2.9. Netherlands

2.9.1. Demographic profile and demographic forecast

According to the demographic forecast for the Netherlands (Table 20), the population will grow moderately but steadily until 2040. The population increase will be mainly due to positive net migration. After peaking at about 18.2 million people in 2042, the population will remain constant at around 18 million. The age structure of population will shift drastically towards older people, with an old age dependency ratio – viewed at as the ratio of the population with 65 years and above divided by the population from 20 to 64 years of age – increasing from 33% in 2019 to 49% in 2050 and 55% in 2070. Already by 2030, the dependency ratio will increase by almost 10 points, and by another almost 7 points between 2030 and 2040.

Table 20: Netherlands: demographic forecast

	2019	2030	2040	2050	2060	2070	2019 - 2070
Population (thousand)	17,343	17,988	18,188	18,136	18,010	17,990	17,343 17,990
Population growth rate	0.6	0.2	0.0	−0.1	−0.1	0.0	0.6 0
Old-age dependency ratio (pop 65+ / pop 20-64)	32.9	42.4	49.3	49.3	51.4	55.2	32.9 55.2
Old-age dependency ratio (pop 75+ / pop 20-74)	11.8	17.0	21.9	24.9	24.2	26.3	11.8 26.3
Ageing of the aged (pop 80+ / pop 65+)	24.2	29.2	33.4	40.8	39.4	39.4	24.2 39.4
Men - Life expectancy at birth	80.7	81.9	83.2	84.4	85.5	86.6	80.7 86.6
Women - Life expectancy at birth	83.6	85.1	86.4	87.6	88.8	89.9	83.6 89.9
Men - Life expectancy at 65	19.0	19.9	20.9	21.8	22.7	23.5	19 23.5
Women - Life expectancy at 65	21.4	22.5	23.5	24.5	25.4	26.3	21.4 26.3
Men - Survivor rate at 65+	89.6	91.2	92.4	93.4	94.2	95.0	89.6 95
Women - Survivor rate at 65+	92.3	93.6	94.5	95.3	96.0	96.6	92.3 96.6
Men - Survivor rate at 80+	63.1	67.9	71.8	75.3	78.5	81.2	63.1 81.2
Women - Survivor rate 80+	74.0	78.0	81.3	84.0	86.4	88.5	74 88.5
Net migration (thousand)	105.4	33.3	34.0	33.4	32.8	33.2	105.4 33.2
Net migration over population change	0.9	0.9	5.8	−2.9	−3.3	9.0	0.9 9

Source: European Commission • Created with Datawrapper
ECO AUSTRIA INSTITUTE FOR ECONOMIC RESEARCH

The “ageing of the aged” indicator, indicating the relationship between over 80-year-olds to persons aged 65+, will increase from 24.2 in 2019 to 40.8 in 2040 due to increasing life expectancy. This will put further funding pressure on other social policy expenditure such as long-term care and public health. Male life expectancy at 65 is expected to increase from currently 19 years to 23.5 years in 2070. For women life expectancy at 65 will increase from currently 21.4 years to 26.3 years in 2070. Accordingly, remaining life expectancy from 65 years is going to increase by 4 ½ years for men and by almost 5 years for women respectively. Summing up, the demographic forecast for the Netherlands indicates moderate population growth and, at the same time, intensive aging dynamics.

Unlike in Austria, for example, the retirement age in the Netherlands is continuously adjusted to rising life expectancy (Table 21). The average effective retirement age will rise continuously and automatically for both men and women, based on a legally anchored mechanism that links the eligibility age for statutory pensions to rising life expectancy. For men, the average effective retirement age will rise from currently 65.8 years to 67 years in 2040 and further to 67.6 years in 2050 and 68.1 years in 2060. For women, the average effective retirement age will rise from currently 64 years to 65.4 years in 2040 and further to 65.9 years in 2050 and 66.4 years in 2060.

Table 21: Netherlands: Exit ages and expected duration of retirement

	2020	2030	2040	2050	2060	2070	2020 - 2070
Average labour market exit age (CSM) - Men	65.8	66.6	67.0	67.6	68.1	68.5	65.8 68.5
Duration of retirement - Men	18.2	18.3	19.2	19.3	20.1	20.0	18.2 20
Percentage of adult life spent in retirement - Men	27.6	27.4	28.1	28.0	28.6	28.4	27.6 28.4
Early/late exit - Men	1.1	1.1	1.2	1.7	1.2	2.3	1.1 2.3
Average labour market exit age (CSM) - Women	64.0	65.0	65.4	65.9	66.4	67.0	64 67
Duration of retirement - Women	22.3	22.5	23.5	23.6	24.5	24.5	22.3 24.5
Percentage of adult life spent in retirement - Women	32.6	32.4	33.2	33.0	33.6	33.3	32.6 33.3
Early/late exit - Women	2.0	1.7	2.0	3.5	2.2	4.1	2 4.1

The labour market exit age as calculated based on Labour Force Survey data for the base year and estimated by the Cohort Simulation Model thereafter; 'Duration of retirement' is calculated as the difference between the life expectancy at the average labour market exit age and that exit age itself; The 'percentage of adult life spent in retirement' is calculated as the ratio between the duration of retirement and the life expectancy minus 18 years; Early/late exit is the ratio between those who retire and are below the statutory retirement age and those who retire at the statutory retirement age or above.

Source: European Commission • Created with Datawrapper

ECO AUSTRIA INSTITUTE FOR ECONOMIC RESEARCH

The development of the average effective retirement age for men and women is a result of an automatic adjustment of the eligibility age for statutory old-age pensions. As mentioned, this is based on an institutionally anchored adjustment formula for the age of entitlement to a public old-age pension. Furthermore, the eligibility age for second tier occupational pensions is linked to the eligibility age for statutory pensions. The eligibility age for the first-tier statutory pension, called AOW-pensions referring to the corresponding legal act, used to be 65 ever since its introduction in 1956/1957. In 2024 it will be 67 years, according to the Dutch country fiche information for the EU Ageing Report (EU, 2020a). After that year, the eligibility age will be linked to institutional adjustment mechanism mentioned above.

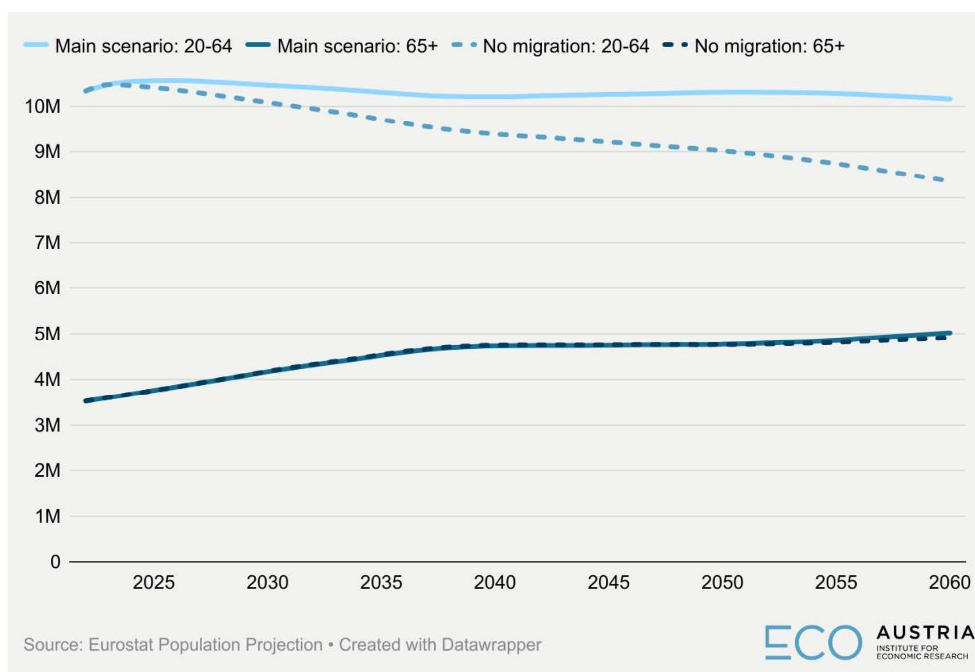
The role of migration

Migration partially compensates for aging, when immigrants have a younger age structure compared to the resident population. However, according to the Ageing Report the Netherlands already has high net immigration, of around 100,000 people per year (Table 20). In the projection period up to 2070, average annual net immigration is expected to develop constantly at about 33,000 persons. However, stagnating migration will put additional upward pressure on age-dependency ratios. Given the assumptions from the demographic projection and assuming the same age-structure and fertility between migrant and resident population, the size of migrant population necessary to hold old-age dependency ratio constant from 34.1 in 2022 (Figure 42)

would be 6 million people in 2060. Assuming an old-age-dependency-neutral migration, average annual net migration would have to exceed by far the levels projected within the scope of the Ageing Report. This is particularly true for the period up to 2030 and beyond to 2040, when average annual net migration would have to be 270,000 and 240,000, respectively, to keep the old-age dependency ratio at the 2022 level of 34.1.

