investment grade / total fixed-income assets	0.8	...	1.1	...	1.2	...
Weighted average of maturities (in years) – life	14.8	...	13.9	...	15.6	...
Investment yield – life	1.8	2.6	2.5	2.1	1.2	...
Liquidity						
Lapse rate (based on contract numbers) – life	3.7	3.7	4.1	3.8	3.3	...
Lapse rate (based on volume) - life	6.7	6.8	6.5	6.0	5.4	...
Liquid assets / total assets excl. unit-linked[1]	48.3	48.5	46.4	45.8	36.3	33.2
Reinsurance						
Risk retention ratio (net premium / gross premium) - life	97.0	94.6	88.9	86.8	84.1	...
Risk retention ratio (net premium / gross premium) - non-life	98.3	98.2	98.2	97.8	97.9	...

[1]Liquid assets include government and corporate bonds, listed equity, cash and cash equivalents.

Source: IMF staff calculations based on DNB and EIOPA data.

Appendix II. Financial Soundness Indicators of the Pension Fund Sector

(In percent)

	2018	2019	2020	2021	2022	2023-Q3
Funding level						
Policy funding rate, median – DB	112.1	107.1	101.5	113.9	123.6	123.7
Share of liabilities of PF below 110 percent funding ratio – DB	78	76	79	32	23	…
Share of liabilities of PF below 100 percent funding ratio – DB	62	63	65	1	0	…
Share of liabilities of PF below 90 percent funding ratio – DB	0	0	0	1	0	…
Contributions and benefits						
Change in contributions – DB+DC	0.8	8.5	13.5	-2.1	15.6	…
Change in paid benefits – DB+DC	3.4	4.0	5.2	4.5	5.8	…
Asset composition and quality						
Equity investments – DB+DC / Total assets[1]	61.0	58.8	56.1	56.9	51.2	49.6
Bond investments – DB+DC / Total assets	28.0	28.4	29.1	32.7	31.4	31.0
Loans – DB+DC / Total assets	1.1	1.1	1.2	1.4	2.5	1.6
Non-investment grade – DB+DC / Total fixed-income assets	9.1	9.6	10.1	11.8	11.3	11.5
Foreign-denominated assets – DB / Total assets	53.3	55.8	56.4	57.0	50.5	49.8
Investment return, median – DB	…	…	9.0	3.7	-23.0	…
Investment return, median – DC	…	…	4.7	9.7	-16.7	…
Liquidity						
Liquid assets / total assets – DB+DC[2]	89.6	87.9	86.5	90.7	88.1	88.7
Contributions / benefits – DB+DC	105.7	110.3	119.0	111.5	121.8	…

[1]Equity investments include holdings in investment funds.
[2]Liquid assets include cash and deposits, listed equity, investment funds, and bonds.

Source: IMF staff calculations based on DNB data.

Appendix III. Follow-up to 2017 FSAP Recommendations

IMF Recommendation	Actions Taken
Insurance and pension fund oversight	
Institutional set-up: To enhance effectiveness under the twin-peaks model, the supervisors should consider strengthening the already robust cooperation, as follows: • While the focus of the DNB and AFM is different, there are areas where a single approach could be taken. In particular, for the culture, governance and integrity supervision, a single joint approach is recommended; • Data exploitation and data analytics are areas where a single approach would increase resource efficiency; and • Earlier formal information sharing on problem files should be considered.	**Implemented.** Both DNB and the AFM have taken the following actions to optimize cooperation, while each acting within its own mandate: • At senior management level the AFM and DNB have bilateral meetings every six weeks to discuss matters that are potentially relevant for each other. • Team leadership from several departments (Account supervision, Policy departments and Expert centers) meet regularly and every six weeks to discuss current events, supervisory activities, supervision methodology and human resources. In addition, both teams meet twice per year to discuss the rolling calendar of supervisory activities that could be relevant to both parties and zoom in on specific topics (such as supervision on ESG, and risk-based research). • Whenever both DNB and the AFM examine similar topics (such as the ongoing supervision on compliance function of supervised entities or the sectoral issues regarding Interest Only Mortgages or New Pension Regulation), care is taken to ensure that each supervisor operates within its own mandate and supervisory findings are shared by Account Supervision or in supervisory colleges. • DNB and the AFM exchange methodologies whenever possible. Currently, the AFM is learning from DNB's updated risk-based methodology (ATM), incorporating insights into its own risk assessments. DNB is inspired by the newly developed method the AFM uses for the selection of informal intervention strategies. • DNB and the AFM are currently working together on exploring the supervision of Diversity, Equity and Inclusion. In response to the evaluations of DNB and the AFM as requested by the MoF, DNB and the AFM have investigated instances where similar information was requested by both supervisors, leading to unnecessary work for supervised entities. While isolated problem areas were identified, the general conclusion, after offering the sector an extended time window to respond with examples, is that only a few instances of similar investigations were found. Data sharing between DNB and the AFM takes place; however, systems and data analytics remain separate. Knowledge is shared between the respective parties and there is an increasing effort on integrating data systems

