



Council of the
European Union

Brussels, 28 February 2019
(OR. en)

6720/19

ECOFIN 219
UEM 66
SOC 137
EMPL 104
COMPET 188
ENV 194
EDUC 104
RECH 128
ENER 112
JAI 200

COVER NOTE

From: Secretary-General of the European Commission,
signed by Mr Jordi AYET PUIGARNAU, Director

date of receipt: 27 February 2019

To: Mr Jeppe TRANHOLM-MIKKELSEN, Secretary-General of the Council of
the European Union

No. Cion doc.: SWD(2019) 1018 final

Subject: COMMISSION STAFF WORKING DOCUMENT Country Report The
Netherlands 2019 Including an In-Depth Review on the prevention and
correction of macroeconomic imbalances Accompanying the document
COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN
PARLIAMENT, THE EUROPEAN COUNCIL, THE COUNCIL, THE
EUROPEAN CENTRAL BANK AND THE EUROGROUP 2019 European
Semester: Assessment of progress on structural reforms, prevention and
correction of macroeconomic imbalances, and results of in-depth reviews
under Regulation (EU) No 1176/2011

Delegations will find attached document SWD(2019) 1018 final.

Encl.: SWD(2019) 1018 final

6720/19

MCS/sl

ECOMP 1A

EN



Brussels, 27.2.2019
SWD(2019) 1018 final

COMMISSION STAFF WORKING DOCUMENT

**Country Report The Netherlands 2019
Including an In-Depth Review on the prevention and correction of macroeconomic
imbalances**

Accompanying the document

**COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN
PARLIAMENT, THE EUROPEAN COUNCIL, THE COUNCIL, THE EUROPEAN
CENTRAL BANK AND THE EUROGROUP**

**2019 European Semester: Assessment of progress on structural reforms, prevention and
correction of macroeconomic imbalances, and results of in-depth reviews under
Regulation (EU) No 1176/2011**

{COM(2019) 150 final}

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EXECUTIVE SUMMARY

While growth is moderating, the still favourable economic environment provides a window of opportunity to sustain the reform momentum.

This includes tackling long-term challenges in the housing market, labour market and pensions⁽¹⁾. Recent structural reforms have borne fruit in terms of a job-rich recovery. Although measures to reduce the debt bias for households have been adopted, incentives to incur debt remain. While the labour market continues to recover, challenges with respect to labour market segmentation and the pension system remain.

Domestic demand continues to drive economic growth.

In 2018, GDP increased by 2.5%. In 2019 and 2020, growth is projected to moderate to 1.7% for both years. Next to household consumption, government expenditure is providing a temporary boost to short-term GDP growth. Measures to reduce the wedge on labour — the difference between workers' take-home pay and what it costs to employ them — and R&D investment support potential growth. With headline surpluses and government debt declining to below 50% of GDP in 2019, government finances are in good shape. However, the projected increase in public expenditure on long term care points to medium risks in long-term sustainability.

Relatively strong investment growth is expected to soften.

Reaching 21% of GDP in 2018, the investment rate is broadly in line with the euro area average. The share of public investment is stabilising at around 3.5% of GDP, significantly below pre-crisis levels but well above the euro area average. Household and business investment is set to continue growing, albeit less than in recent years. Risks to the investment outlook are

relatively high given the uncertain international economic environment.

Job creation continued in the second half of 2018, driving down the unemployment rate to pre-crisis lows.

While the labour market has recovered from the crisis in terms of employment, jobs and the level of unemployment, the composition of the labour force has changed over the past decade. The share of permanent contracts has declined, with a marked increase in flexible contracts and self-employment. While flexible work arrangements allow for an efficient matching between labour supply and demand, an overly flexible labour market with high self-employment contains social-economic risks, such as underinvestment in human capital (human knowledge and/or skills) and underinsurance for old-age, disability and sickness.

Wage growth remains moderate.

Over a longer period, it has been below the level that could be expected based on fundamental drivers such as unemployment, productivity and inflation. This may partly be due to growth in flexible employment as temporary employees earn less in general. A further tightening of the labour market is expected to lead to an acceleration of wage growth in 2019 and 2020.

Investments in Research and Development, human capital, climate and energy are needed to support productivity growth and maintain a strong innovation capacity.

While the research and development investment intensity rose to over 2%, it is still well below the 2.5% national target and the level of top performers. In terms of labour productivity, the Netherlands is one of the best performing countries in many sectors. This implies that productivity growth should come from new innovations. A further increase in research and development investment, especially in the private sector, is needed for this to happen. Technical skills and qualified professionals are crucial for the Dutch economy's innovation capacity and productivity growth. This points to the need to invest more in training, to promote flexible upskilling and reskilling opportunities for all. Improving society's innovation capacity also requires investments to support education in the field of science, technology, engineering and mathematics. Moreover, increased investment in skills, education and training is crucial to

(1) This report assesses the Netherlands' economy in the light of the European Commission's Annual Growth Survey published on 21 November 2018. In the survey, the Commission calls on EU Member States to implement structural reforms to make the European economy more productive, resilient and inclusive. In doing so, Member States should focus their efforts on the three elements of the virtuous triangle of economic policy — delivering high-quality investment, focusing reforms efforts on productivity growth, inclusiveness and institutional quality and ensuring macroeconomic stability and sound public finance. At the same time, the Commission published the Alert Mechanism Report (AMR) that initiated the eighth round of the macroeconomic imbalance procedure. The AMR found that the Netherlands warranted an in-depth review, which is presented in this report.

improving access to the labour market and the employability of those operating at the margins of the labour market, while fostering equal opportunities and active inclusion. The energy transition and the reduction of greenhouse gas emissions requires substantial investments to ensure more sustainable and resource-efficient economic growth. Annex D identifies key priorities for support by the European Regional Development Fund and the European Social Fund Plus over 2021-2027, building on the analysis of investment needs and challenges outlined in this report.

Overall, the Netherlands has made some progress in addressing the 2018 country-specific recommendations.

There has been **substantial progress** in the following area:

- Raising public and private investment in research, development and innovation, while respecting the medium-term objective. The government is implementing fiscal stimulus measures, including higher investment in R&D.

There has been **some progress** in the following areas:

- Taking measures to reduce the debt bias for households and the remaining distortions in the housing market, in particular by supporting the development of the private rental sector. The government accelerated the reduction in mortgage interest deductibility and submitted a law to Parliament to increase the supply of housing in the middle segment of the rental market.
- Creating conditions to promote higher wage growth, while respecting the role of the social partners. Wages in collective agreements increased on average by 2.1% in 2018. Public sector wages increased at a faster rate (by 3% in the second half of 2018), with wage agreements leading to a nominal increase of 7% in two years for all civil servants in central government. Additional funding has been provided to increase the salaries of primary school teachers. The government has taken tax

measures that support higher disposable real incomes of households.

There has been **limited progress** in the following areas:

- Reducing the incentives to use temporary contracts and self-employed without employees, while promoting adequate social protection for the self-employed. The government sent a draft bill (*Wet Arbeidsmarkt in Balans*) to Parliament in November 2018. This draft bill contains a package of proposed measures to make the hiring of employees on a permanent basis easier and make flexible contracts less flexible. However no other concrete measures have been adopted so far.
- Ensuring that the occupational pension system is more transparent, inter-generationally fairer and more resilient to shocks.

There has been **no progress** in the following areas:

- Tackling bogus self-employment. The government is expected to inform Parliament on the previously announced measures addressing bogus self-employment in spring 2019.

Regarding progress towards its national targets under the Europe 2020 strategy, the Netherlands has achieved its targets on energy efficiency, early school leaving and higher education. The targets on the employment rate and reduction of national greenhouse gas emissions are also expected to be met. The target of 14% for renewable energy consumption in 2020 is expected to be out of reach. While the Netherlands has taken measures to increase R&D spending, a substantial further effort is needed to reach 2.5% of GDP.

The Netherlands performs very well on most indicators of the Social Scoreboard supporting the European Pillar of Social Rights. It has an overall good standing in labour market performance and the social situation. Per capita real gross disposable income of households continued to rise, with income inequality below the EU average. In the area of social protection and inclusion, the weakening of the situation with regard to the risk of poverty or social exclusion is a

point of attention. However, the Netherlands is still among the top performers, with a low level of poverty.