At the levels projected in the Ageing Report, migration in the Netherlands has still a significant relevance to at least partially compensate for the ageing of society. The impact is shown in Figure 41 and Figure 42. Whereas migration has hardly any relevance for the older population with 65 years and more, migration leads to an increase of the working age population from 20 to 64 years. Without migration the working age population from 20 to 64 years would be smaller by about 820.000 people in 2040 and by 1.28 million of people in 2050 respectively. For 2040, the main population projection base-scenario results in a population size of 10.2 million people aged 20 to 64. Without migration, the corresponding figure is only 9.38 million people. The situation is similar in 2050. With migration, the population aged 20 to 64 will be 10.3 million people, compared with 9 million without migration. As shown in Figure 41, immigration can at least compensate for a decline in the working-age population, while it cannot ensure a constant old-age dependency ratio due to the increase in the elderly population.

Figure 41: Netherlands: demographic forecast with and without migration (2022-2060) [29]

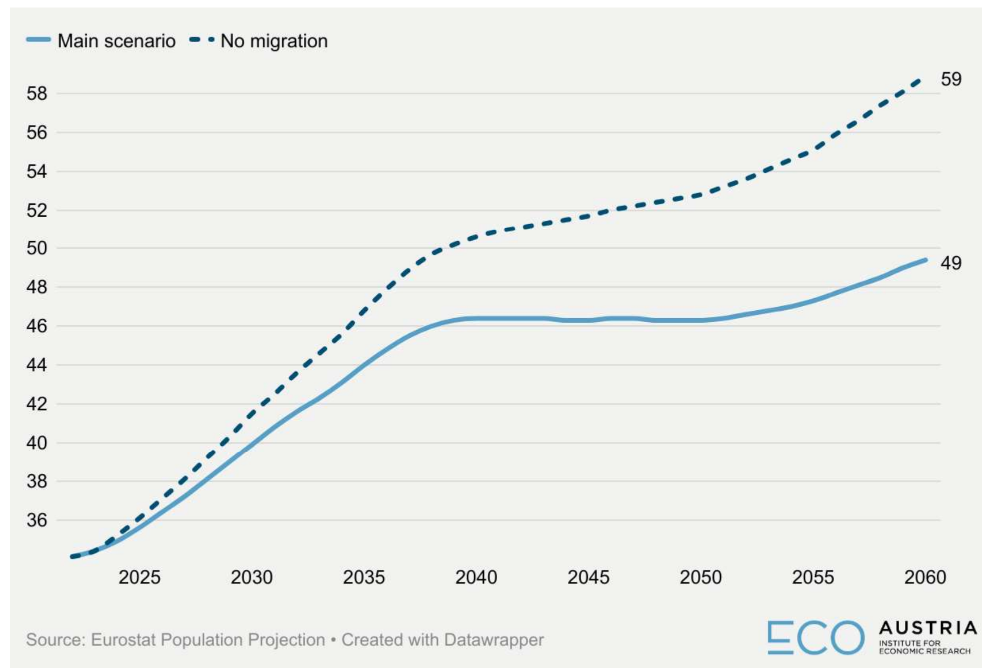


In summary, migration offsets some of the ageing pressure on working age population and has a mitigating though not completely offsetting effect on the increase of old-age dependency ratios (Figure 42). Without migration the dependency ratio would be 50.6% in the year 2040, whereas

[29] The corresponding data for this section is taken from the population projection, published by Eurostat under the data code „PROJ_23NP". The values might differ from those in the ageing report.

with migration the dependency ratio improves to 46.6%. In 2050 the dependency ratio would raise up to 52,8% without migration, while migration will dampen the increase to 46.3%.

Figure 42: Netherlands: old-age dependency ratio (65+/20-64) in the main scenario and without migration



2.9.2. General architecture

The Dutch pension system mainly consists of three major pension tiers, comprising:

- statutory pensions, which provide universal flat-rate pensions (first tier) that depend on age, residence and the length of the insurance record in the Netherlands,
- mandatory or at least quasi-mandatory[30] occupational pensions that are based on funded pension plans laid down in most collective industrial agreements (2nd tier),
- voluntary individual pension plans (3rd tier).

The 1st tier is a flat-rate statutory state pension based on a General Old-Age Pensions Act ("Algemene Ouderdomswet" or AOW). The basic AOW old-age pension provides an equal minimum income for all pensioners at a level related to the net minimum wage. From July 1st, 2023 this gross amount was EUR 1,458 for a single person (Better Finance 2023). each year of insurance, persons insured build up an entitlement of 2% of a guaranteed basic pension benefit. Basic AOW pensions are financed on a PAYG basis, via social insurance contributions and taxes. The additional 2nd and 3rd tier provide funded occupational pension schemes and respectively individual saving schemes. In the Ageing Report's country fiche information for the Netherlands the mandatory part of the Dutch pension system is described as comprising the government provided AOW basic old-age pension scheme (1st tier), occupational pension schemes (2nd tier)

[30] Occupational pension schemes and their form are regulated in most collective agreements.

and, as a part of public provision of basic social security, disability benefits and survivor benefits. However, this is only partially correct, as the occupationally funded pension schemes are not, strictly speaking, mandatory. There is no statutory obligation for employers to offer a pension scheme to their employees. However, an obligation to provide occupational pension plans is laid down in most collective industrial agreements for at least most of the employees in the Netherlands. Approximately 90% of employees are covered. Thus, these schemes are often described of as being “quasi-mandatory”, but still for a relevant share of employees in companies that have fewer than ten employees (Kemna et al. 2011, 28) and for the self-employed there is no mandatory occupational pension insurance. Furthermore, the self-employed must arrange their supplementary pension themselves. They can do this in the form of 3rd tier individual insurance policies.

The 2nd tier comprises the occupational pension schemes. These schemes are all funded and laid down in the agreements on industrial relations, thus being quasi-mandatory for most employees. In principle there are three types of second-tier occupational pension funds in the Netherlands. The first is the industry-wide or sector-wide pension fund, organized for a specific sector of industry (e.g., construction, health care, or transport). Participation in an industry-wide pension fund is mandatory for all firms operating in the sector. A corporation can opt out only if it establishes a corporate pension fund that offers a better pension plan to its employees than the industry-wide fund. Where a supplementary pension plan exists, either as a corporate pension fund or as an industry-wide pension fund, participation by workers is mandatory and governed by collective agreements. The third type of pension fund is the professional group pension fund, organized for a specific group of professionals such as physicians or notaries.

Funded occupational pensions play an important role in the Dutch pension system. They are an integrated part of the architecture of the overall pension system and have not only supplementary character. The function of career- and earnings-related provision of pension benefits is provided by occupational pension funds. This is a significant difference to the more social-insurance based PAYG systems that exist in Austria and Germany. Here, the public PAYG system assumes the function of securing the standard of living, while funded 2nd and 3rd tier pension plans have a supplementary character. They supplement state pensions and are related to past contributions and previously earned income. According to OECD’s Pension Markets in Focus currently pension plans are currently shifting from defined benefit schemes to defined contribution schemes. This transition is likely to continue, driven by the introduction of a new pension agreement between the government and the employers' and employees' associations for occupational pension systems turning the occupation pension contract more into a DC system rather than a DB system[31]. The new occupational pension contract should be used in practice from 2026 onward. However, DB are still dominating the landscape of occupational pensions according to the EIOPA occupational pensions statistics. Thus, the total volume of assets in funded DB plans was 1,8 billion of EUR in 2021, compared 22 million in DC plans.

[31] For information see information from the Dutch government under the Weblink.

Qualifying conditions

The first statutory pillar is universally covering all persons living in the Netherlands. According to MISSOC[32] the 1st pillar pension system corresponds to a social insurance scheme for all residents financed by tax-related premiums on earned incomes on a PAYG basis and additional financing through taxes. The main qualifying conditions for receiving state pensions are thus residency in the Netherlands and having reached the eligibility age.

Current and future retirement age

Eligibility to a basic old-age pension is linked to the age of inhabitants. In 2020, the basic old-age pension was payable from the age of 66 years and 4 months. In 2023, the eligibility age is 66 years and 10 months, according to MISSOC. The statutory pension age is gradually increasing to 67 in 2024. Thereafter, the standard retirement age will increase automatically according to gains in life expectancy. Eligibility ages for first statutory pillar pensions and for second pillar occupational pensions are linked. It is possible to withdraw from the occupation pension earlier before reaching the eligibility age. However, the benefits are adjusted. It is not possible to defer the basic old-age pension scheme after having reached the eligibility age. But it is possible to combine the basic pension benefit receipt and continue working.