	IMF Recommendation	Actions Taken
		where possible, e.g., CRM data and licenses. Also checks take place to ensure data reporting requirements do not overlap and the reporting burden on financial companies is kept to a minimum. Information sharing on problem files: It is standard practice for both supervisors, based on the Cooperation Agreement, to actively inform each other about developments at supervised institutions that are relevant to the other. In recent years, information sharing and cooperation were intensified and formalized in so-called protocol files on solvency problems at insurers. In addition, the AFM has taken seats at management level in DNB steering groups.
	Institutional set-up: The authorities are recommended to enhance the powers of DNB and the AFM to introduce technical regulation in accordance with national and EU legislations.	**Largely implemented.** In general, based on the Dutch instructions for formal legislation ('Aanwijzingen voor de regelgeving'), regulatory powers can only be granted to an independent administrative body, such as DNB or the AFM, insofar as the regulatory powers concern organizational or technical topics, or in extraordinary cases and on the condition that the minister has the power to approve the regulation. Although this general principle limits the possibility to provide for technical regulations to a certain extent, it should be noted that DNB and the AFM already have the power to adopt so-called policy rules which are in principle self-binding on DNB and the AFM when exercising the relevant supervisory powers, but are not, as such, legally binding on supervised institutions. However, since DNB or the AFM will take these policy rules into account when exercising the relevant supervisory powers, these policy rules are nonetheless (even though not legally binding) very much relevant for supervised entities when aiming to comply with the relevant regulatory requirements. The power to adopt such policy rules is based on Article 4:81 of the General Act on Administrative Law (Algemene wet bestuursrecht, AWB). An example of a policy rule is the joint 'Policy rule of DNB and AFM on fitness assessments. In addition, DNB and the AFM have delegated regulatory powers based on specific provisions included in, for instance, the Dutch Financial Supervision Act (Wet op het financieel toezicht, WFT). By using those regulatory powers, DNB and the AFM can typically adopt de facto legally binding requirements for supervised entities, usually of a technical nature and further specifying requirements in the relevant 'higher' legislation.
	Institutional set-up: Exemptions from the WNT-3 for both supervisory authorities should be considered.	**Not implemented.** The Law on Standards for Remuneration for Senior Officials in the Public and Semi-Public Sector (WNT-3) would impose the mentioned salary cap on DNB and AFM. Due to incongruence with its coalition agreement and in line with the advice of the Council of State, the current government

	IMF Recommendation	Actions Taken
		decided not to submit the proposal for the WNT-3 to parliament thereby preventing enactment of the law altogether. The MoF has not provided DNB and AFM with greater autonomy in setting their supervisory budgets. No actions to do so are foreseen. In practice the WNT is an important limit to the DNB and AFM salaries for management levels. Because of this issue, DNB has a very tough time filling its vacancies for insurance supervisors. Salary seems to play an evident role in this, as several insurers have standard market add-ons for, e.g., actuaries, which DNB cannot match.
	Institutional set-up: For a smooth transition and effective functioning of the new structure, the AFM is recommended to apply flexibility in the resources allocation and strong guidance on the functioning of the new structure under a stable board of directors.	**Implemented.** The conduct of business supervision of the retail financial services sector has been operating in its current structure for seven years now. The experiences so far are positive. Working in product-oriented teams has increased market knowledge and associated challenges and further strengthened the tenacity of supervision within the various sectors. At the same time, the support of direct supervision by various cross-sector expert teams improves quality and depth. The functioning of the current organizational structure has been subject to ongoing review and optimization. Mr Jos Heuvelman has been a member of the executive board of the AFM since 2018 and reappointed in 2022 for another four-year term. The central management of substantive risks has been strengthened. As a result, priorities are clear to all colleagues and flexibility regarding allocation can be consciously deployed. As the AFM has retained its project-based approach to risk, adjustments in capacity allocation and supervisory intensity occur naturally and efficiently. In addition, great value is attached to coordination between the various focus areas; for example, there are various horizontal partnerships and steering groups to coordinate the overlap in themes between different product teams. Examples of this are the coordination of data driven initiatives and the Intermediary steering group, which coordinates activities relating to the distribution channel of various sectors, such as insurance and banking products. Developments in the field of financial innovation are also coordinated horizontally.
	Institutional set-up: The AFM is recommended to be allocated a substantial budget for the development of capabilities to exploit big data for supervision.	**Implemented.** The AFM has allocated a substantial budget for (big) data supervision. Since the last FSAP resources and knowledge building have taken shape through a dedicated program office (called "Spot-on"). It now entails around 40 permanent staff that work from a central expertise unit where they both maintain and expand the platform where applications are built ("Managed Data Platform") and build