The main findings of the in-depth review contained in this report and the related policy challenges are as follows:

- **Mortgage interest deductibility continues to fuel household debt.** Private debt is well above macroeconomic imbalance procedure thresholds. Corporate debt is largely in the hands of multinationals and poses limited macroeconomic risks. High household debt makes households vulnerable to financial shocks with macroeconomic repercussions. Although the ratio of household debt to GDP has been falling, it is still twice the euro area average. Household debt largely consists of mortgage debt and is fuelled by generous tax relief on mortgage interest payments. While mortgage interest deductibility is effectively being lowered, debt-financed home ownership remains heavily subsidised.
 - **Subsidies to owner occupied housing and social housing lead to an underdeveloped private rental market.** The social housing and rent-controlled sector is large compared to other Member States. The private rental market is the only non-subsidised housing sector and remains underdeveloped. The lack of a well-functioning middle segment on the rental market encourages households to buy rather than rent, leading to high debt-to-income ratios and financial vulnerability.
 - **High illiquid housing and pension assets combined with high mortgage debt make households vulnerable to shocks.** While the pension system performs well on pension adequacy and fiscal sustainability, it has drawbacks in terms of intergenerational fairness, transparency on pension rights and flexibility. Moreover, occupational pension contributions are high and fluctuate depending on how pension funds perform. As such, it may affect household spending in a pro-cyclical way, with the balance of risks geared towards young age groups as lower indexation and higher pension contributions have been the primary means of adjustment. Households combine substantial housing and pension wealth with high mortgage debt. However, the former are highly illiquid and unevenly distributed across generations. Long household balance sheets make households vulnerable to economic shocks and accentuate the pro-cyclical dynamics of household finances.
 - **The current account continues to show a marked surplus.** The Netherlands has had a current account surplus of 7% of GDP on average over 1999-2017. All institutional sectors are currently in surplus, which led to the current account surplus rising to 10.5% of GDP in 2017. This high level is mostly accounted for by the non-financial corporation sector, and may be linked to the presence of multinationals' headquarters. A comparatively large non-financial corporation savings surplus is rooted in a relatively high operating surplus, together with high net property income and relatively low levels of domestic corporate investment. Resuming income growth combined with high compulsory savings, pressure on households to reduce their debt level and low residential investment has led to positive net lending for households. The government sector recorded stable headline surpluses following substantial fiscal consolidation in recent years. While corporations make the largest contribution to the surplus over time, the government and household sector are largely responsible for the post-crisis increase in the current account surplus. Housing market and pensions institutions affect consumption and the surplus in a pro-cyclical way.
 - **Structural reforms have small but positive international spillovers.** Simulations in this report show that structural reforms aimed at closing half of the gap with top performance in a selected range of pro-growth policy areas have a considerable effect on domestic GDP and small yet positive international spillovers.
- Other key structural issues analysed in this report, which point to particular challenges facing the Dutch economy, are the following:
- **The labour market performed well across the board, while challenges of segmentation**

and integration of non-EU-born migrants remain. Employment reached a record high and unemployment continued to decline. An increasingly tight labour market has recently provided incentives for employers to offer more open-ended contracts. However, the share of flexible employment remains high, and there are large differences in the working conditions and social protection of the employment contracts and work arrangements. In addition, there is still large untapped labour potential in the high number of women in part-time employment and people with a non-EU-born migrant background. Furthermore, the employment situation of those operating at the margins of the labour market remains challenging.

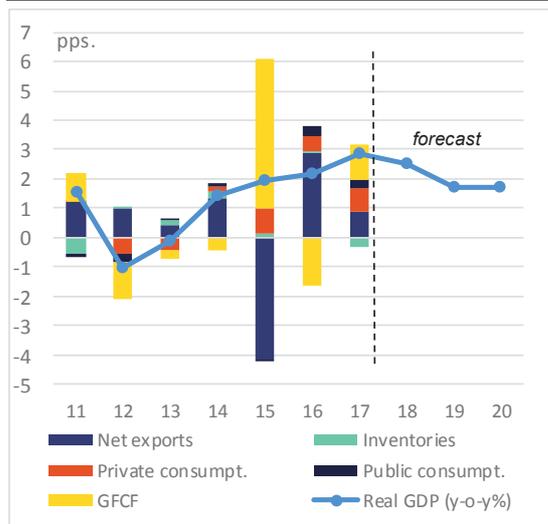
- **The Netherlands' tax rules appear to be used by multinationals engaged in aggressive tax planning structures, but some important steps are being taken to limit such practices.** Some elements that may facilitate tax planning include the absence of withholding taxes on royalties and interest payments. However, to curb aggressive tax planning the Netherlands is making important changes to its tax system in line with European and internationally agreed initiatives, but also through the announced introduction of withholding taxes on interest and royalty payments to low-tax countries or in case of abuse, which will need to be monitored closely.

1. ECONOMIC SITUATION AND OUTLOOK

GDP growth

GDP growth in 2018 remained robust at 2.5%, but moderated compared to 2017. In 2019 and 2020, growth is expected to decline further to 1.7% for both years. Unemployment has fallen well below 4% and the manufacturing capacity utilisation rate has been on an upward trend since 2013, exceeding its pre-crisis level. The output gap, which was negative for a prolonged period during the crisis, turned positive again in 2017 and is expected to remain so over the coming years (Graph 1.1). The economic expansion is job-rich, with labour productivity growth contributing less than 1% per year on average since the crisis.

Graph 1.1: GDP growth



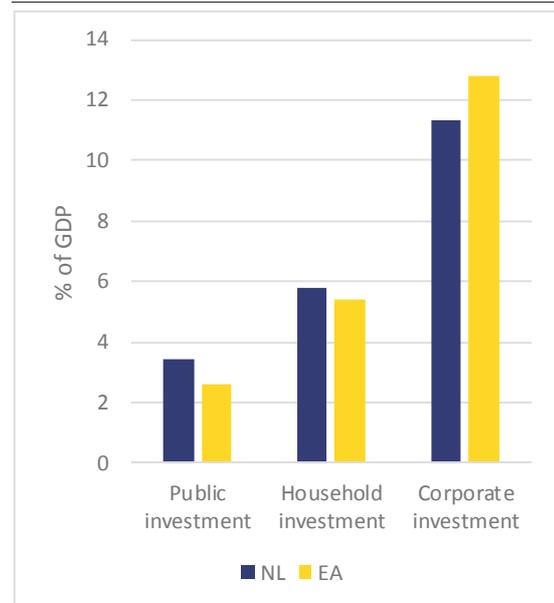
Source: European Commission (Winter 2018 Interim Economic Forecast)

As the economic cycle matures, domestic demand is the main contributor to growth. Private consumption is expected to increase on the back of higher disposable income as employment and wages increase. The government's expansionary fiscal package is also expected to boost growth, although it is subject to implementation risks. The contribution of net exports is projected to be close to zero, reflecting the weaker external environment and solid domestic demand.

Investment

Investment has been on an upward trend, reaching 20.5% of GDP in 2017. The investment rate is broadly in line with the euro area average (20.8%, Graph 1.2). The share of public investment has been decreasing since 2009, but is expected to stabilise at around 3.5% of GDP in 2018-2020, compared to a euro area average of 2.6%. Household investment is to a large extent driven by residential investment, which increased by 18% per year on average in 2015-2017 (in real terms). However, it is expected to experience more moderate growth in the coming years. Corporate investment has historically been lower than the rest of the euro area as a share of GDP, although it has been increasing rapidly in recent years. Looking ahead, corporate investment is expected to grow more moderately given that the economy is expanding at a slower pace and economic sentiment has decreased over the course of 2018. In terms of investment needs, higher investments in R&D, human capital and climate and energy are necessary to support productivity growth and to maintain a strong innovation capacity (see Section 4.4.1).

Graph 1.2: Investment by sector, 2017



Source: Eurostat

Regional dimension

Regional differences in terms of economic activity and income are limited. In 2016, GDP per head in purchasing power standard terms relative to the EU average varied from 90 in Friesland and Drenthe to 166 in Noord-Holland. While this seems a substantial difference, disparities in GDP per head at the provincial level are among the smallest in the EU and vary little over time. In most regions, except Groningen⁽²⁾, GDP per head growth in 2010-2016 was similar to the national average of 1.1%. Variations in productivity per worker and in household income are much smaller. Household income varied between 83% (Groningen) and 115% (Utrecht) of the national average in 2015.

Inflation

A Value Added Tax (VAT) increase is expected to drive inflation up to 2.4% in 2019. An increase in the reduced VAT rate from 6% to 9% took effect at the start of 2019, as part of a comprehensive tax package. Higher energy prices pushed up inflation in recent months, but their influence is expected to dissipate in line with lower oil prices compared to the second half of 2018. In 2020, inflation is expected to fall to 1.7%. Underlying, core inflation is expected to pick up, in line with tightening supply constraints and related wage increases.

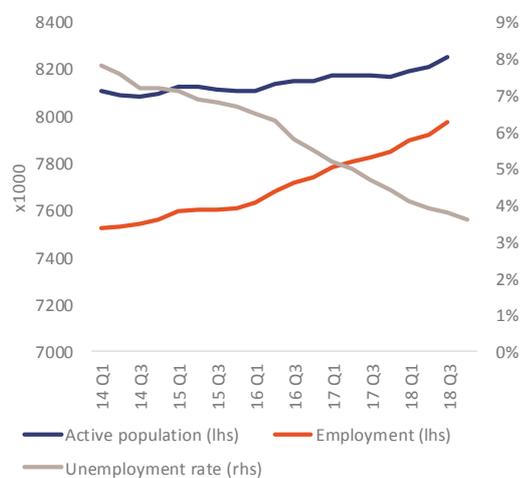
Labour market

Employment continued to increase strongly in 2018 while the unemployment rate is reaching historically low levels (Graph 1.3). Employment increased by 2.3% in 2018, following a 2.1% increase in 2017⁽³⁾. The unemployment rate reached 3.8% in 2018, only slightly above the pre-crisis level of 3.7% in 2008. The employment rate (20-64 years) has exceeded its historical peak. Over the course of 2018, labour force growth started to accelerate, leading to a temporary stabilisation in the unemployment rate for several months before a further decline.

(2) The GDP of the province of Groningen declined by 0.9% over this period, linked to the sharp decline of natural gas production.