First-tier pensions

The basic pension provides for a standard benefit. The system generally covers all residents. The amount of the pension entitlement is, however, based on contribution periods or episodes. People who work in the Netherlands and pay taxes on their earned income are insured regardless of their place of residence. The benefit amount is adjusted biennially in line with the development of net minimum wages.

The basic pension benefit for a single person equalled about EUR 1,230 per month in 2020 (see OECD, 2021d). There is an additional holiday allowance. It amounted to about EUR 72 per person in 2020 resulting in a total benefit equal to about EUR 1,300 for singles and about EUR 1,770 for couples. The basic benefit accrues at 2% of the full value for each year a worker lives or works in the Netherlands. To reach the full basic benefit a person must live and work in the Netherlands for 50 years. For older people and/or households with less than 50 years of residency and economic activity and with no other means of support or no assets there is a means tested social-assistance scheme available (OECD, 2021d). The social assistance scheme supplements the benefits from basic and occupational schemes to a maximum value equal to the net basic pension.

The basic old-age pension benefit is conditional on a full lifetime employment record. The basic pension aims at an equal income for all pensioners at a level related to the net minimum wage. Supplementary benefits for dependents and spouses are laid down in a transitional law from 2015. To qualify for the supplement, the partner's income should not be higher than EUR 1,600 gross

[32] The Mutual Information System on Social Protection (MISSOC) provides information on social protection systems and their organisation in the 27 Member states of the European Union, the three countries of the European Economic Area – Iceland, Liechtenstein and Norway – as well as the UK (up to 1st July 2019) and Switzerland. The information is updated continuously, at least once a year. The data tables are published at the Weblink and can be downloaded there.

per month. If the combined income of the partners is higher than EUR 3,070, the supplement will be lowered by maximum 10%. Each person entitled to AOW receives an income support benefit, "*inkomensondersteuning AOW*" of about EUR 5 gross per month, when the person has a complete insurance record.

People who move abroad from the Netherlands are entitled to voluntary insurance for a period of maximum ten years after they have moved abroad. For this option people must have lived in the Netherlands for at least one year and must apply for this voluntary insurance within one year after moving abroad.

Persons who have reached the eligibility age for a basic state pension (AOW) but do not receive the full pension benefit, for instance due to insurance gaps and interruptions, might be eligible to supplementary social assistance related payments, the so called AIO supplement. The AIO supplement is an income support benefit for people of AOW pension age but who are not entitled to a full AOW-pension. The means-tested AIO supplement provides for the guaranteed minimum income. To qualify for an AIO supplement, the total value of income and assets must be below a certain level. Benefits from a second pillar occupational scheme or from an individual pension scheme are considered.

The first-tier public pension scheme also provides for survivor benefits. This scheme covers widowers, widows and orphans (Ageing Report Country Fiche for the Netherlands). The benefit level has a maximum of 70% of minimum wage. This level applies only to individuals with no income from labour. In net terms it equals the social assistance level. In case the involved individual has income from labour, the benefit is reduced by a level that equals 50% of minimum wage plus two thirds of the surplus of labour income. Possession of personal wealth or incomes from pensions do not lead to a reduction of the benefit.

The first-tier statutory pension system comprises disability or invalidity benefit schemes. Three schemes are relevant. The new WIA scheme, the old WAO scheme for disabilities before 2004 and the Wajong scheme. WAO and WIA are social security schemes. They are financed by social security contributions paid by employers. Wajong is financed by general taxation. Wajong covers especially people with a low employment record. The level of benefit is low and generally do not exceed those of social assistance. The WAO covers individuals who became disabled before 2004 and had past earnings. It involves a benefit that depends on past earnings, age and degree of disability. It can amount to a maximum of 75% of past earnings and is capped at around EUR 55,000 in 2019. WIA[33] is the current scheme to prevent from social risks of disability. Like WAO, the WIA scheme is a social-insurance scheme. Benefits are earnings-related and based on the difference between the previous wage and the social minimum. There are two arrangements, which depend on the degree and the prospect of duration of the incapacity for work. For people completely unable to work and with no prospect or only a small chance of recovery, it provides permanent income support in form of a full-invalidity benefit (IVA). The benefit covers up to 75% of the last wage (according to MISSOC) for person fully handicapped. Persons with the prospect

[33] The abbreviation WIA refers to „Wet Werk en Inkomen naar Arbeidsvermogen", meaning Law on Income according to working capacity.

of recovery fall into the WGO "Return to Work" arrangement. The benefit amount depends on the degree of work incapacity. If the incapacitated person does not work at all it is 75% of the last wage during the first 2 months and 70% of the last wage afterwards. If a partially incapacitated person works, the benefit is 75% of the difference between the last wage and the current income during the first two months on top of the current wage. The benefit is reduced to 70% of the difference after the first two months.

As regards taxation, there is no special tax relief for pension income. However, pensioners over the age of 66 may claim a tax credit. The basic tax credit for persons above 66 years of age was EUR 1,413 in 2020 (OECD 2021d). This tax credit is increased by EUR 1,622 for income less than EUR 37,372. In addition, a pensioner in a single person household can receive a tax credit of EUR 436.

Pensioners pay 9.75% of taxable income for the general health insurance and survivors' pensions (Wlz, ANW, up to an income of EUR 34,713 for 2020). Depending on their income, they pay for their own health insurance. The social security contributions are less than the contributions for those below the eligibility age for state pensions, who also must pay for old-age pensions and unemployment.

Second and third-tier pensions

Second tier pensions provide for quasi-mandatory funded pension plans based on collective agreements and mostly dependent on the employees' profession. For second pillar pensions different institutional settings are relevant. Over 90% of these employees (2020) are covered by defined benefit (DB) schemes. The remaining employees are covered by a defined contribution (DC) scheme. As mentioned, occupational pensions are currently shifting from DB-based to more DC-based schemes. Defined contribution schemes are gaining in importance. This development will be further promoted by the introduction of a new pension agreement starting in 2026. At present, however, most occupational plans still have the character of funded DB schemes.

For the majority of DB contracts benefits are measured on the basis of lifetime average earnings, whereas less than 1% are based on the final salary or a combination of the two (OECD, 2021d). Final-salary schemes have a maximum accrual rate of 1.657% of earnings for each year of service. This equals a target replacement rate (excluding the AOW franchise) for most occupational pension plans of around 70% after contribution payments over a complete lifetime career. The maximum accrual rate for average salary schemes is 1.875% per year of service, which only covers earnings up to EUR 110,111 in 2020. Pension contributions for higher earnings will need to be paid with taxable contributions.

Although there is no legal uprating requirement, most occupational pensions in payment are raised on an annual basis. According to Pensions at a Glance for the Netherlands in 2020 nearly 28% of pensions in payment follow, mostly industry specific, wage growth, while some 65% of the pensions are indexed to prices and 1% aim for a mixture of wage and price growth.

Pension rights are fully transferable when individuals change jobs (OECD, 2021d). There is a legal requirement to index pension rights of people leaving a scheme before retirement in the same way as pensions in payment. Pension providers must ensure very short vesting times, when

people change their pension fund or administrator. When people change jobs, they can either transfer their pension capital to a new pension fund or administrator, or they can stay with the old pension fund. A transfer of pension capital is possible, but not always necessary, especially since many occupational plans are organised on an industry or sector level.

Most schemes use a target total replacement rate of 70% of final pay. This target rate is linked to the basic AOW state pension for the most occupational schemes: According to the Ageing Report's Country Fiche information, the AOW benefit is included in most calculations of occupational pension schemes to arrive at the overall 75% replacement aim in case of a complete lifetime career. This includes the corresponding factor in form of the so-called AOW franchise. In practice this means that occupational pensions do not accrue over the total wage, but the contribution base, which is the wage minus the AOW franchise. On average, pension contribution rates amount to 24% of gross income above this threshold, i.e. the contribution base, of which roughly 70% is covered by the employers and 30% by the employees. Together these two parts of the contribution to pension funds currently amount to around 14% of aggregate gross labour income.

This reveals a significant difference between occupational pension provision in the Netherlands and Austria. In the Netherlands, both the employer and the employee contribute to the funded pension system, whereas in Austria only the employer pays contributions. For employees in the Netherlands, occupational pensions are an important part of their overall retirement provision. The function of maintaining the standard of living is primarily provided by occupational pensions. Austria, for instance, there is a PAYG component that basically provides for income-based and earning-related benefits. In principle, this public pension component fulfils the essential function of maintaining the standard of living. It must be emphasized that there is no comparable function with regard to the Dutch PAYG component. The public AOW pension provides a standard basic benefit, depending on the length and continuity of the employment history and the insurance record. The function of maintaining the standard of living is largely provided by funded occupational pensions. The flat-rate nature of PAYG AOW system was a central arguing point for trade unions' political pressure to expand funded company pensions in the 1950s and 1960s (Chapter 2.2). After cost dampening policies led to substantial cuts in the generosity of AOW pensions in the 1980s and 1990s, losses were compensated for through the 2nd tier of funded occupational pensions. The overall replacement target remained constant for those employees who participated in an occupational pension scheme.