	IMF Recommendation	Actions Taken
		new applications and tools. Moreover, there are multiple data analysts that work in specific risk areas. As a result, roughly 10-15 percent of supervision resources are dedicated to data supervision. Several big data initiatives have been implemented at the AFM, especially in capital markets supervision as there are several reporting requirements. Also in other areas (for example accounting and pension funds) there are big data tools and supervision. However, the efforts have also been constrained by legal restrictions. Especially in the area of retail supervision big data supervision almost always involves consumer data, which means it is subject to privacy laws and high legal restrictions. The legal means to request this data is currently limited. There is a new law proposal that would make this possible. However, it still needs to go through all the legislative processes.
	Institutional set-up: The Risk, Management and Strategy Department should be in charge of following up on the implementation of the recommendations that the departments have agreed to implement.	**Largely implemented.** DNB's Risk, Management and Strategy Department's (RMS) evaluations conclude with findings and recommendations for the investigated department(s). In its annual report, RMS reports on the status of the follow-up of the implementation of the recommendations. In addition, RMS requests a so-called reflection report of the investigated department(s) about a year after the evaluation was finalized. In this report the concerning department reflects on the changes that have been made driven by the RMS evaluation. In addition, RMS provides input to the Internal Audit Department on future audits and as such ensures that any RMS evaluation follow-up that needs extra attention could be considered for an audit. RMS is not responsible for the implementation of the recommendations as such; this responsibility lies with the concerning department(s) that received the recommendations.
Insurance oversight		
	Supervisory review: The potential risk of missing full exploitation of the sectoral thematic work carried out should be minimized by accompanying its growth with the account management and line supervision resources.	**Implemented.** The selection of supervisory themes is jointly performed by the account and expert center teams and decided upon in the management team. The supervisory themes are chosen and planned based on the resources from both expert center and account teams to execute the thematic investigations and follow up the findings. The supervisory teams systematically deliver resources to perform the planned sectoral thematic work. These sectoral investigations are predominantly led by specialists from the Expert Center within the supervisory department. In contrast, specific on-sites are conducted and managed by the on-site department.
	Supervisory review:	**Implemented.**