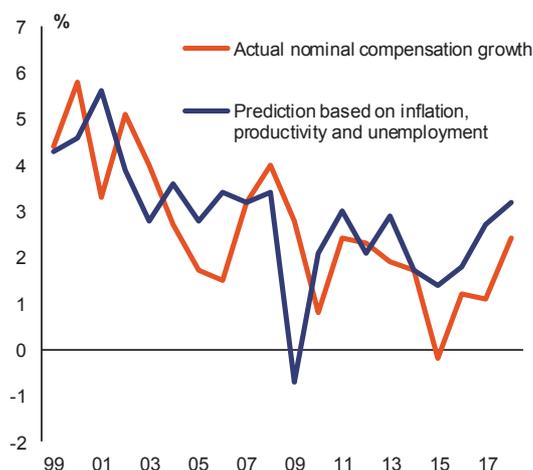
(3) According to Labour Force Survey data, Statistics Netherlands.

Graph 1.3: Labour market trends

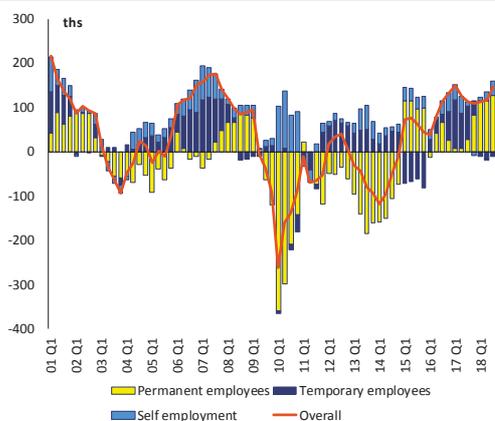


Source: Eurostat (Labour Force Survey)

Wage growth is increasing, but has remained moderate so far. According to the Commission's Autumn 2018 Economic Forecast, nominal compensation per employee is expected to have increased by 2.4% in 2018, compared to 1.1% in 2017. As in previous years, wage growth remained below what would be expected based on its historical relationship with inflation, productivity and unemployment developments (Graph 1.4). Increased labour market segmentation could explain part of the low wage growth in recent years (see Section 4.3 and European Commission 2018e). Trade unions have again formulated substantially higher wage demands compared to before. In combination with a further tightening of the labour market, this is expected to result in an acceleration of nominal wage growth to 3.1% in 2019 and 3.5% in 2020. However, as inflation is also picking up the increase in real wages remains moderate.

Graph 1.4: **Actual and predicted wage growth based on fundamentals**

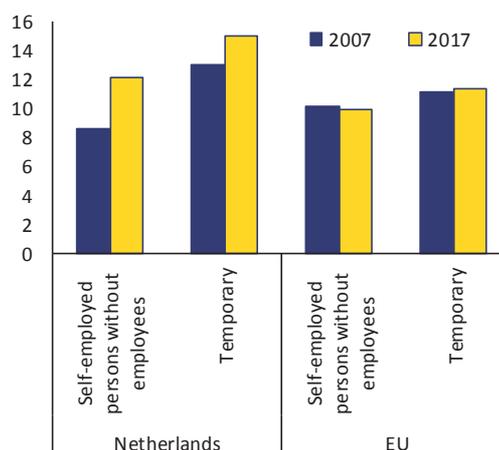
Source: European Commission (based on Autumn 2018 Economic Forecast)

Graph 1.5: **Change in employment by contract type (thousands)**

Source: European Commission

The share of non-standard employment remains high in the Netherlands. Job creation for permanent employees has exceeded job creation for temporary employees since Q4-2017 (Graph 1.5). For the first time in years, the share of temporary employees in total employment decreased slightly to 14.8% in Q3-2018, down from 15.2% one year earlier. However, this is still well above the EU average (11.4%) and the pre-crisis level (Graph 1.6). In addition, the share of self-employed without employees in total employment remains high (12.2% compared to 9.9% for the EU average). Part-time employment

also remains widespread, in particularly among women.

Graph 1.6: **Temporary employment and self-employment without employees, % of total employment**

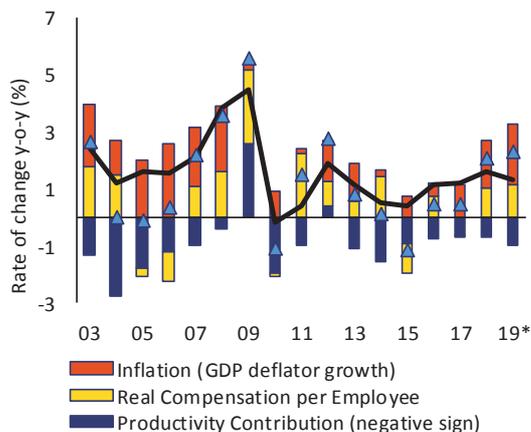
Source: European Commission

Unit labour costs are set to increase somewhat faster than the euro area average. According to the Commission's Autumn 2018 Economic Forecast, growth of unit labour costs is expected to accelerate from 1.7% in 2018 to 2.2% in 2019 and 2.5% in 2020 (Graph 1.7). For 2019 and 2020, this is roughly 1 pp. above the euro area average. Over a longer period of time unit labour cost trends in the Netherlands are closely aligned with the euro area as a whole.

Social developments

The Netherlands has a low level of income inequality. As a result of the highly redistributive tax and benefit system, the ratio of disposable household incomes between the richest and the poorest quintile of the Dutch population is 4.0, which is well below the EU average of 5.2. Wealth inequality is higher, although this is mainly driven by households with negative net housing equity following the decline in house prices during the crisis.

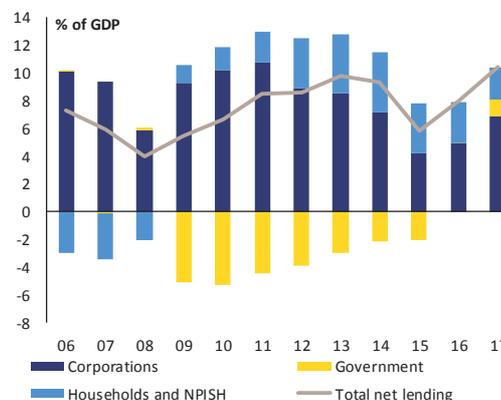
Graph 1.7: Trends in unit labour costs and components



Source: European Commission

External position

Graph 1.9: Net lending by sector (% of GDP)

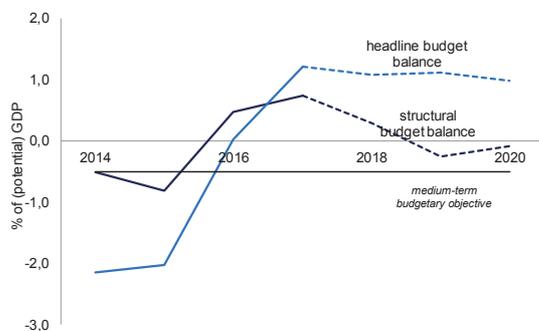


Source: Statistics Netherlands

Public finances

The budget balance is expected to remain in surplus over the coming years (Graph 1.8). The budget surplus is forecast to have reached 1.1% in 2018. This is higher than previously expected as several planned expenditure increases have been subject to implementation lags, including in infrastructure and defence. For 2019 and 2020 a surplus around 1% is foreseen, as further expansionary measures will be broadly compensated by strong growth in tax revenues. The structural balance is set to deteriorate from a surplus of 0.7% in 2017 to a deficit of 0.3% in 2019, before rebounding somewhat to -0.1% in 2020. The debt-to-GDP ratio is declining rapidly and is expected to fall below 50% in 2019, down from 57% in 2017.

Graph 1.8: General government budget balance



Source: European Commission Autumn 2018 Economic forecast

After peaking at 10.5% in 2017, the current account surplus is expected to decline only gradually. From a net lending perspective, the corporate sector accounts for the largest part of the domestic surplus, while the household and government sector are also in surplus (Graph 1.9, see also Section 4.2.6). A sustained trade surplus in goods, averaging 9.5% over the period 2013-2017, is the main driver of the high level from a trade perspective. Primary income flows have had a limited impact on the current account on average over a multi-year period, but are a source of short-term volatility and largely explain the peak in 2017. On the back of solid domestic demand growth, the current account balance is expected to decline only gradually. Despite the persistently high current account surpluses, the net international investment position fell back somewhat from 63% in 2016 to 60% in 2017. Negative valuation effects and high nominal GDP growth outweighed domestic net lending.