Despite the differences, there are also similarities: With the AOW system a public PAYG pension system was established in the post-war period in the years 1956/1957. Back in the 1950s, PAYG financing was seen as the most obvious and almost "natural" institutional choice for financing pension systems (Haverland 2001). In the countries of Western Europe, this period was characterized by high economic growth and advances in productivity. A key difference compared to the more classic "bismarckian" models is that since that period and particularly from the 1980s onwards, the Netherlands had developed a strong capital-based pension pillar, while the Austrian or the Germany systems, for example, continued to rely on the public PAYG component. As already mentioned in the section 2.2 on the history of policy reforms, in the late 1990s, the

percentage of PAYG-financed pensions as a share of overall pension income was 45% in the Netherlands, while in comparative welfare states, including Austria or Germany, it was still at 80% to 90% (Haverland 2001). Although the public PAYG component in Austria or Germany may have a more extensive functionality in the context of maintaining living standards, it is in particular the hybrid and diversified character of the Dutch system that makes the overall pension system robust against external developments. The overall system appears very resilient against ageing and unemployment, also because of its strong funded component. Regarding the character and nature of the Dutch pension system, scientific analyses highlight the importance of institutional path dependencies and historical developments, especially since the beginning of the 1980s, as a main reason for the development of the Dutch pension system (Haverland 2001). What is particularly relevant here is the different design and functionality of the PAYG component in the Netherlands, compared to the classic “Bismarckian” model in Austria or Germany. The Dutch AOW provides flat-rate benefits to all residents above the retirement age. Contributions are paid by employees and calculated as a percentage of personal income. However, the amount of pension benefits is neither oriented to income nor to contributions. Benefits are related to the national minimum income, providing for flat-rate pension benefits. Thus, the Dutch PAYG component does not include elements and functionalities to maintain living standards. Maintenance of living-standards is achieved primarily thorough funded occupational pensions. It is the funded occupational pension system that provides for the equivalence of contributions and benefits and thus ensures that living standards can be maintained. In the classic social insurance-based PAYG models, this function should largely be guaranteed by the public PAYG component.

The eligibility age for occupational pensions corresponds to the statutory basic pension age. The rules on pension deferral differ among occupational plans. It is possible to combine the occupational pension scheme and work. Some schemes allow a member to withdraw a pension and continue to work with the same employer (OECD, 2021d). The default pay-out variant for occupational pensions is that of a lifelong annuity (Dillingh & Zumbühl 2021). Until recently, it was not permitted to pay out even parts of the capital saved as a capital lump-sum. (Warren et al. 2021). Exceptions applied to very low pension entitlements up to a certain limit (Reichert 2018). In the debate about a new pension system in the Netherlands, much attention had been given to the freedom of choice, both in the accrual phase and in the benefit phase (Dillingh & Zumbühl 2021). New legislation added the extra option of taking out up to 10% of accrued retirement benefits as a partial lump-sum at the retirement date. With the new legislation, different pay-out options are now available. These options are (1) a flat-rate annuity, (2) a high/low annuity-based profile, and (3), as mentioned, a partial lump-sum at retirement with a lower annuity pension thereafter (Dillingh & Zumbühl 2021). According to recent research (Dillingh & Zumbühl 2921), the most popular pay-out option is still that of a lifelong flat-rate annuity. This provides for (nominally) constant monthly payments throughout retirement. Retirees receive a fixed monthly pension pay-out. While most pension contracts have the ambition to provide yearly indexation against inflation, the majority of pension funds was not able to do so in the years after the financial crisis. A constant nominal pay-out implies a slowly but steadily diminishing real payment. The third option is the pay-out in the form of high/low annuity-based payments. Here, retirees start with a period of high monthly pension pay-outs, followed by a period of lower pay-outs. The maximum

difference between the high and the low payment is regulated by law. Therefore, the low payment has to amount to at least 75% of the high payment (both before tax). The third option takes the form of a partial lump-sum payment in combination with a reduced annuity. In the lump sum profile, retirees receive a share of their pension savings – as mentioned, up to 10% of their total savings – as a one-time payment at the start of their retirement. Thereafter, they receive a constant monthly payment, based on their remaining pension savings. Therefore, the "capital option" of capital payments is very limited in the Netherlands. It was completely restricted above a marginal income level until recently. Even at this point in time, it is not possible to pay out more than 10% of total pension wealth as a capital option.

If not agreed otherwise, under Dutch law[34] partners are entitled to half of the old-age pension rights that a partner accrues during a marriage or civil partnership[35]. The form of distribution of retirement pension entitlements is also known as "equalisation of pension rights" in the event of divorce. When a partnership ends, the former partner receives a share of the ex-partner's pension as soon as this ex-partner stops working.

There is no automatic mechanism for inheritance of pension entitlements. Occupational pension plans in the Netherlands involve sharing mortality risk. The longevity risk is pooled and shared among the insured community. This ensures that pensions benefits are paid over a lifetime, but it also means there is no pension pot to pass on when a member dies. However, a partner's pensions can be supplementary anchored in the pension contract. Such partner pension amendments are even common under both annuity and variable pension options (Warren et al. 2021, 3). By anchoring a partner's pension in the pension contract, a participant accrues entitlements not only to his own pension, but also entitlements to a partner's or to an orphan's pension. A partner's pension or a special "surviving dependent's pension" is a pension entitlement that is built up for a spouse in the event of decease. As mentioned, occupational pension plans do not include a partner's pension automatically. If there is an arrangement for a partner's pension, however, this benefit will be paid out to the partner. In certain cases, the accrued pension capital is paid out to the beneficiaries as a lump-sum[36]. The beneficiaries then are required to use this capital to purchase a surviving dependants' annuity.

The third pension pillar consists of non-mandatory savings via individual plans such as life insurance companies. These plans are of minor importance, according to the information from the Ageing Report's Country Fiche for the Netherlands.

2.9.3. Public pensions fiscal challenges

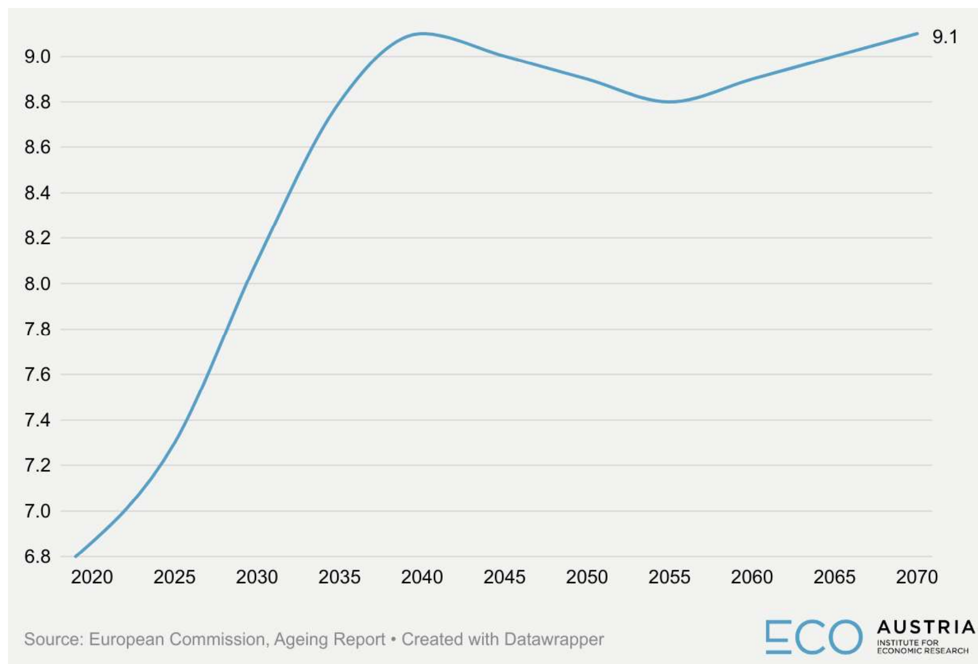
Public expenditure on public pensions

Public spending on public pensions in the Netherlands is anything but stable. The forecast of public expenditure on pensions, calculated within the scope of EU's Ageing Report, indicates an increase in public pension spending from 6.8% of GDP in 2020 to 8.9% of GDP in 2060, with the

[34] Equalisation of Pension Rights in the Event of Divorce Act ("Wet verevening pensioenrechten bij scheiding, WVPS").
[35] See information from the Dutch Government via Weblink.
[36] See Information by ABN-AMRO via Weblink.

greatest financing pressure arising in the years up to 2040. After 2040 public spending on pensions remains constant at around 8.9% to 9%. The key period for the increase in public pension spending is thus from 2020 to 2040, when public pension spending will rise by almost 2.3 percentage points.