IMF Recommendation	Actions Taken
As the detailed and extensive reporting under Solvency II emerges, further tuning of FOCUS! to enhance its alignment with Solvency II is recommended.	The ATM methodology has succeeded FOCUS!. ATM uses the regular Solvency II based QRTs (for financial risks) and qualitative questionnaires (for non-financial risks) to calculate data-driven ‘risk scores’ for several risk categories. These risks are used to prioritize the supervisory actions.
Supervisory review: DNB is recommended to carry out random on-site inspections on the quality and validity of the data. DNB should join selected AFM inspections of auditors and require specific inspections of auditors. On a regular basis, the predictive power of FOCUS! should be confirmed.	**Largely implemented.** DNB’s Expert Centre Operational Risk and IT works on improving data quality, and data quality is a regular subject both in on-site inspections and in thematic supervisory work (e.g., the review of LAC_DT in 2022). DNB holds regular meetings with accountants and actuaries, discussing ongoing expectations and general findings. DNB’s Expert Centre Data continuously works on improving data quality. An example of the work to improve data quality is the project “Dataloop”, an application developed within DNB for assessing the data quality of supervisory reports. It allows for validations from different sources like Python, SAS and XBRL. In Dataloop, the validations and resulting signals will be visible to the reporting practitioners and supervisory institutions. Both have the possibility to communicate and explain on each signal via a chat function. Depending on the assessment of the reporting practitioner, the signal gets the status “approved” or “resubmission”. Likewise, all signals will be assessed, and finally the report will be approved in Dataloop or be marked for resubmission. Communication about data quality is now centralized, assessing reports becomes more efficient, and an audit trail is available with historical reporting assessments. So far, DNB works internally at insurers and pension funds with Dataloop; an external roll-out to the insurance sector is planned for the near future. FOCUS! has been replaced only recently by the new and enhanced ATM methodology for which the predictive power has not yet been evaluated.
Consolidated supervision: Given the detailed information on intragroup transactions expected as of 2017 for insurance groups, the monitoring of the contagion risk could benefit from an IT tool.	**Partly implemented.** DNB has no sectoral dashboard for monitoring the reported data on intra-group transactions (IGTs), given the heterogenous and dynamic nature of reported data and the limited risks identified in regular supervision so far. The DNB does review intra-group transactions on a risk-based and individual level, e.g., by assessing internal reports of the company and/or starting a mitigation process to address a specific intra-group risk. In 2018, DNB did a thematic review on IGTs and in recent years in several cases specific high levels of IGTs were phased out due to supervisory actions. Nevertheless, regular sectoral in-depth analysis could indeed be useful to identify specific risks, trends or outliers. DNB will consider whether this can be incorporated in a next update of its ATM methodology.
Supervisory cooperation:	**Implemented.**

	IMF Recommendation	Actions Taken
	The authorities working together with EIOPA should continue supporting the coordination among supervisors of member states to minimize supervisory arbitrage.	Contributing to a level-playing field is a main driver for DNB's involvement in EIOPA. DNB continues to cooperate with other NCAs to enhance supervisory convergence and to minimize arbitrage. As an example, DNB strengthened the supervision on contract boundaries for disability contracts. In a reply, undertakings indicated that undertakings supervised by other NCAs, using home supervision, were allowed to apply a less strict approach. DNB worked together with these NCAs in order to make sure that both NCAs applied the regulations in the same way. For the AFM, internationalization is increasing the importance of collaboration and harmonization with other supervisory authorities. Cross-border financial markets clearly lead to cross-border issues, risks and challenges that are becoming increasingly difficult to deal with adequately at the national level. The AFM is therefore actively involved in influencing the European supervisory agenda.
	Recovery and resolution: The winding up regulation needs to be upgraded, as follows: • The authorities are recommended to introduce regulation that allows for fast advance payments on all insurance liabilities and requires the approval of both supervisors for the portfolio transfers of insurance and pensions, except when resolution powers are applied; • The authorities are recommended to evaluate the introduction of a guarantee scheme for insurance as an important additional resolution tool; • The authorities are recommended to introduce the planned resolution framework following a similar approach to the EU Bank Recovery and Resolution Directive with due regard to the insurance business model; and • The DNB, in conjunction with EU authorities, should consider whether the current arrangements in the case of a cross-border failure ensure adequate coordination and flexibility between the various resolution tools and authorities.	**Implemented.** Since January 2019 the Dutch bankruptcy law includes a provision that the administrator and/or the resolution authority can continue regular payments and claim payments to policyholders after the failure of an insurance company. When it becomes clear to the administrator or resolution authority that the remaining assets in the estate are insufficient to pay 100 percent of those policyholder claims, a reduction in payments may be applied. With regard to portfolio transfers, DNB is the main responsible authority, see Section 3.5.1a. of the Financial Supervision Act (FSA). Currently, an evaluation is ongoing with respect to the possible introduction of an insurance guarantee scheme. A study on the topic was completed and sent to Parliament in 2022. A public consultation was launched in Spring 2023 based on that study with a view to receiving input from stakeholders. These responses are currently being analyzed. As yet, there is no official government position on the matter and further work is being carried out in order to arrive at a conclusion. Since January 2019 the Insurance Recovery and Resolution Act is in force (an amendment to the Financial Supervision Act). This law is based on the EU Banking Recovery and Resolution Directive with due regard to the insurance business model. E.g., in banking the resolution authority needs to solve the resolution of a banking group within a short time frame in order to prevent a bank run. In insurance there is no risk of an insurance run. This means that that the resolution authority will have more time for its work. Therefore, less frequent and detailed resolution