Table 1.1: Key economic and financial indicators -the Netherlands

	2004-07	2008-12	2013-15	2016	2017	2018	forecast	
							2019	2020
Real GDP (y-o-y)	2,8	0,0	1,1	2,2	2,9	2,5	1,7	1,7
Potential growth (y-o-y)	1,8	0,9	0,8	1,4	1,7	1,9	1,8	1,8
Private consumption (y-o-y)	0,8	-0,4	0,5	1,1	1,9	.	.	.
Public consumption (y-o-y)	3,0	1,4	0,2	1,3	1,1	.	.	.
Gross fixed capital formation (y-o-y)	6,2	-4,1	7,4	-7,3	6,1	.	.	.
Exports of goods and services (y-o-y)	6,6	2,0	4,8	1,7	5,3	.	.	.
Imports of goods and services (y-o-y)	6,8	1,1	6,5	-2,0	4,9	.	.	.
Contribution to GDP growth:								
Domestic demand (y-o-y)	2,4	-0,7	1,7	-0,8	2,3	.	.	.
Inventories (y-o-y)	0,0	0,0	0,2	0,1	-0,3	.	.	.
Net exports (y-o-y)	0,4	0,8	-0,8	2,9	0,9	.	.	.
Contribution to potential GDP growth:								
Total Labour (hours) (y-o-y)	0,3	0,2	0,3	0,7	0,8	0,8	0,6	0,5
Capital accumulation (y-o-y)	0,7	0,5	0,3	0,5	0,6	0,7	0,7	0,7
Total factor productivity (y-o-y)	0,7	0,3	0,2	0,2	0,3	0,4	0,5	0,5
Output gap	-0,6	-1,3	-2,5	-1,1	0,1	1,0	1,6	1,6
Unemployment rate	5,2	4,8	7,2	6,0	4,9	3,9	3,6	3,6
GDP deflator (y-o-y)	2,0	1,0	0,8	0,5	1,2	2,0	2,4	2,0
Harmonised index of consumer prices (HICP, y-o-y)	1,5	1,9	1,0	0,1	1,3	1,6	2,4	1,7
Nominal compensation per employee (y-o-y)	2,3	2,5	1,1	1,2	1,1	2,4	3,1	3,5
Labour productivity (real, person employed, y-o-y)	1,7	-0,1	1,2	1,1	0,7	.	.	.
Unit labour costs (ULC, whole economy, y-o-y)	0,6	2,4	-0,1	0,5	0,5	1,7	2,2	2,5
Real unit labour costs (y-o-y)	-1,3	1,4	-0,8	0,0	-0,7	-0,3	-0,2	0,5
Real effective exchange rate (ULC, y-o-y)	-0,2	0,2	-1,2	0,5	0,6	1,0	-0,1	0,5
Real effective exchange rate (HICP, y-o-y)	-0,5	-0,8	-0,2	1,3	0,6	1,5	-0,2	-0,4
Savings rate of households (net saving as percentage of net disposable income)	2,6	6,4	9,3	9,9	9,0	.	.	.
Private credit flow, consolidated (% of GDP)	12,1	7,5	4,3	5,6	3,0	.	.	.
Private sector debt, consolidated (% of GDP)	228,4	243,4	262,4	262,1	252,1	.	.	.
of which household debt, consolidated (% of GDP)	106,5	115,9	111,5	107,6	104,5	.	.	.
of which non-financial corporate debt, consolidated (% of GDP)	121,9	127,6	150,9	154,5	147,6	.	.	.
Gross non-performing debt (% of total debt instruments and total loans and advances) (2)	.	2,4	2,7	2,2	1,9	.	.	.
Corporations, net lending (+) or net borrowing (-) (% of GDP)	9,2	9,0	6,6	5,0	6,9	6,9	6,6	6,5
Corporations, gross operating surplus (% of GDP)	27,3	27,7	27,6	27,2	26,9	27,1	27,0	26,9
Households, net lending (+) or net borrowing (-) (% of GDP)	-2,4	1,3	4,1	2,9	2,3	1,8	1,5	1,3
Deflated house price index (y-o-y)	2,4	-3,7	-1,7	7,9	6,0	.	.	.
Residential investment (% of GDP)	6,0	4,8	3,2	4,1	4,4	.	.	.
Current account balance (% of GDP), balance of payments	7,7	7,2	8,2	8,1	10,5	10,1	9,5	9,1
Trade balance (% of GDP), balance of payments	8,5	8,4	9,6	10,2	10,7	.	.	.
Terms of trade of goods and services (y-o-y)	-0,1	-0,5	0,5	0,6	-0,3	0,1	0,0	0,0
Capital account balance (% of GDP)	-0,4	-0,3	-0,1	-0,2	-0,1	.	.	.
Net international investment position (% of GDP)	-5,5	10,3	42,9	62,7	59,8	.	.	.
NIIP excluding non-defaultable instruments (% of GDP) (1)	-64,3	-73,2	-54,8	-44,4	-29,3	.	.	.
IIP liabilities excluding non-defaultable instruments (% of GDP) (1)	326,3	387,0	414,3	426,8	379,8	.	.	.
Export performance vs. advanced countries (% change over 5 years)	6,9	0,8	-5,4	-2,7	-3,2	.	.	.
Export market share, goods and services (y-o-y)	.	.	-0,1	0,5	0,9	.	.	.
Net FDI flows (% of GDP)	4,6	5,8	6,5	14,4	2,0	.	.	.
General government balance (% of GDP)	-0,6	-3,7	-2,4	0,0	1,2	1,1	1,1	1,0
Structural budget balance (% of GDP)	.	.	-1,0	0,4	0,7	0,3	-0,2	0,0
General government gross debt (% of GDP)	47,1	59,7	66,7	61,9	57,0	53,2	49,6	46,9
Tax-to-GDP ratio (%) (3)	36,0	36,1	37,2	38,9	39,2	39,1	39,4	39,5
Tax rate for a single person earning the average wage (%)	32,5	32,1	31,6	30,5
Tax rate for a single person earning 50% of the average wage (%)	23,3	21,4	20,1	16,1

(1) NIIP excluding direct investment and portfolio equity shares

(2) domestic banking groups and stand-alone banks, EU and non-EU foreign-controlled subsidiaries and EU and non-EU foreign-controlled branches.

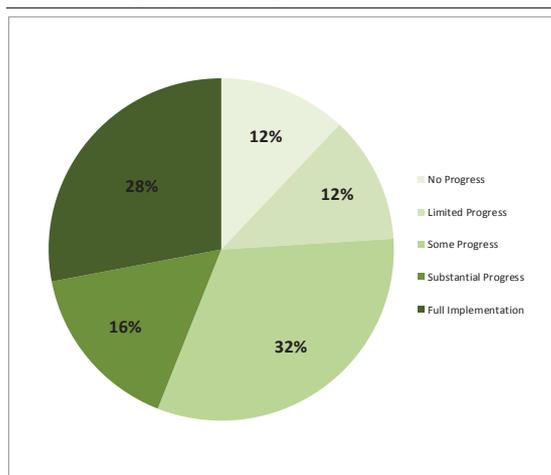
(3) the tax-to-GDP indicator includes imputed social contributions and hence differs from the tax-to-GDP indicator used in the section on taxation

Source: Eurostat and ECB as of 31-1-2019, where available; European Commission for forecast figures (Interim Winter forecast 2019 for real GDP and HICP, Autumn forecast 2018 otherwise)

2. PROGRESS WITH COUNTRY-SPECIFIC RECOMMENDATIONS

Since the start of the European Semester in 2011, 76 % of all country-specific recommendations addressed to the Netherlands have recorded at least ‘some progress’. 24% of these CSRs recorded “limited” or “no progress” (Graph 2.1). Substantial progress has been made over the past years in the area of public finances, this includes a reform of the long-term care system, and the protection of expenditure in growth-friendly areas; such as education, innovation and research. Substantial progress and full implementation have also been achieved several areas of the labour market and pensions, such as an increase in the statutory retirement age and getting older workers back into work.

Graph 2.1: Overall multi-annual implementation of 2011-2018 CSRs to date



* The overall assessment of the country-specific recommendations related to fiscal policy excludes compliance with the Stability and Growth Pact

** The multi-annual CSR assessment looks at implementation from the first year of adoption up until the 2019 Country Report.

Source: European Commission

Since the first round of country specific recommendations in 2011, the government has implemented significant structural reforms. In line with country specific recommendations adopted in 2011 and 2012, the Netherlands corrected its excessive deficit by 2013, while protecting public expenditures directly relevant for growth, such as spending on R&D, education and training. Following recommendations to improve the fiscal sustainability of public finances, the government implemented reforms in the field of long-term care and pensions. The statutory

retirement age was raised and linked it to life expectancy.

Housing market measures have helped to reduce the high household debt level, but challenges remain. At 105% of GDP and 211% of household disposable income in 2017, compared to 57% and 93% respectively for the euro area, household debt is high in the Netherlands. A high debt level makes households vulnerable to economic shocks. Household debt largely consists of mortgage debt, which is subsidised by mortgage interest deductibility in personal income taxes. Since 2012, recommendations have been issued on the need to reform the housing market, in particular to modify the favourable tax treatment of homeownership, refocus social housing and provide a more market-oriented price mechanism in the rental market. The Dutch government has acted upon those recommendations, in particular with a reduction of mortgage interest deductibility (including a requirement to repay mortgages within 30 years to qualify for mortgage interest deductibility). Policy measures have also been taken on the rental market, such as the the Housing Act (*Woningwet*) in 2015, but challenges in the housing market remain.

2018 assessment

On the recommendation to use fiscal and structural policies to raise public and private investment in research, development and innovation, while respecting the medium-term objective, the Netherlands has made substantial progress. The government is implementing a fiscal stimulus, which includes public investment, while respecting the medium-term objective. According to the Commission Autumn 2018 Economic Forecast, the structural budget balance is expected to decline from 0.7% of GDP in 2017 to -0.3% of GDP, pointing to a fiscal expansion of 1% of GDP in 2019 (see Section 1 and Section 4.1). The announced increase in R&D expenditure in 2019 has been incorporated into the budget law. The main fiscal tool to foster R&D is set to increase by 2020. However, a gap remains compared to the national R&D target of 2.5% of GDP, implying that more effort is needed.