Figure 43: Netherlands: Forecast of public expenditure on pensions (in % of GDP)



As regards the projection of public expenditure on pensions, the Netherlands is in a rather favourable situation, compared to other 11 countries considered. First, public pension spending is rather low at levels and, and second, a developed funded second-tier occupational pension system exists. From a systemic perspective, the latter is less vulnerable to changes in the age structure because later benefits depend on the assets accrued on occupational and personal accounts and benefits are based on individual contributions by the employer and the employee. Furthermore, the overall government debt[37] ratio relative to GDP for the Netherlands is 51% for 2022. This is much lower than the corresponding values for Austria (78.4%), Germany (66.3%) or Italy (144.4%). This underscores the fact that, from the perspective of the Netherlands, financing the cost increase will be significantly less strenuous and thus more affordable than it is the case for comparable countries.

The impact of a rising old-age dependency ratio on public pension expenditure can be shown by the old-age dependency effects. Within the scope of the EU Ageing Report the corresponding dependency ratio effect reflects the evolution of the ratio of the elderly (population 65+) to the working-age population (population 20-64) and its impact on public pension spending. The dependency ratio effect quantifies the impact of demographic changes on pension expenditure. Correspondingly the benefit ratio effect indicates how the average pension develops relative to

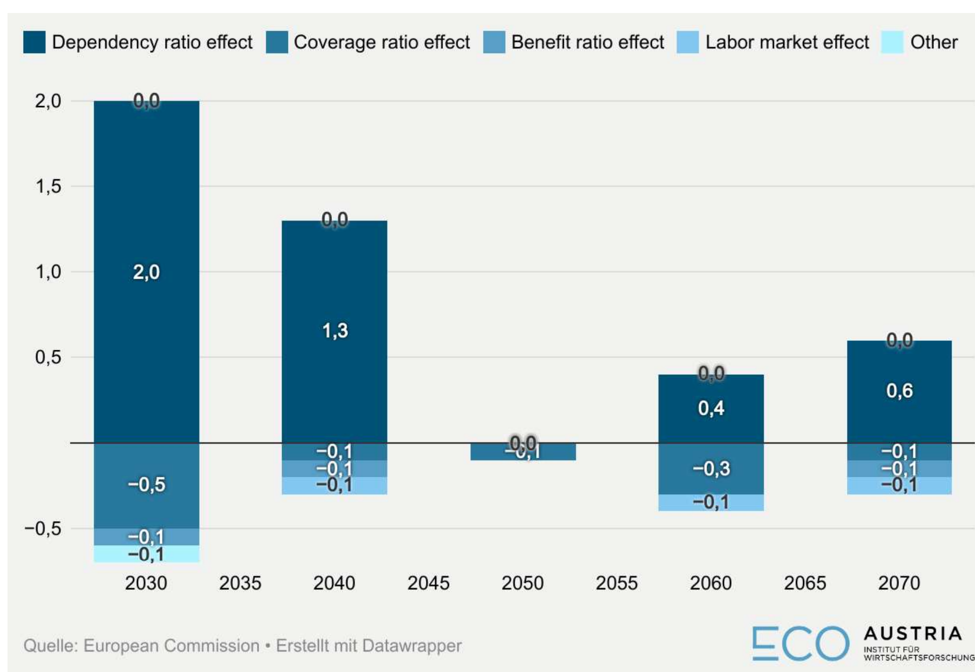
[37] Government consolidated gross debt according to Eurostat.

the average wage. For the Netherlands it is expected that total public pension expenditure will increase by 1.3 percentage points up to 2030 and by a further percentage point between 2030 and 2040, thus resulting in a cumulative increase of 2.3 percentage points up to 2040. This increase is relatively significant, also compared to the other countries observed in the comparisons in section (see country comparison in Section 2.14, especially Figure 74).

Rising old-age dependency ratios would have a much stronger effect on the increase in public pension expenditure when all other factors, such as benefit ratios, labour market participation and intensity, would be constant. However, the demographically induced increase in public spending on pensions will be partially offset by other factors. This is due to declining benefit rates and to changes in labour market and retirement behaviour, i.e., increased, or intensified labour force participation or postponed retirement from the labour market. The effect on the old-age dependency ratio is 2 percentage points by 2030 and another 1.3 percentage points from 2030 to 2040, resulting in a cumulative effect on the old-age dependency ratio of 3.3 percentage points by 2040. The comparative value up to 2070 is even higher at 4.3 percentage points. As mentioned, a decreasing benefit ratio will provide a partial offset for the rising public pension expenditure by cumulatively 0.2 percentage points of GDP in 2040 and by 0.3 percentage points up to 2070. Correspondingly the benefit ratio for public pensions is expected to decline from 37% to 36% in 2040 and further to 35% in 2070. However, compared to other pension systems, the yet adopted declines in benefit ratios are rather modest.

Delayed retirement also has a cost-reducing effect. This channel is mainly expressed in declining coverage ratio effects. The coverage ratio effect is expected to lower pension expenditure by cumulatively 0.6 percentage points up to 2040 and 1.2 percentage points up to 2070.

Figure 44: Netherlands: Components of change in the public expenditure



Forecast of benefit ratios and replacement rates

Table 22 shows the development of the benefit ratios and replacement rates. It also shows the interaction between statutory first-tier pensions and quasi-mandatory occupational pension schemes. It becomes obvious from the projections of benefit ratios that – given the increase in old-age dependency – benefit rates are relatively stable over the projection period, compared to other countries. For Italy, for instance, the benefit ratio for public pensions is projected to decline from currently 61% to 49% in 2050. In Austria the benefit ratio for public pensions will fall from currently 54% to 46% in 2050. For the Netherlands the benefit ratio for first tier public pensions remains almost constant at 34% and 33%, respectively. The benefit ratio for statutory first tier pensions might be low. However, the difference to the total benefit ratio is filled up by occupational funded schemes. The total benefit ratio will decline from currently about 65% to 64% in 2040 and further to 61% in 2070.

The replacement rate at retirement (RR) is defined as the average first pension of those who retire in a given year over the average wage they earned before retirement, whereas the benefit ratio (BR) measures the average pension benefit of all pensioners against the average, economy-wide wage. The replacement rates are lower than the benefit ratios because in the Netherlands wages rise strongly with age. Wages just before retirement are therefore relatively high, leading to a larger decline in income at retirement.

Table 22: Netherlands: Benefit ratio and replacement rates until 2070

	2019	2030	2040	2050	2060	2070	change in pp
Public scheme (BR)	37%	36%	36%	36%	36%	35%	−2.0
Public scheme: old-age earnings related (BR)	34%	33%	34%	34%	34%	34%	0.0
Private occupational scheme (BR)	49%	43%	46%	45%	44%	43%	−7.0
Private individual schemes (BR)							
Total benefit ratio	65%	62%	64%	63%	62%	61%	−5.0
Total replacement rate	54%	51%	53%	52%	51%	50%	−4.0

Source: European Commission • Created with Datawrapper

ECO AUSTRIA INSTITUTE FOR ECONOMIC RESEARCH

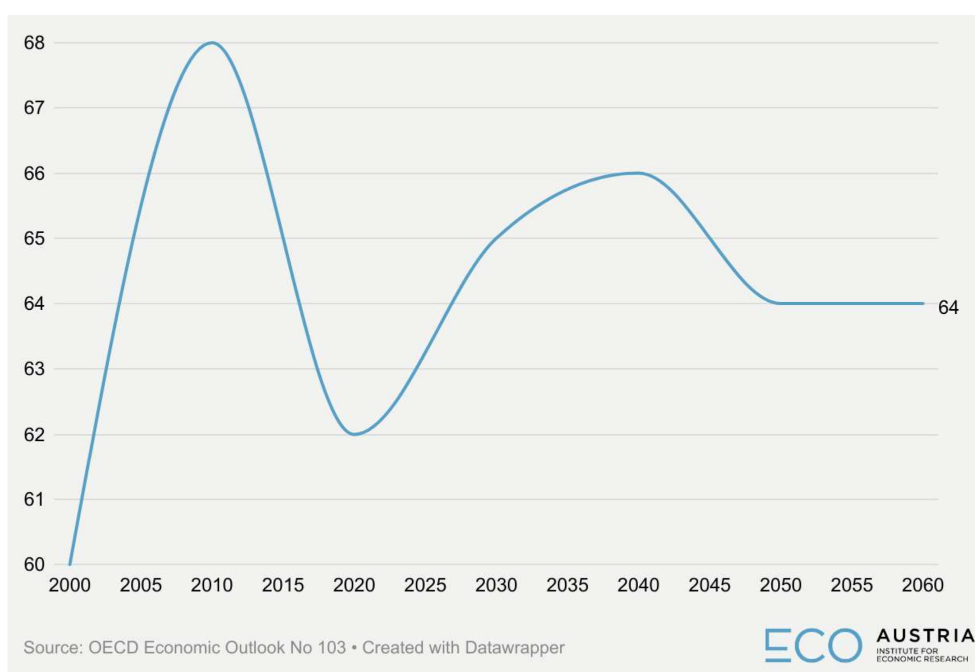
Forecast of the debt levels

As shown in Figure 43, the overall increase in public pension spending in the Netherlands is at a lower level than in comparable countries, such as Austria, Germany or Italy. Nevertheless, also in the Netherlands there is a distinct increase in public pension spending, especially in the years 2020 to 2040. Currently, public pension expenditure (gross) amounts to about 7% of GDP. In 2040, they will amount to more than 9% of GDP. First, it should be borne in mind that that partly due to the financing system, the burden on public budgets is much less pronounced in the Netherlands than in other countries. The Dutch overall system is based to a lesser extent on public financing, or in other words, PAYG is a financing a smaller component of the Dutch pension system, namely the first statutory pension tier. Thus, the overall system is exposed to fiscal pressure stemming from society's ageing, but this happens on a smaller level. For example, public