	IMF Recommendation	Actions Taken
		planning is needed in the Dutch legislation in comparison with the Banking Recovery and Resolution Directive.
	Solvency II implementation: An evaluation of the methodology to allow for company-specific parameters for small size companies and credit insurers falling under Solvency II is recommended. This should be done by the Netherlands in conjunction with the EU authorities over the coming years.	**Implemented.** In the Netherlands, only one firm has requested to use undertaking-specific parameters. DNB uses the work from the dedicated EIOPA working group that looked into this Solvency II methodology in 2022.
	Solvency II implementation: A strong focus on internal model approval of material changes and on the identification and monitoring of model drift risk should be maintained. Supervisory responses to model change requests that are central for capital reporting should be provided without compromising on quality of the approval within the market reporting timeframe.	**Implemented.** Within DNB there is a strong focus on requests for material (and minor) internal model changes. DNB has installed an Internal Model panel (including heads of relevant department and the director of insurance supervision) that decides on all material changes, on-sites and mitigation regarding internal models. DNB has set-up a framework for the monitoring of the ongoing appropriateness of internal models. This framework consists of: • DNB principles for supervision in the use of internal models • How DNB monitors the internal models as part of the supervisory review process • Process for internal model applications and changes • Roles and responsibilities One specific part of this is the identification and monitoring of potential model drift. For every (partial) internal model a report is prepared and discussed in the internal model panel. DNB actively uses the IMOGAPI (Internal Model Ongoing Appropriateness Indicators) tool of EIOPA. On a yearly basis a monitoring report for every (partial) internal model insurer is made that describes the strengths, weaknesses, attention points in supervision, changes etc. DNB is the first NCA in the EU to use the new QRTs for internal models and the first to have made reports to analyze these. Requested decisions of DNB regarding model changes are of high quality and within time frames. An EIOPA on-site on DNB's internal model supervision had no major findings and had a generally positive outcome.
	Solvency II implementation: Elements that limit the economic valuation of the liabilities should be closely monitored. Using Pillar 2 powers, a series of well-defined actions should be taken at different levels of the impact that Volatility Adjustment (VA) and Ultimate Forward Rate (UFR) have on the solvency position of the insurers.	**Implemented.** DNB monitors on a quarterly basis the value of the liabilities and the solvency position for insurers with and without the UFR and VA. To be able to deal with the risk and challenges of the low interest rate environment DNB has developed a sustainable approach and forward-looking methodology to monitor

	IMF Recommendation	Actions Taken
		the risk that future profits and developments will not be sufficient to cater for the UFR drag. The purpose is to identify signs of a development that may threaten the solvency of the insurer. This methodology includes a risk assessment that is updated every quarter and is an important component of the risk assessment and scoring in the overall supervision methodology. As part of the methodology an escalation ladder was developed, which guides the measures that should be taken at each identified risk level.
	Solvency II implementation: The transition into Solvency II should be closely monitored. In particular, the following aspects should be included in the next revision of the framework: the UFR methodology, the tax-loss absorbance capacity of tax credits, and the VA methodology.	**Implemented.** DNB has been very active in the 2020 Solvency II review to have the UFR methodology as economic as possible, e.g., through investigations in the last liquid point and improving the extrapolation method. DNB has also made proposals for the dynamic VA to diminish overshooting effects. DNB has developed a forward-looking methodology to monitor the risk that future profits and developments will not be sufficient to cater for the UFR drag. DNB is currently investigating the use of LAC_DT within the sector and has published a question and answer. DNB closely monitors the VA and the development of the dynamic VA within the Solvency II framework.
	Macroprudential supervision: DNB is recommended to carry out country-specific stress tests in addition to the EIOPA stress testing.	**Implemented.** DNB is developing a top-down stress test tool based on SII QRT data. Several modules have been developed and back tested. The next step is to include mortgages and loans. DNB also contributes to the EIOPA Project Group that is building a top-down stress test methodology that uses SII QRT data to assess the impact of market movements on the balance sheet of undertakings. DNB's project EIPHORIA assessed the impact of a low interest requirement on Dutch undertakings. The analysis included a projected low interest rate environment and can be considered to be a stress test. In addition, some of the automatic calculations in the ATM model are stress based.
	Supervisory reporting: The reporting requirement for insurance intermediaries should be revised and its frequency increased from annually to quarterly. In addition, the reporting requirements for insurers should be enhanced with market conduct indicators complementing the reporting requirements set by the DNB.	**Not implemented.** Regarding the reporting requirements for intermediaries (in total ~6,500): This has been fully revised, and the annual frequency is maintained. The market for intermediaries is sizeable and heterogeneous in size and type of companies. The AFM currently has a yearly reporting requirement which it considers appropriate. The current yearly process takes around four months to complete and puts a significant toll on the AFM organization as well as the intermediaries. The costs of increasing the reporting frequency would outweigh the benefits.