Some progress has been made on reducing remaining housing market distortions. The

accelerated reduction in mortgage interest deductibility has been adopted and will be implemented between 2020 and 2023. However, as this fiscal subsidy will not be phased out completely and remains an important policy distortion, sustaining a debt bias for households and affecting the decision to buy or rent. The government also acknowledges the need to develop the private rental market, making it a genuine alternative for the owner occupied market. It has submitted a draft law to Parliament to increase supply in the mid-priced rental market (*Wet maatregelen middenhuur*) by easing requirements for housing corporations to build for this segment.

On CSR 2, limited progress has been made to address the problem of labour market segmentation. As a first step in a broader process of labour market regulation measures and ongoing reflections on how to best tackle distinct institutional drivers properly, a draft bill (*Wet Arbeidsmarkt in Balans*) was sent to Parliament in November 2018. It contains a package of measures to make it easier to hire permanent employees and to make flexible contracts less flexible. In addition, a Committee of independent experts was established to advise the government on the regulation of labour in the future bearing in mind the changing economy and society. However, on possible social security coverage for sickness and disability of the self-employed, no concrete measures have been adopted yet, but a plan of action to increase and strengthen well informed choices by self-employed is expected to be presented in the beginning of 2019. In addition, government plans to tackle bogus self-employment have been delayed. Further details on possible measures are only expected to be provided by spring 2019 in view of them becoming law by January 2021. On wage growth, which is gradually increasing, some progress has been made. Wages in collective agreements have increased on average by 2.1% in 2018, with public wages increasing at a faster rate (by 3% in the second half of 2018). In 2018 wage agreements were reached in various government sectors (e.g. a nominal increase of 7% in two years for all civil servants in central government), after zero-wage growth in the public sector during the fiscal consolidation era. Additional funding has been provided to increase the salaries of primary school teachers. In the 2019 budget, the government has taken measures that

support higher disposable real incomes of households, by a reduction of personal income taxes, which is only partly financed by higher indirect taxes. Despite a shared understanding among stakeholders of the need to reform, negotiations to reform the occupational pension fund system stalled at the end of 2018. Early February the government informed Parliament with a letter setting out the government initiatives to continue reforming the occupational pension system, leading to limited progress.

Overall, the Netherlands has made some progress in addressing the 2018 country-specific recommendations. Substantial progress has been made in general in addressing CSR 1, in particular, by implementing fiscal stimulus measures, including public investment and increasing R&D expenditure, while respecting the medium term objective. On CSR 2, limited progress has been made, leading to some progress overall.

Table 2.1: Assessment of 2018 CSR implementation

The Netherlands	Overall assessment of progress with 2018 CSRs : some progress
<p>CSR 1:</p> <p><i>While respecting the medium-term objective, use fiscal and structural policies to raise public and private investment in research, development and innovation. Take measures to reduce the debt bias for households and the remaining distortions in the housing market, in particular by supporting the development of the private rental sector. (MIP relevant)</i></p>	<p>The Netherlands has made substantial progress in addressing CSR 1:</p> <ul style="list-style-type: none"> • Substantial progress has been made by implementing a fiscal stimulus, including additional spending on R&D in 2019. • Some progress has been made on the housing market, although the mortgage interest deductibility will remain generous after being reduced to a maximum applicable rate of 37% by 2023.
<p>CSR 2:</p> <p><i>Reduce the incentives to use temporary contracts and self-employed without employees, while promoting adequate social protection for the self-employed, and tackle bogus self-employment. Create conditions to promote higher wage growth, respecting the role of the social partners. Ensure that the second pillar of pension system is more transparent, intergenerationally fairer and more resilient to shocks. (MIP relevant)</i></p>	<p>The Netherlands has made limited progress in addressing CSR 2:</p> <ul style="list-style-type: none"> • Limited progress has been made on labour market segmentation, with a draft bill to make the hiring of employees on a permanent basis easier and making flexible contracts less flexible, but no concrete measures on social protection coverage for the self-employed. In addition, a Committee of independent experts was set up to advise the government on the regulation of labour in the future bearing in mind the changing economy and society. • No progress has been made in tackling bogus self-employment. • Some progress. Negotiated wages increased by 2.1% in 2018, with public sector wages growing at a faster rate. In 2018 wage agreements were reached in various government sectors (e.g. a nominal increase of 7% in two years for all civil servants in central government). Additional funding has been made available for teachers' salaries. Fiscal measures included in the 2019 budget support disposable household income. • Limited progress has been made on the reform of the occupational pension system.

This does not include an assessment of compliance with the Stability and Growth Pact

Source: European Commission

Box 2.1: EU funds help overcome structural challenges and foster development in the Netherlands

The Netherlands continues to benefit from EU funds to support structural change. The financial allocation from European structural and investment funds, whose aim is to help the Netherlands face development challenges, amounts to up to EUR 1.9 billion in the current multiannual financial framework. This is equivalent to around 0.04% of GDP annually in 2014-2020. As of the end of 2018, EUR 1.47 billion had been allocated to specific projects. In addition, numerous Dutch research institutions, innovative firms and individual researchers have benefited from other EU funding instruments, in particular Horizon 2020 which has provided EUR 2.6 billion to boost innovation and research in the Netherlands. Furthermore, the Connecting Europe Facility has allocated EUR 439 million to specific projects on strategic transport networks.

EU funding has helped to address policy challenges, including those identified in the 2018 country specific recommendations. EU funds support investment in R&D in the Netherlands. The European structural and investment funds stimulate investments in innovation in the private sector, among others, by providing loans or grants to develop experimental new products and services, set-up living labs and encourage cooperation between small and medium-sized enterprises (SMEs) and research institutions. Over 400 enterprises have received support to cooperate with research institutions and over 1 500 SMEs to introduce new products to the market. Private investment that matches R&D support has exceeded EUR 300 million. The “Uniiq – Proof of Concept Fund for South-Holland” uses EU Funds to invest EUR 22 million in supporting SMEs to convert an idea into a concrete, marketable product or service. EU funds also contribute to a EUR 4 million investment to develop the “High tech X-Gen wind turbine”, which is compact, maintenance-friendly, silent, affordable and suitable for the built environment. Horizon 2020 has supported over 3 300 research projects covering a broad range of areas from health to energy transition. The European social fund also invests in coaching people at the margin of the labour market, which in turn helps improve overall labour market participation. Furthermore, it supports specific measures that improve the job prospects of older workers. 212 000 people have benefited from measures that foster social inclusion and 5 200 enterprises have received support to adapt the working environment to prolonged working lives.

EU funding helps to mobilise private investment. The European structural and investment funds mobilise additional private capital in the Netherlands, whereby private enterprises provide a high proportion of national co-financing. Around EUR 31.3 million of support from the European structural and investment funds has been allocated to financial instruments including loans, guarantees and equity, which is expected to leverage substantial private investment. In addition, financing allocated to projects under the European fund for strategic investments amounts to EUR 2.2 billion in the Netherlands and is set to trigger EUR 10 billion in investments (EIB, 2018). For infrastructure and innovation, 27 projects financed by the European Investment Bank and backed by the European fund for strategic investments have been approved to the tune of EUR 2 billion. For SMEs, 12 agreements with intermediary banks or funds have been approved for EUR 199 million in total financing, leading to improved access to finance for 7 364 SMEs and mid-caps.

3. SUMMARY OF THE MAIN FINDINGS FROM THE MIP IN-DEPTH REVIEW

The 2019 Alert Mechanism Report concluded that a new in-depth review should be undertaken for the Netherlands to assess the persistence or unwinding of the imbalances (European Commission, 2018b). In spring 2018, the Netherlands was identified as having macroeconomic imbalances (European Commission, 2018a). The imbalances identified related in particular to the high level of private debt and the large current account surplus. This chapter summarises the findings of the analyses in the context of the macro-economic imbalance procedure in-depth review that is contained in various sections in this report⁽⁴⁾.

3.1. IMBALANCES AND THEIR GRAVITY

The current account balance increased further in 2017 to a peak of 10.5% of GDP. The surplus is among the highest in the euro area. A persistently high trade surplus in goods is the main driver from a trade perspective. However, the recent increase was mainly driven by higher net primary income flows, reflecting higher net property income in the corporate sector. In 2017 the Netherlands contributed 0.7 pps to the euro area current account surplus, which is the second largest contribution after Germany (2.3 pps).

With the corporate sector making the largest contribution to net lending, all domestic sectors are in surplus. Both financial corporations and non-financial corporations are in surplus, with the latter being the main driver. Net lending by non-financial corporations amounted to 5.3% of GDP in 2017. Compared to the rest of the euro area, profitability and net property income are relatively high for Dutch firms, whereas investments are lower. The presence of multinational enterprises is likely to influence aggregate corporate sector net lending, although available macro-economic data do not allow for a straightforward identification of their statistical impact (see Section 4.2.6).

⁽⁴⁾ Analyses relevant for the in-depth review can be found in the following sections: fiscal policy (Section 4.1), private indebtedness, house price developments, developments in the field of pensions (Section 4.2); wage developments (Section 4.3); saving and investment imbalances (Section 4.4). Box 3 discusses the potential effects of a stylised set of structural reforms.