spending on pensions in 2040 will amount to about 15% in Austria and almost 18% in Italy. As showed above the yet adopted and institutionalized cuts of benefit ratios are relatively moderate. The financing pressure, which can also be observed in the Netherlands, can be seen as affordable against the background of a government consolidated gross debt. In 2022 the Dutch gross dept level was around 51% of GDP in 2022. Comparable countries such as Germany (66.3%), Austria (78.4%) or Italy (144%) face more difficult starting conditions for financing, while at the same time having a similar or even higher demographic burden.

In the longer term the costs of aging, not only for pensions but also for health and long-term care, are also evident for the Netherlands. General government gross financial liabilities will rise from currently around 62% to around 66% by 2040. Ceteris paribus, this will also be reflected in a corresponding increase in the government debt ratio. From 2050, general government gross financial liabilities will be constant at 64%. This is 2 percentage points higher than the current starting values.

Figure 45: Netherlands: Projection of long-term gross financial liabilities (in % of GDP)



2.9.4. Funded Pensions (Second and third tier)

The second pillar of the Dutch pension system comprises the occupational pension schemes. Second pillar contributions are normally laid down in collective pension agreements and are typically shared between employers and employees. Employers usually pay a higher share, roughly two-thirds (OECD 2021a). These completely funded occupational pensions plans have an important function in the Dutch pension system to ensure an overall replacement rate of 75% for a life-time career over 40 years. Most schemes have a target total replacement rate of 70% of final pay. Private benefits are reduced by a franchise amount provided by the first-tier basic state pension. This underlines that the various elements of the Dutch pension system are systemically

integrated. Occupational pension plans supplement the state pension and, in contrast to public PAYG AOW pensions, are tied to past contributions and previously earned income. With about 90%, most persons employed in the Netherlands participate in an occupational pension scheme. Although funded DC plans are currently on the rise most of the occupational plans are still designed as funded DC plans. As mentioned, the overall pension replacement target is 75% of the average salary. Most pension funds currently have an average pay scheme promising a maximum yearly accrual rate of 1.875% of average career salary (including first-pillar benefits). If the collective labour agreement lasts for 40 years, total pension benefit (first plus second pillar) therefore will be 75% of the average salary. Pension rights are correspondingly built up from the contribution basis, which is the wage minus the AOW franchise. Occupational pension premiums are only paid over the contribution basis income.

Indexation of pension rights of the working population used to equal on average 50% of the wage rise and 50% of the price rise, though in recent years price indexation seems to have become more dominant especially for the retired. Indexing is conditionally and dependent on the financial situation and the rate of coverage (funding ratio) of the pension funds and sponsors. Most pension plans have implemented limited indexation or stopped it entirely after the financial crisis. In the context of the continued high importance of DB plans, it must be taken into account that the associated benefit promises actually only refer to nominal benefit levels. In other words, even with DB plans the level of benefits decreases in real terms.

In the Netherlands, according to the Ageing Report's Country Fiche, there are mainly four types of occupational pension providers: (1) industry-wide pension fund providers that administer the pension scheme of a whole branch of industry; (2) company-specific pension fund providers that administer the pension scheme of a larger enterprise; (3) pension funds for professional groups which have to do with self-employed professionals within a particular profession (there are only active members and pensioners and no employer); (4) insurance providers who have to deal with group life insurance contracts for separate enterprises.

The joint capital of these pension providers is estimated to be more than twice the size of GDP. According to OECD's Pension Markets for in Focus (2023) total assets in private and funded schemes amounted 213% of GDP in 2021, recently increasing from 194% in 2019. Here also savings from voluntary individual pension plans are included. However, third tier individual pension plans are of minor importance for the Netherlands (EU, 2020b).

The pension sector is also concentrated. The largest fund, with an invested capital of EUR 466 billion (The Dutch Civil Servants' Pension Fund ABP), represents around 25% of the total assets. The largest five funds share about a half of the total assets. At present (end of 2019), 216 pension funds are in operation. Other than these, 40,000 group pension agreements have been made with insurance providers by companies that do not have a pension fund. All these pension providers are being supervised by the Dutch Central Bank (DNB). About 95% of the capital is managed by pension funds (including Pension Premium Institutions, PPI).

According to OECD's Pension Markets in Focus (2023, p. 14) in the Netherlands the legislation does not require employers to set up a plan for their employees. However, participation in a plan

in these countries is quasi-mandatory as the decision is made at the industry or branch level through collective bargaining agreements. Occupational pension plans for employees in the Netherlands are widespread, but do not cover all salaried employees. About 10% of employees do not have an occupational pension plan.

Investment regulations

Occupational and private pension funds are under the supervision by Dutch Central Bank (DNB). According to information from the DNB[38], the Pensions Act – for company pension funds and industry-wide pension funds –, the Mandatory Occupational Pension Scheme Act – for occupational pension funds – and the secondary legislation based on these laws impose prudential and material requirements on the pension funds and providers. Prudential requirements concern for example the propriety of policymakers, the expertise of policymakers, the operational management, material requirements concern for instance the administration agreement between the employer and the pension fund or pension scheme rules between the pension fund and its members. These requirements have been elaborated in greater detail in secondary legislation and concern all kinds of operational, technical and financial aspects as well as related risks.

However, regarding specific investment vehicles or asset classes providers of funded occupational and personal pensions face a large degree of freedom: There are no specific legal restrictions on the equity exposures of Dutch pension funds. However, there are restrictions on investments in single issuers und issues. The pension funds may not acquire more than 10% in a single issue or from a single issuer. This applies to all asset classes, including equity exposures. The restrictions are with a maximum holding of 5% even more stringent for investments in issues of the employer financing an occupational plan.

According to OECD's annual survey of investment regulation of pension funds (OECD 2021a) the Netherlands is among a few countries that do not impose any specific ceiling on any asset class but expect pension providers to invest according to the prudent person principle. No specific or explicit limits are set exemplary for real estate, bills and bonds issued by public administrations, equity or bank deposits.

According to information from the Ageing Report's country fiche for the Netherlands the supervision structure, the financial assessment framework (FTK), has been revised in 2015. The government, social partners, pension fund administrators and the supervising authority agreed that some stopgap regulations, aimed at short-term financial stability, could be counterproductive to the long-term quality of the pension system. Pension funds are now allowed to base their indexation policies on the year-averaged funding ratio instead of the funding ratio at the end of the year. Since most occupational plans are still DB schemes, although the transition to more DC elements is evident, the funding ratio of funded and private DB plans is a useful indicator for assessing the sustainability of funded pensions. Funding ratios measure the proportion of liabilities that available assets cover. When the value of assets in DB plans is less than the value of liabilities arising from the retirement income promise, or in other words, when the funding ratio

[38] For information see DNB's website under the Weblink.

is below 100%, the plan is underfunded. According to OECD's Pension Markets in Focus (2023) the funding ratio of such DB plans was 114.8 in 2021, indicating the sustainability of funded DB plans in the Netherlands.

Moreover, current rules already allow that the cost-effective contribution rate to be based on the ten-year-averaged interest term structure. These measures intend to make the participants in the pension system less vulnerable to short-term fluctuations in the interest rate and the capitalization rate of the funds. It is legally required for pension funds to determine a cost-effective contribution rate and a minimum solvency rate to guarantee their members a pension benefit. If the amount is less than this basic limit, pension funds are compelled to take measures (including cutting promised pension benefits) to restore this level. According to the FTK, pension funds must state in a clear way whether or not they will index the pension rights and under what conditions they intend to do so. The parameters used in FTK will be assessed every five years (such as the expected returns on assets and expected inflation).