IMF Recommendation	Actions Taken
	Regarding reporting requirements for insurers: Insurers yearly report information about the consumer complaints they receive. Moreover, more detailed data on the financial results of specific products is reported which the AFM uses for conduct supervision.
Conduct of business: The authorities are recommended to include the product regulation independently of the location of the provider and to establish mechanisms to credibly enforce national market conduct regulation for cross-border operations under the freedom to provide services.	**Implemented.** The product oversight and governance (POG) norms require financial institutions to develop financial products that match the needs, characteristics and objectives of the target market. They need to ensure that products will be distributed to the target market and to prevent distribution outside the target market. The supervisory mandate with regard to the POG requirements in case of cross border services has been divided between the member state in which the firm has its headquarters registered (home member state, in short the national conduct authority, is responsible for supervising duty of care requirements, exceptions excluded), and the member state in which the firm is offering its services to (host member state is responsible for supervising organizational requirements, exceptions excluded). This depends on the applicable sectoral legislation (MiFID II, Solvency II, IDD, CRD, etc.), and whether the cross border services are executed via a branch in the host member state. In this respect, the AFM aims to prevent mis-selling by supervising the organization and application of POG in practice. In order to enforce POG regulation for FPS operations the AFM cooperates bilaterally with other NCA's and by actively contributing to the European Supervisory Authorities, like ESMA and EIOPA. E.g., the AFM participated as penholder in writing the ESMA Product Governance Guidelines and the POG chapter in the EIOPA Supervisory Handbook, participated in the ESMA common supervisory action on POG, and the EIOPA POG peer review. Currently, the AFM specifically cooperates with an NCA regarding POG supervision on a firm that operates cross-border.
Macroprudential supervision: The DNB is recommended to closely monitor search for yield activities in the sector.	**Implemented.** DNB has conducted its own research in 2022 in order to visualize how much search for yield is taking place in Dutch financial institution investment portfolios. The research concluded that insurers in particular engaged in this behavior (compared to banks and pension funds). The most prominent change is the shift from government bonds to mortgages for life insurers. Non-life insurers have mainly increased their share of corporate bonds. Overall, there is also an increase in allocation to alternative investments (private assets such as infrastructure). DNB regards the Solvency II review regarding the Volatility Adjustment as an important policy initiative and liaises with the Ministry of Finance so it can influence the process. DNB also conducts thematic inspections in the insurance sector in order to

IMF Recommendation	Actions Taken
	establish the quality of risk management regarding exotic investments such as private assets. • In declaration-of-no-objection (DNO) processes DNB has paid special attention to limit excessive search for yield through limitations in the DNO and issuing supervisory expectations towards the undertakings; • DNB has compared the excess return objectives of the large insurers to assess any outliers; • DNB is currently assessing the adherence to the prudent person principle in a thematic review, including the potential need for extra regulation.
Pension fund oversight	
Consolidated supervision: The PW should require group supervision**.**	**Not implemented.** The IMF has noted that there is no direct supervision of companies to which pension funds outsource their activities. Together, the MoF and the MoSA have investigated the usefulness and necessity of direct supervision of pension service providers. Talks were held with pension funds, pension administration companies and the supervisors to identify where there are still gaps in the supervision and what risks could arise in that regard. The conclusion was that financial services to pension funds are diverse and are already affected by the PW, the WFT and European regulations, and that the case for the need for more supervisory powers has not been made convincingly.
Macroprudential supervision: The DNB is recommended to carry out country-specific stress tests in addition to the EIOPA stress testing**.**	**Largely implemented.** Pension funds are required to report periodically to DNB the impact of prescribed market shocks (interest rate, currency) on their liquidity positions.
Liquidity risk management: Pension funds should be required to have liquidity plans that consider the effect on their hedging positions under stress**.**	**Implemented.** Pension funds are required to report periodically to DNB the impact of prescribed market shocks (interest rate, currency) on their liquidity positions. Requirements for adequate management of liquidity risk follow from the prudent person principle and the requirement of "in control operations" (risk management) in the pension legislation**.**
Supervisory reporting: The reporting requirements for pension funds should be enhanced with market conduct indicators complementing the reporting requirements set by the DNB**.**	**Implemented.** As of reporting year 2019, the AFM conducts a broad annual survey amongst pension providers. Market conduct risk is included in this survey using indicators that can be monitored over multiple years. The information is collected from second pillar pension providers on a voluntary basis. There have been no issues in collecting the data. In the current survey, the following datapoints have been included:

	IMF Recommendation	Actions Taken
		• Number of Pension Benefit Statement ("Uniform Pension Overviews") provided to participants and number not provided. • Number of complaints in respect of the accrual of pension including of the number of complaints that have been resolved and the number of complaints that have resulted in a change of pension rights. • Whether a correction policy is available, including whether it is publicly available. • Number of pensioners that have been faced with a reclamation of pension benefits. • Number of complaints in respect of the pension benefit payments including if the number of complaints that have been resolved and the number of complaints that have resulted in a change of pension benefits. As part of its annual supervision process, the AFM translates survey responses into key risk scores and suggested supervisory interventions. In 2023, the AFM has improved the process of translating market information into a robust risk scoring model. For many indicators, all pension providers are compared against the market average and peers to identify outliers. Two market conduct risk indicators are part of this risk scoring model: • In-depth analysis of not provided Uniform Pension Overviews per pension fund over the years 2019, 2020 and 2021. • In-depth analysis of complaints per 100,000 participants per pension fund over the years 2019, 2020 and 2021. The goal is to identify outliers that have unusually high numbers of missing Uniform Pension Overviews or complaints over multiple years (potential long-term issue) as well as to identify issues with pension funds in a specific year compared to previous years (potential short-term issue). Special attention goes out to pension funds that have not reported numbers or that have reported numbers that appear to be of low data quality.
	Licensing: The authorities are recommended to introduce a license requirement for pension funds.	**Partly implemented.** Licenses are required for APF (General Pension funds) and PPI (contribution-based pension institution) because these entities actively aim to acquire clients in the market for pensions. Other pension funds are in general established to execute a pension scheme of a company or a sector; they do not compete in a market for pension schemes.
	Investments:	**Largely implemented.** The new pension system provides that investment policy of the pension fund should be in line with the risk attitudes of

	IMF Recommendation	Actions Taken
	The authorities are recommended to tighten the prudent person regime closer to the Solvency II definition.	the different age cohorts of its participants, which tightens the prudent person principle for pension funds. Further tightening is deemed unnecessary given the new pension system.
	Recovery planning: The authorities are recommended to reinstate the sound requirement to charge a pension contribution that does not increase the coverage deficit under a recovery plan.	**Not implemented.** After the Parliament has agreed on the new Pension Law on 30 May 2023, this recommendation is not relevant anymore as under this new pension law from January 1, 2028 premium contributions can only be made in DC schemes.
	Feasibility test: The authorities are recommended to introduce an additional test to the feasibility assessment of the pension funds with a projection period of about 10 years.	**Not implemented.** After the Parliament has agreed on the new Pension Law on 30 May 2023, this recommendation is not relevant anymore as under the new pension law only DC schemes are allowed.
	Conduct of business: The authorities are recommended to introduce mechanisms to ensure pension participants receive financial advice.	**Implemented.** The Financial Sector Supervision Act (WFT) has a specific legal scope, as has the Pension Act (PW). While the WFT covers—inter alia—financial advice on products, the PW determines the agreements made by employers and employees' representatives. Information to and guidance of pension plan participants is important, therefore the PW (due to the new legislation) has strengthened provisions on these matters.
	Conduct of business: The authorities are recommended to harmonize the Financial Sector Supervision Act (WFT) and the PW with respect to the regulations on the quality of advice and suitability of product. This will be critical when more choices become available for pension participants.	**Partly implemented.** The Financial Sector Supervision Act (WFT) has a specific legal scope, as has the Pension Act (PW). While the WFT covers—inter alia—financial advice on products, the PW determines the agreements made by employers and employees' representatives. Information to and guidance of pension plan participants is important, therefore the PW (due to the new legislation) has strengthened provisions on these matters. A full harmonization between both acts has, however, not been aimed for.
	Pension reform: The new pension system should aim to reinstate the qualities that existed in the system, confidence in a guaranteed defined benefit and add portability.	**Implemented.** One of the key aims of the new pension system is to re-inspire confidence in the pension system, while keeping key strengths of the current systems. One of the ways to fulfill this aim is to no longer make undue promises under non-sustainable DB-schemes. The reform will mean that going forward only DC-schemes are allowed. The inherent individual characteristics of these DC-schemes mean portability will be improved. A collective reserve with clear requirements for filling and emptying the reserve means solidarity and collective risk sharing will remain.