Households have been recording surpluses since the crisis, amounting to 2.3% in 2017. The dip in the housing market during the crisis led to a decrease in residential investment, while at the same time private consumption stagnated. Pension funds are also an important driver of household net lending. Pension contributions and investment income are much higher than payouts, with pension funds mainly investing in assets abroad (European Commission, 2018e). The government sector recorded a headline surplus of 1.2%, driven by past consolidation measures and increasing tax revenues.

Private debt continued to decline in 2017, but remains elevated. Private debt reached 252% of GDP in 2017, down from 262% the year before. Non-financial corporate debt accounted for 148% of GDP. However, 60% of this debt is owed by multinationals. As multinationals' debt largely consists of intra-group debt, the macro-economic risks appear to be limited.

Household debt largely consists of mortgage debt. The tax deductibility of mortgage interest payments incentivises households to take on mortgage debt. The household debt ratio declined to 105% of GDP in 2017 on the back of strong GDP growth, although nominal household debt is increasing again. However, growth is much slower than before the crisis, at around 1% annually in recent years. Growing mortgage debt can be linked to the strong recovery of the housing market. House prices accelerated in 2017, increasing by 6% in real terms therefore reaching the macro-economic imbalance procedure threshold. Overall, house price developments suggest a lagged supply response rather than overvaluation at national level (see Section 4.2).

Potential spill-overs to other EU countries are relatively moderate given the size of the Dutch economy. Table 3.1 shows that exports to the Netherlands constitute a relatively large share of GDP for Belgium (11%). From the Dutch perspective Germany is the most important export destination, followed by the United Kingdom. On the financial side, Belgium, Cyprus, Ireland, Luxembourg and Malta have a relatively high exposure to the Netherlands. Box 3.1 presents an

Table 3.1: Outward spill-over heatmap for the Netherlands

	EU partner																														
	AT	BE	BG	HR	CY	CZ	DK	EE	FI	FR	DE	EL	HU	IE	IT	LV	LT	LU	MT	NL	PL	PT	RO	SK	SI	ES	SE	UK			
Imports	1,0	10,8	1,8	1,2	1,2	3,4	1,6	1,6	2,0	1,0	2,6	0,7	2,3	5,1	0,8	2,3	2,2	6,6	7,5		2,3	1,4	1,2	2,2	1,4	1,0	1,7	1,6			
Imports (in value added)	1,1	4,7	1,0	0,8	1,3	1,5	1,4	1,4	1,2	1,2	2,5	0,8	1,5	2,6	1,1	1,1	1,3	1,6	4,9		1,2	0,9	0,8	1,0	0,9	0,8	1,3	1,1			
Financial liabilities	15,8	62,0	0,8	3,3	70,0	6,6	10,7	3,0	11,9	20,1	15,3	4,1	9,5	55,1	9,8	2,3	2,3	1391,1	19,9		8,2	10,1	0,4	2,0	4,6	19,7	13,0	22,8			
Financial assets	18,1	68,6	19,2	11,4	96,5	6,0	10,2	8,4	19,1	17,3	12,5	1,9	12,6	60,2	8,5	1,3	2,0	1236,0	44,1		2,7	9,7	11,3	9,3	1,6	18,4	13,4	28,4			
Liabilities (to banks)	1,1	4,7							0,7	4,1	1,8	0,1		0,6	0,9						0,6					1,2	2,1	3,7			
Bank claims	2,3				5,3				1,2			3,7	3,1	4,4	0,8			8,3	1,6		46,3	4,6			6,4	1,4	4,0		2,9	1,3	3,7

Note: cross-border figures for Netherlands, expressed as a % of the GDP of the partner country. The darkest shade of red corresponds to percentile 95 and the darkest shade of green to percentile 5. The percentiles were calculated for each variable based on the full available sample of bilateral exposures among EU countries. The blank spaces represent missing data. Data refer to: Imports - 2016, Imports (in value added) - 2014, Financial liabilities - 2015, Financial assets - 2015, Liabilities (to banks) - 2018-Q2, Bank Claims - 2018-Q2.

Source: UN, OECD, WIOD, BIS and Commission services

analysis of the effects of a stylised set of structural reforms on GDP, indicating small but positive spill-over effects to the rest of the euro area. The simulations presented therein follow the spirit of the 2019 Council Recommendations for the euro area.

3.2. EVOLUTION, PROSPECTS AND POLICY RESPONSES

The current account is set to fall gradually, but remains high. According to the European Commission's autumn forecast, the surplus is set to gradually decline from 10.5% in 2017 to 9.1% in 2020. Growth during this phase of the cycle is mainly driven by domestic demand, leading to higher imports and a gradual expected decline in the trade balance. Wage growth in recent years has been relatively subdued, but is expected to increase in line with the tightening labour market and increased wage demand by trade unions. Domestic demand is further supported by implementation of the fiscal stimulus package ensuing from the coalition agreement.

Private debt is expected to remain elevated. Solid nominal GDP growth is projected to support the trend of passive deleveraging. The acceleration of the maximum applicable rate of mortgage interest deductibility from 49% in 2019 to 37% in 2023 has been adopted by Parliament. While this decreases the debt bias for households, a substantial subsidy remains. The government has also launched initiatives to support the private rental segment, which would provide households with an alternative to taking on mortgage debt. However, with a share of 13% of the total housing stock in 2017 the private rental sector remains underdeveloped. For firms, a limitation on the

deductibility of interest payments has been introduced in 2019, which may reduce the incentive to take on debt for tax optimisation purposes.

3.3. OVERALL ASSESSMENT

The Netherlands has recorded persistently large current account surpluses. The net lending position is largely driven by non-financial corporations, with both relatively high savings and low investments. Corporate net lending is also likely influenced by the presence of large multinationals. Households also make a positive contribution, among other things due to high mandatory pension contributions. Household debt as a share of GDP is around 50 pps higher than the euro area average as tax incentives encourage households to take on mortgage debt. While household debt is coupled with substantial housing and pensions assets, these assets are often illiquid, leaving households vulnerable to shocks.

The external surplus and the high private debt level are both expected to unwind only gradually. The current account balance is set to moderate slowly on the back of domestic demand and rising wages, also supported by the fiscal stimulus package. However, the level is expected to remain well above the threshold. While household debt is decreasing as a share of GDP, it is increasing in nominal terms as the housing market has recovered. Despite measures taken, strong incentives to take on mortgage debt remain, also against the background of an underdeveloped private rental market.

Table 3.2: MIP assessment matrix(*)

	Gravity of the challenge	Evolution and prospects	Policy response
Imbalances (unsustainable trends, vulnerabilities and associated risks)			
Current account balance	<p>The three-year average of the current account stood at 8.3% in 2017, one of the highest in the euro area. The Netherlands has been running a current account surplus over the last three decades. This implies a persistent gap between savings and investment, with possible adverse consequences for the allocation of resources and therefore growth and welfare.</p> <p>A breakdown by sector points to non-financial corporations as the largest contributor, with a surplus of 5.3% in 2017 (see Section 4.2.6), although all domestic sectors are net savers. Compared to the euro area average, high corporate surplus is driven by a relatively high operating surplus and net property income, as well as low investment. The large presence of multinationals, possibly related to profit shifting and aggressive tax planning, might also have an upward effect on corporate savings.</p> <p>The household balance turned positive during the crisis and accounts for much of the surplus widening since. It reached 2.3% in 2017 and is likely boosted by relatively large mandatory pension savings.</p>	<p>After reaching a historic high of 10.5% of GDP in 2017, the current account surplus is likely to have remained broadly stable in 2018. The trade balance has remained persistently elevated in recent years on the back of buoyant global trade developments. The primary income balance is a source of short-term volatility and is largely responsible for the increase in 2017.</p> <p>Solid growth in domestic demand and increasing wages in this phase of the business cycle, coupled with the ongoing fiscal stimulus, is expected to support to a gradual reduction of the surplus. Nevertheless, a surplus position linked to structural reasons is expected to persist going forward, among others linked to the presence of multinationals.</p>	<p>The government is implementing a sizeable fiscal stimulus package, which should boost domestic demand and thereby contribute to external rebalancing. For 2019 increases are planned in the areas of education, research and innovation, security and infrastructure.</p> <p>Despite a shared understanding among stakeholders about the need to reform the pensions system, negotiations between the social partners collapsed in November 2018.</p> <p>The implementation of measures in the area of corporate income taxation and e.g. the <i>Anti Tax Avoidance Directive</i> might affect cross-border income flows as well as headquarter location decisions for multinationals, with potential implications for corporate net saving. However, it remains to be seen to what extent this would affect the current account.</p>

(Continued on the next page)

Table (continued)