Assets allocated

According to OECD's Pension Market in Focus (2023) the Netherlands is not only a country with one of the highest shares of assets in private and funded pensions plans, but also one of the countries with the highest share of assets invested abroad. Almost 90% of assets accumulated in private and funded pension plans are invested abroad. In general, countries with the highest proportion of pension assets invested abroad are European countries with small capital markets. Among the ten countries with the largest proportion of assets invested abroad, nine were from the euro area or were using the euro as their main currency in 2021: Malta (98% of assets invested abroad), Latvia (90%), the Netherlands (89%), Lithuania (88%), the Slovak Republic (85%), Portugal (84%), Estonia (81%), Slovenia (72%) and Italy (69%).

Also, the share of assets invested in foreign currencies was rather high compared to other countries. According to OECD's Pension Markets in Focus the share of assets invested in foreign currencies was about 55%. The share of assets invested in foreign currencies has increased in the last years, from about 51% in the year 2015.

At about 43%, the main investment instrument for private and funded pensions in the Netherlands are bills and bonds. Only about 31% of assets are invested in equities, corresponding to only the 18th highest equity share compared to 38 OECD countries. The equity share is much higher for many comparable countries like Belgium (50%), Finland (46%) or Canada (41%).

Excursus on the investment structure of Dutch DB schemes

To date, the structure of funded company pension plans is determined by defined benefit (DB) plans. According to the EU Commission study on drivers of investments in equity by insurers and pension funds (2019) two main types of occupational pension providers (i.e. "Pensioenfonds" and "Premiepensioeninstelling") exist in the Netherlands. These provide various types of pension plans, i.e. DB, DC and hybrid pension plans. A "Pensioenfonds" can offer both DB and DC plans, while the latter offer hybrid plans. In principle, DB and DC plans differ with regard to the risks (e.g. investments, longevity, inflation) that are shared between policyholders and pension providers. With DC pension plans, specific benefit levels are not defined or guaranteed, and the risks are

largely borne by the participating policyholders (OECD 2021, 216). By contrast, DB pension fund plans “promise” future payouts to policyholders (Rousová et al. 2021). Compared to DB plans, risks are to a larger extent transferred to the sponsoring employers or to pension fund providers.

Historically and still proportionally, occupational pension schemes in the Netherlands are largely organised as DB plans. Accounting for 99.6% of the total assets in 2017 (EU 2019, p. 2), DB plans were still most common at the end of the last decade. This is also due to historical reasons (Kemna et al. 2011, 29)[39]. According to the Global Pension Assets Study 2023 (TAI 2023, p. 17), in 2021 DB plans still accounted for 95% of pension assets in the Netherlands (also Higgins 2021).

Rising life expectancy and falling interest rates are putting pressure on the financing of benefit commitments (Hintze 2021). As regards the financing of pension entitlements falling and low interest rates are a challenge for providers of DB-funded pensions: Within the scope of DB plans, the present values of “promised” future benefit pay-outs are calculated based on discount rates. Lower discount rates lead to higher present values of both the benefit promises and the assets. Although the present value of both the liabilities and the assets increase when interest rates fall, the overall effect is often more intense on the liabilities side than on the assets side, which is due to a “negative duration gap”. Specifically, the overall effect will depend on the actual duration of the assets and liabilities. However, as occupational DB pension funds are confronted with long-term, interest-sensitive liabilities, a longer duration of the liabilities compared to the duration of the assets can be expected. Falling interest rates and increasing life expectancy as well pose structural pressures on providers of DB plans (Rousová et al. 2021, Antolin et al. 2011 for OECD). This draws attention to the investment structure and strategies of DB plans and to the forms of risk management and hedging.

Based on recent policy reforms with a new Pension Act (“Wet toekomst pensioenen” – WTP), occupational pensions are currently transitioning from a DB to a more DC dominated system. Existing DB rights will be transformed into DC capital sums (Cremers and English 2023, p. 33). The Dutch pension funds will switch to a DC system by 2027 (Rousová et al. 2021). The aim of the policy reform is to mitigate pressures on the financing of DB plans. As DB plans are still the most common form of occupational pension in the Netherlands, one could assume that this structure has had an influence on investment strategies of Dutch pension providers in the past. Rousová et al. (2021) point out, that DB schemes face a lower bound on their expected returns through statutory minimum funding ratios, and face interest rate risk exposure through their liabilities. This offers them a strong incentive to reduce negative duration gaps. Theoretically, various strategies come into consideration in order to deal with a negative duration gap. If pension providers and funds want to reduce negative duration gaps, they intend to increase the duration of their assets. This can be done through purchases of long-duration bonds. An alternative

[39] Originating in the 1950s, pension funds in the Netherlands were set up initially as traditional DB plans, similar to those in the United States and United Kingdom (Kemna 2011, 29). The “classical” DB plan was oriented to the final pay. After 40 years of service and at an accrual rate of 1,75% of pensionable wage per year participants were entitled to pension payments of 70% of the final salary. Pensioner faced no benefit risk (Westerhout et al. for CPB 2021, 9). In the light of stagnating and temporary collapsing equity markets after 2000 two major changes had been introduced by pension funds. The first was the introduction of conditional indexing benefit payments according to the solvency position of funds (depending on the funding or coverage ratio) based on an instrument called “policy-ladder”. The second was the transformation of final-pay into average-pay DB plans.

strategy in the context of decreasing profitability would be to accept a higher interest rate risk. Funds may increase their investments in riskier asset classes such as equities, real estate and alternative assets, in order to boost income from investment. A third way of dealing with a negative duration gap is implemented on the liabilities side. Providers of occupational pensions might switch to products with lower or no guaranteed returns. In line with the objectives of recent pension reforms in the Netherlands, this is exactly the case, when pension plans change from DB to DC. Empirically, Rousová et al. (2021) report evidence from European pension markets, that DB products are overweight long-term debt securities, whereas DC products are more heavily invested in equity and investment funds shares. Fixed income portfolios linked to DB products tend to have longer maturities (Rousová et al. 2021). Portfolios tied to DB pensions might underweight equities, while the opposite is true for portfolios related to DC products.

Results from the OECD's Pension Markets in Focus publication indicate that pension providers in the Netherlands still were more successful in market terms, compared to other countries in the country sample. Over the timespan of 10 years from 2012 to 2021 the real investment rate of return was almost 6% for the Netherlands, compared to 2.9% for Austria, 2.3% for Germany, 2.5% for Italy or 2.1% for Poland. Over the last 17 years, from 2005 onwards, the corresponding value was 5% for the Netherlands, compared to 1,8% for Austria, 2.3% for Germany, 1.8% for Italy or 2.3% for Poland (OECD 2022). Over the years from 2012 to 2021 the share of assets invested in equities was 33% for the Netherlands. This might indicate a higher risk exposed asset structure in the Netherlands, compared to Germany (5.5%), Denmark (23,3%), Italy (20,2%) or Sweden (14%). The proportion of assets invested in equities shows a downward trend over the years from 2012 onwards, with the highest proportion (varying from 37% to 39%) being achieved in the years 2013 to 2015. However, no clear pattern can be recognised with regard to the proportion of bills and bonds. The share of investment in bills and bonds was at a medium level of 44.6% in the years from 2012 to 2021, which corresponds to the 22nd highest level among 37 OECD countries observed. The proportion of bills and bonds was higher than in Austria (42.4%), Denmark (32%) or Sweden (17.4%), but still lower compared to Germany (50%) or Italy (46%).

For the Netherlands, a maybe more relevant distinction can be made in the context of assets invested abroad. With 85% of pension asserts invested abroad, Netherlands has the highest share among all OECD countries observed in the 2022 Pension Markets in Focus publication. The comparative value is 33% for Denmark, 62% for Italy, 6% for Poland, 18% for the UK or 17% for Sweden. The internationalisation of the pension assets took place during the 1990s, when Dutch pension funds diversified out of private loans, mostly to the Dutch Government, into equities, real estate and bonds (Franzen 2010, 39).

According to the analysis of risk-taking Kemna et al. (2011, 29) conclude that the Netherlands holds an in-between position between higher risk profiles in most Anglo-Saxon countries, on the one hand, and a more-conservative risk profile in most of continental Europe on the other hand. Authors expect that a shift towards DC products could boost equity financing and support further growth of the investment fund sector (Rousová et al. 2021). With the new pension plan in the Netherlands and the expected transition from DB to DC plans financial experts expect that funds will show less demand for long-term fixed-income assets compared to the past (Hintze 2021).

Investment performance

In 2021, the real investment rate of return from funded and private pension plans was 2.1%, according to OECD's Pension Markets in Focus. Of 34 OECD countries observed, the Netherlands ranked only 16th according to the average real rate of return. However, for reasons of performance comparisons a longer timespan must be taken into account. Over the last 10 years the average of real average annual rates of return for funded and private pension plans was 5.8% and thus significantly above the comparative value for the last year. Among 37 OECD countries compared, this corresponds to the 6th highest value. In the medium term, the performance of private and funded pension plans in the Netherlands is therefore above average compared to other countries.