Appendix IV. DNB and AFM Organization Charts

Figure Appendix IV. 1. DNB Organization Chart

(Supervisory Functions Only, as of August 1, 2023)

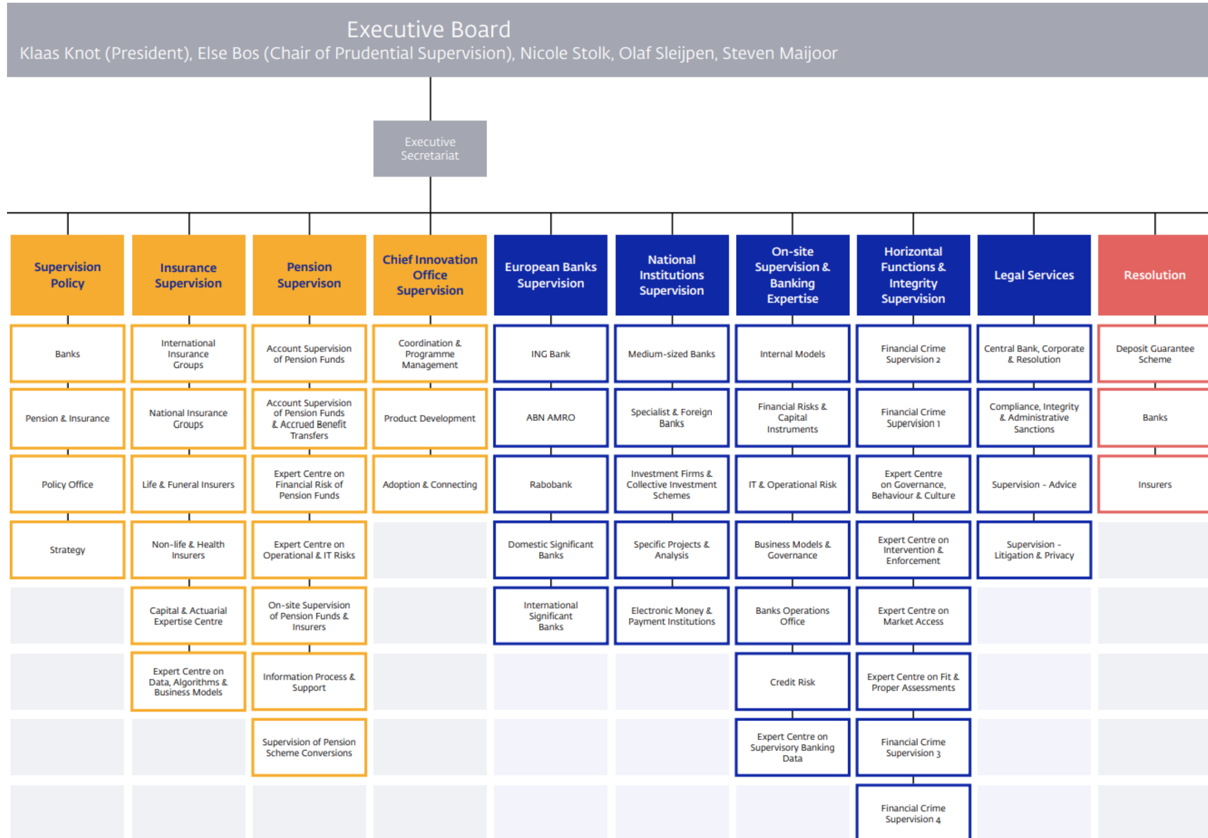


Figure Appendix IV. 2. AFM Organization Chart

(as of February 1, 2023)