Private debt	<p>The private debt level in the Netherlands continues to decline but is still very high, reaching 252% of GDP in 2017. Household debt declined to 105% of GDP in 2017 but still exceeds the euro area average by about 50 percentage points, driven by tax incentives and an underdeveloped rental market. While households have a high positive net asset position due to housing and pension wealth, they remain vulnerable to financial and other shocks since those assets are often illiquid. NFC debt has declined somewhat to 148% of GDP in 2017 from over 150% in previous years (see Section 4.2.3). The high level of NFC debt is largely driven by intra-group debt of multinationals.</p>	<p>Passive deleveraging is expected to continue on the back of robust real GDP growth and increasing inflation. Nominal household debt is increasing again after a temporary decline in 2013 and 2014. Despite a strong house price growth, the increase remained limited to 1% per year on average in 2015-2017. Moderate debt flows combined with the housing market recovery have strongly reduced the share of underwater mortgages (see Section 4.2.4). The pace of the increase is much slower than before the crisis when it grew by more than 8% per year over 2000-2008. Overall, private debt as a percentage of GDP is expected to gradually decline further, but remain elevated over the medium term.</p>	<p>The acceleration of the reduction in mortgage interest deductibility has been adopted by Parliament, reducing the maximum applicable rate to 37% by 2023. Nonetheless, a substantial subsidy on homeownership remains. Initiatives are being undertaken to improve the functioning of the private rental market, but the effect remains to be seen.</p> <p>In 2019, a limitation on the deductibility of interest payments ('earnings stripping') was introduced as part of the implementation of the <i>Anti-Tax Avoidance Directive</i>. This reduces the incentive to take on debt for tax optimisation purposes and could help reduce corporate debt.</p>
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Conclusions from IDR analysis

- The current account balance is one of the highest in the euro area, peaking at 10.5% in 2017. The persistently high gap between savings and investment has possible adverse consequences for the allocation of resources and therefore growth and welfare. Household debt, consisting mainly of mortgage debt, is high compared to the euro area. Tax incentives encourage households to take on mortgage debt, while the private rental market remains underdeveloped.
- A gradual reduction of the current account is expected in line with solid growth in domestic demand and increasing wages in this phase of the cycle. However, it is expected to remain high, also driven by structural features such as the pension system with implications for household consumption and disposable income and the presence of multinationals. Nominal household debt is increasing again as the housing market has recovered, but is outpaced by nominal GDP growth, resulting in passive deleveraging.
- The fiscal stimulus package should support domestic demand and contribute to external rebalancing, although it has been subject to implementation lags in 2018. The acceleration of the reduction in mortgage interest deductibility has been adopted and takes effect between 2020 and 2023, although a generous subsidy remains. Despite a shared understanding among stakeholders, there is no comprehensive agreement on pension reform.

(*)The first column summarises 'gravity' issues which aim at providing an order of magnitude of the level of imbalances. The second column reports findings concerning the 'evolution and prospects' of imbalances. The third column reports recent and planned relevant measures to address these. Findings are reported for each source of imbalance and adjustment issue. The final three paragraphs of the matrix summarise the overall challenges in terms of their gravity, developments and prospects, policy response.

Source: European Commission

Box 3.1: Spill-overs of structural reforms – the Netherlands

There is some debate about the size and direction of the cross-border spill-overs of structural reforms.

While the demand effect leads to higher export demand for foreign products, reforms usually improve a country's competitiveness too, which has the opposite effect. Whether the net effect is positive or negative depends on the relative strength of these two opposing channels and is likely to be reform-specific. In a simulation exercise using the European Commission's the QUEST model⁽¹⁾, the impact of a comprehensive set of reforms is quantified for all EU Member States in a harmonised way (Varga and in 't Veld, 2014). For a large set of structural indicators the benchmark is defined as the average of the three top performing countries. In the simulation these gaps are then closed by half for all indicators together, and for each country separately. An update of this exercise for the Netherlands, based on recent indicators (but does not capture the latest reform measures), is shown in the table below. As the magnitude of the reform 'shocks' simulated here are based on a harmonized benchmarking exercise, they do not exactly correspond to past European Semester country specific recommendations. However, they do illustrate the potential impact structural reforms can have.

An ambitious reform package would boost Dutch GDP, with small but positive spillovers to the rest of the euro area.

The simulated reforms cover all areas: product market regulation and entry, labour market participation, taxation structure and R&D subsidies. For the Netherlands the largest 'reform gaps' identified are in the tax wedge (as captured by the relative share of labour tax revenues compared to consumption tax revenues) and the benefit replacement rate, with smaller gaps identified in the field of labour force participation, in particular of low-skilled workers. Based on the simulation, this ambitious reform package would boost GDP by 5% after 10 years, and 7.75% after 20 years. The reforms raise competitiveness, leading to a real depreciation and boosting exports. The terms of trade fall by around 5% after 10 years, and there is a marginally positive effect on the trade balance as a share of GDP. The net spill-over to the rest of the euro area (EA) is small but positive.

Table 1:

Netherlands

Years	1	2	3	4	5	10	20
GDP	0.46	1.09	1.7	2.31	2.9	5.08	7.74
REER	0.24	0.76	1.35	1.97	2.58	4.47	6.8
Trade balance (% GDP)	-0.17	-0.24	-0.14	0.01	0.18	0.11	-0.07
Rest of EA GDP	0.02	0.02	0.02	0.01	0.01	0.02	0.07
EA GDP	0.04	0.08	0.11	0.14	0.17	0.31	0.5

Note: Increase in REER is a depreciation. GDP and REER are expressed in percent deviation. Trade balance (% GDP) is in percentage point deviation from baseline.

⁽¹⁾ More information on the QUEST model is available at https://ec.europa.eu/info/business-economy-euro/economic-and-fiscal-policy-coordination/economic-research/macroeconomic-models_en

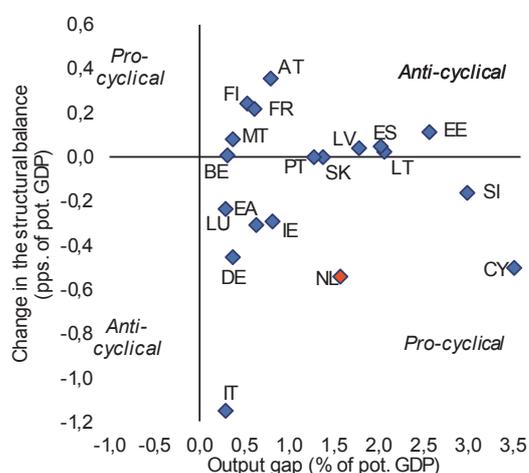
4. REFORM PRIORITIES

4.1. PUBLIC FINANCES AND TAXATION

4.1.1. EXPENDITURE DEVELOPMENTS* (5)

Following a period of fiscal consolidation, the government is implementing a sizeable fiscal stimulus package. The expansionary fiscal policy stance is illustrated by a 1 percentage point of GDP decline in the structural budget balance in two years, from a surplus of 0.7% of GDP in 2017 to a deficit of 0.3% in 2019 (Graph 1.8) (6). In its 2019 Budgetary Plan, the government highlights increased spending on education, research and innovation (EUR 1.9 billion, 0.25% of GDP), defence and security (EUR 1.7 billion, 0.2% of GDP) and infrastructure (EUR 1 billion, 0.1% of GDP, amongst others via an increase in the infrastructure fund). Public investment, which fell from a peak of 4.3% of GDP in 2009 to 3.4% of GDP in 2017, is expected to stabilise at slightly above 3.5% of GDP in 2018 and 2019.

Graph 4.1.1: Change in the structural balance vs. output gap, 2019, euro area Member States



(1) Greece is outside the chart area with output gap of -3.8 and change in the structural balance of -1.7

Source: European Commission Autumn 2018 Economic Forecast

While the fiscal stance is pro-cyclical, the expansionary budget is partly used to ease supply-side constraints. A pro-cyclical fiscal stance (Graph 4.1.1) risks fuelling prices while

only having a limited impact on real economic growth due to supply-side constraints. However, price and wage developments have been relatively muted until now. Moreover, focusing on supply-side investment, such as education, R&D and innovation is expected to have beneficial effects on potential growth in the medium run.

4.1.2. TAXATION*

The 2019 income tax package contains a shift away from labour and income taxes to other sources of revenue less detrimental to growth. The Netherlands has one of the highest tax and non-tax compulsory payment wedges on labour in the EU (European Commission, 2018e). The government is reducing the tax burden on labour by lowering personal income tax by 0.7% of GDP, while increasing indirect taxation (on consumption) by 0.4% of GDP, largely via an increase in the reduced Value Added Tax rate from 6% to 9% as of 2019. A lower tax wedge and a shift from direct to indirect taxes is generally seen as beneficial for economic growth as the tax burden is shifted from the active to the inactive population. The number of tax brackets has been reduced from four to two, with a base rate of 38% in the lower bracket and a top rate of 51.75% (for incomes above EUR 68 507) as from 2019. Both rates will be reduced to 37% and 49.5% from 2021 onwards. Tax deductible expenses will gradually only be deductible against the lower rate, leading to lower tax expenditures. In addition, the labour tax credit (*arbeidskorting*) will be increased to incentivise people to work. To strengthen the fiscal investment climate for companies, the corporate tax rate will be gradually reduced from 25% to 20.5%. For taxable profit up to EUR 200 000, the rate will be reduced from 20% to 15%.