Tax treatment

For the classification of the tax regime for funded pension plans, we refer to the classification of the World Bank and the OECD (Whitehouse 1999). According to that, three transactions constitute the process of saving via funded pension schemes, each providing an option for taxation: 1) when money is contributed to the fund, normally by employers and employees or by an individual insurant, 2) when investment income and capital gains accrue to the fund and 3) when retirees receive benefits. In the classification system, taxation or exemption is indicated by either a "T" for taxation or an "E" for exemption.

Funded occupational pension schemes play a leading role in the Dutch pension system. According to OECD (2021d), this form of saving is attractive as it is tax favoured. The tax regime of funded occupational pension plans is mostly described as an EET system (Table 23), i.e. contributions and funds' returns on the investments including equity and dividends are tax exempted, while withdrawals and benefits in payment are subject to taxation or partial exemption respectively (EU 2019 for the Netherlands).

Table 23: Netherlands: Taxation regime for funded pensions

Taxation regime for funded pensions in te Netherlands

	Source of contribution	Contributions	Returns	Withdrawals
All	All	E	E	T

Quelle: OECD (2022). Annual survey on financial incentives for retirement savings. • Erstellt mit Datawrapper

ECO AUSTRIA INSTITUT FÜR WIRTSCHAFTSFORSCHUNG

Contributions to an occupational plan are not considered as taxable income to the employee (OECD 2022b, p. 78). The tax exemption on the contribution side – indicated by the first "E" in "EET" – applies only up to a maximum income. The maximum income for the EET regime is set at EUR 112,189 in 2021 (OECD 2021a). For the income that exceeds that threshold a TEE system is applied. Persons with income above this level may contribute a percentage of income to an occupational pension plan, but the income considered to calculate the contribution is capped at the threshold of EUR 112,189. If the person wants to make extra contributions, she or he must open a voluntary pension plan. Extra contributions in such voluntary plan are not tax-deductible. In contrast to the standard EET regime for occupational pensions, here investment income and

capital gains are tax exempt, as well as the benefits paid out from this voluntary pension plan, resulting in a TEE system. Contributions made under the TEE system are taxed at the individual's marginal income tax rate.

Similar to occupational pension plans, the contributions to voluntary private pension contracts are also tax-exempt. Contributions to private personal old-age provisions are tax-deductible up to a limit. Contributions are limited to 13.3% of the annual income, with a ceiling of EUR 114,866 in 2022 (OECD 2022b, 78), minus a threshold for first pillar general AOW state pension. To prevent accumulation of the tax relief accrued pension entitlements in occupational pension plans are taken into account. Up to a limit the contributions for both, occupational and individual pension plans, are tax exempt. Compared for example to Austria, where contributions to personal pension plans are taxed at the individual's marginal rate of income tax (OECD 2022b, 20), this provides a strong incentive individual pension saving. A favourable taxation in the first contribution stage is expected to provide a more relevant incentive, to start participating in a voluntary individual pension scheme. Also, from an economic point of view, a tax exemption in the contribution phase could provide a stronger incentive, as the marginal tax rate on earned income will generally be higher than that on pension benefits.

The accrual of investment income and capital gains is tax exempt. Returns on investments are not taxed, indicated by the second "E" in the "EET" formula. There is no ceiling on the lifetime value of private pension funds. No tax applies on funds accumulated (OECD 2021a).

In the Dutch system, taxation basically starts at the time of payment. Income from occupational and personal pension plans under the EET system is taxed at the individual's marginal income tax rate (OECD 2021a), indicated by the "T" in the third position in the "EET" form. A general personal tax credit is available to all taxpayers. The amount of the general tax credit depends on the age of the individual and the level of the individual's income. For persons at or above the statutory retirement age, a tax credit of EUR 1,469 applies, if the person's income is less than EUR 21,043. For persons who have not yet reached the eligibility age for a state pension, the comparative tax credit is EUR 2,837 (OECD 2021a). In addition, individuals at or above state pension eligibility age are entitled to a special tax credit called the "elderly allowance". This tax credit is EUR 1,703, reduced by 15% of the aggregate income to the extent that this income exceeds EUR 37,970. For singles, this tax credit is increased with a fixed amount of EUR 443.

Lump sum payments are generally not permitted, unless the annuity payment is very small. Lump sum payments are taxed as income. However, this applies only to individual pension plans. The occupational pension capital cannot be paid out as a lump sum to the employee.

Similar conditions apply to social security contributions. On pension contributions no social contributions are levied. Conversely, pensioners pay 9.75% of their taxable income for the general insurance of certain health costs and survivors' pensions up to an income of EUR 35,129 in 2021 (OECD 2021a). Thus, pensioners pay for their own health insurance depending on their income. Contributions are the same as the contributions for those below the age from which the general state pension payments are received. However, they no longer need to pay the contribution for the AOW first pillar state pension.

2.9.5. Highlights and main features of the system

1. Strengths and weaknesses (according to Overall Pension Index – OPI)
- The Dutch pension system ranks top with regard to "Adequacy" (with an OPI score of 0.76 and ranked 3rd among 11 countries) and "Market capitalization" (OPI score 0.71, ranked 4th). - The system is characterized by a variety of PAYG- and funded components. Only basic elements are PAYG, the overall pension system therefore appears affordable, resilient and adequate. - Particularly since the 2008/2009 crisis, low interest rates and decreasing coverage ratios increased the pressure on funded DB plans, which are still the most common form of occupational pensions.
2. Tax treatment
- 1st tier: Contributions are not deducted from the income tax base. Benefits are taxed as personal income (Holzmann & Genser 2020). 2nd and 3rd tier: EET (up to certain limits, above these limits TEE).
3. Contribution rate to funded plans and split between employer and employee
- Contributions to occupational plans are fund-specific. OECD (Pensions at a Glance, 2023c) reports "typical" rates for 2022 of 7.4% of the salary, paid by the employee (roughly 1/3 of contributions), and 11.2%, paid by the employer (roughly 2/3). The total contribution is 18.6% on earnings above the AOW franchise. The franchise amount is the part of the salary for which no pension contribution is awarded. As of 1 January 2023, the franchise is EUR 16,878 per annum for full-time work.
4. Asset Allocation
- In the year 2022 according to OECD: Equities (30.9%), Bills & Bonds (42.9%), Cash & Deposits (2.0%), Other* (24.2%) * Assets invested in loans, real estate (land and buildings), unallocated insurance contracts, private investment funds and other alternative investments.
5. Obligatory character
- All residents are insured in the statutory 1st tier AOW public pension scheme. Contributions are compulsory for all employees under the retirement age. - Approximately 90% of employees are covered by occupational pensions. These are anchored in collective agreements and therefore binding (quasi-mandatory) for employers in a certain industry.
6. Pay-out options of funded plans
- For occupational pensions 3 pay-out options are available: (1) a flat-rate annuity, (2) a high/low annuity-based profile, and (3) a partial lump-sum (up to 10% of the total capital) at retirement with a lower annuity pension thereafter. The most popular pay-out option is a lifelong flat-rate annuity (1).
7. Contributions to funded plans as percentage of GDP
- According to the EIOPA IORP statistics, net contributions in 2022 amounted EUR 48.2 billion. Given a GDP of EUR 958.5 billion (2022) this corresponds to a contribution volume of 5% of GDP.
8. Investment performance
- 10-year average investment rate of return 2011-2021 according to OECD: 5,7% - At the same time the OECD average was 3.7%.

Additional information and results

- The pension system integrates elements of all three tiers. (Quasi-)mandatory elements comprise the 1st tier statutory pensions and 2nd tier occupational pensions. The latter are funded and quasi-mandatory, anchored in industrial collective agreements. The former is a mandatory, contribution based social security system, financed by social contributions and PAYG mechanisms.
- Statutory state pensions are only a part of the total old-age pension system, providing minimum income for all pensioners. Living standards are mainly guaranteed in the form of funded occupational pensions.
- Because only basic elements in form of public state pensions are financed on a PAYG basis, the fiscal pressure on public pension spending seems "affordable". However, raising fiscal pressures on public pension expenditure is still evident from the recent projections.
- Funded pension plans play a very important role in the Netherlands, also because funded occupational pensions are quasi-mandatory and institutionalised in most collective industrial agreements. However, still about 10% of employees are not covered, neither are the self-employed. Overall, however, voluntary private third-tier pensions play a minor role.
- The Netherlands are one of the largest markets for funded pension markets in Europe. Total assets amounted to more than 200% of GDP 2021. The share of assets in funded and private pension plans invested abroad is almost 90%. This corresponds to one of the highest foreign investment rates among the 11 countries observed. And more than 50% of investments of funded and private plans are invested in assets issued in foreign currencies. The Dutch occupational pension providers (IORPs) are therefore particularly global and international.