The high level of dividend, royalty and interest payments made via the Netherlands (European Commission, 2018e) may be an indication that the country's tax rules are used by companies that engage in aggressive tax planning. The current absence of withholding taxes on royalties and interest payments (which may lead to those payments escaping tax altogether, if they are also

(5) An asterisk (*) indicates that the analysis in the section contributes to the in-depth review under the MIP (see Section 3 for an overall summary of main findings)

(6) European Commission Autumn 2018 Economic Forecast.

not subject to tax in the recipient jurisdiction) may have facilitated aggressive tax planning. A study commissioned by the Dutch Ministry of Finance on tax avoidance through Dutch letterbox companies⁽⁷⁾ concludes that the annual income flows (dividends, interest, royalties) flowing through these companies amounts to EUR 199 billion (27% of GDP), of which EUR 177 billion (24% of GDP) mainly flows to other Member States and the USA. The remainder, EUR 22 billion (3% of GDP), flows to low tax jurisdictions. This part should be affected by the announced introduction of withholding tax on interest and royalties⁽⁸⁾, which should be monitored closely. For the income flows to other Member States and the USA, the Dutch government generally assumes that normal taxation will apply in these countries and that any tax avoidance could be addressed by exchanging information and anti-abuse measures.

The Netherlands is acting to address aggressive tax planning by implementing European and internationally agreed initiatives. The interest deduction restriction of the Anti-Tax Avoidance Directive has been introduced in the shape of an earnings stripping measure, implying that net interest expenses are only deductible up to 30% of the gross operating profit⁽⁹⁾. The Netherlands introduced black list with 21 countries that the Netherlands considers low-tax jurisdictions, which is used for the new controlled foreign company measure, the ruling rules and the future withholding taxes on royalties and interests. At the same time, two existing targeted interest deduction restrictions have been abolished. The government has also announced that as of 1 July 2019 certainty in advance (rulings) will only be granted to multinationals that have a sufficient economic nexus in the Netherlands. A ruling will not be granted if it involves a transaction with an entity residing in a low-tax jurisdiction or if the purpose of the transactions is solely to reduce or avoid paying Dutch or foreign taxes. This may limit the attractiveness for letterbox companies. In 2018, the

⁽⁷⁾ Report by Stichting Economisch Onderzoek (SEO) *'Balansen, inkomsten en uitgaven van BFI's*, Amsterdam October 2018.

⁽⁸⁾ The government intends to issue a proposal to introduce withholding taxes on interest and royalty payments to low tax jurisdictions and in abusive situations in 2019 to become effective as of 2021.

⁽⁹⁾ The Netherlands is not providing for a group escape and lowering the threshold to EUR 1 million.

government introduced a withholding tax on profit distributions by cooperatives in abusive situations, its effects remain to be assessed. The government has also proposed to adopt almost all provisions of the Multilateral Convention to Implement Tax Treaty Related Measures to Prevent Base Erosion and Profit Shifting, including a principal purpose test to counter treaty shopping. These should become effective as of 2020 and should among others prevent multinationals from benefiting from the Netherlands' tax treaty network without having substantial presence in the Netherlands. However, application of the provisions of the multilateral instrument will depend on the choices made by the relevant treaty partners. The effectiveness of all these measures in addressing aggressive tax planning will need to be monitored⁽¹⁰⁾.

4.1.3. DEBT SUSTAINABILITY ANALYSIS AND FISCAL RISKS

According to the 2018 Fiscal Sustainability Report, the Netherlands faces medium sustainability risks in the long run. The report analyses risks in the short-, medium- and long term⁽¹¹⁾. The early detection indicator of fiscal stress, the S0 indicator, signals low risks in the short term⁽¹²⁾. The medium-term S1 indicator, which measures the effort required to achieve a debt level of 60% of GDP by 2033⁽¹³⁾, is negative (at -1.7% of GDP). This implies low fiscal sustainability risks, which is mainly explained by a debt level below the reference value. The debt sustainability analysis also points to low

⁽¹⁰⁾ The government has commissioned an external research bureau to carry out a zero measurement on money flows. This research should provide for a better insight into the effects of the implementation of various measures aimed at addressing aggressive tax planning. The result of this zero measurement on money flows, special financial institutions and balance sheet amounts has been reported to the Dutch parliament. Developments in these figures will be reported yearly.

⁽¹¹⁾ For details, see the European Commission 2018 Fiscal Sustainability Report (European Commission, 2019) and annex B.

⁽¹²⁾ The S0 indicator is a composite indicator to evaluate risk of fiscal distress in the short term, based on a set of 25 indicators.

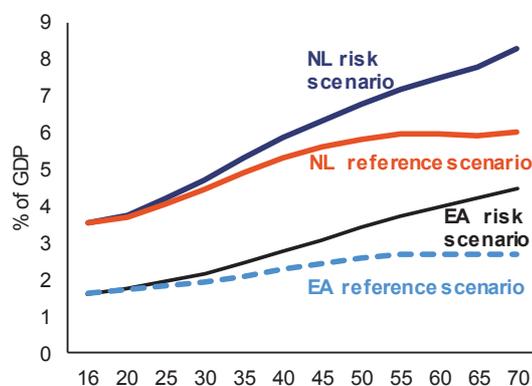
⁽¹³⁾ The medium-term sustainability indicator S1 shows the additional required adjustment, in terms of improvement in the government structural primary balance, over five post-forecast years to reach a 60% public debt-to-GDP ratio by 2033, including financing for future additional expenditure arising from population ageing.

sustainability risks. However, the analysis of the fiscal sustainability gap indicator (S2) points to medium risk in the long term⁽¹⁴⁾. This is mainly due to the projected increase in ageing costs. While the Netherlands scores well in terms of fiscal sustainability of the public pension system and other expenditures related to ageing, public spending in the field of health-care and in particular long-term care stand out. In the baseline reference scenario, public spending on long-term care is expected to grow from 3.5% of GDP in 2016 to 6% of GDP in 2070, with both having a much higher initial level and greater increase than on average in the euro area (Graph 4.1.2). In a risk scenario, which assumes higher age-related spending due to non-demographic costs, such as long-term care costs in excess of costs expected from purely demographic factors due to technological changes (e.g. development of new drugs) the increases are even greater. This represents a substantial liability for today's government finances.

The 2015 long-term care reform may lead to a more cost-effective system, but its effect on fiscal sustainability is partly off-set by additional spending to improve the quality of nursing homes. In 2015, the government moved the long-term care system to the municipal domain to improve its efficiency and support fiscal sustainability. This was accompanied by a budget cut and a tightening of the eligibility criteria. In parallel, the authorities promote independent living, where older people are encouraged to live at home for as long as possible before turning to more expensive nursing homes. This reform is expected to reduce the growth in long-term care expenditure by 0.2% per year in the period 2018-2021 (Mot et al., 2016). However, fiscal sustainability concerns remain given that additional annual expenditure of EUR 2.1 billion (0.3% of GDP) is needed to meet the requirements of the quality framework for nursing homes as of 2021.

⁽¹⁴⁾ The long-term sustainability indicator S2 shows the upfront adjustment to the current primary balance (in structural terms) required in order to stabilise the debt-to-GDP ratio over the infinite horizon, including financing for any additional expenditure arising from an ageing population.

Graph 4.1.2: Long term care expenditure



Source: Ageing Report 2018, Ageing Working Group scenario's

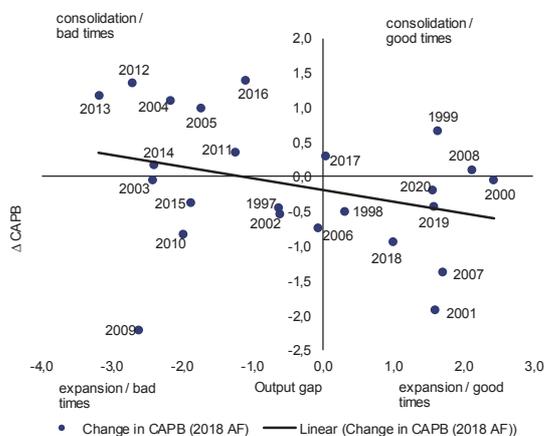
4.1.4. FISCAL FRAMEWORK AND QUALITY OF PUBLIC FINANCES

The Netherlands has a well-established fiscal framework. Since the mid-nineties, the Netherlands has been conducting a trend-based fiscal policy with a strong multi-annual focus. The main characteristics of this multi-annual trend-based fiscal framework include: (i) the use of independently derived macroeconomic assumptions; (ii) the use of inflation-adjusted expenditure ceilings for the government's entire term; (iii) the use of automatic stabilisers on the revenue side, and (iv) a well-defined budgetary process for decision-making and clear distribution of responsibilities, including the tasks of independent fiscal institutions, the Bureau for Economic Policy Analysis and the Advisory Division of the Council of State. The Bureau for Economic Policy Analysis carries out independent macro-economic and fiscal forecasts while the Advisory Division of the Council of State, as fiscal council, is tasked with monitoring compliance with numerical fiscal rules and a *normative* assessment of government finances. The commitment to comply with EU fiscal rules is embedded in the legal framework of the Netherlands, in particular via the law on sustainable public finances (*Wet Houdbare Overheidsfinancien*).

Automatic fiscal stabilisation has been strengthened. The fiscal framework uses strict expenditure ceilings, with automatic stabilisation mostly taking place via the revenue side of the budget. Changing macro-economic conditions are

therefore absorbed by the headline budget balance via revenues. However, this framework does not prevent pro-cyclical decision-making when multi-annual fiscal plans are set at the start of a new government term, or when fiscal thresholds are breached during a government term. In fact, fiscal consolidation (operationalised by a positive change in the cyclically-adjusted primary budget balance) took place mostly in years with a negative output gap, and fiscal expansions in economic good times, with a positive output gap (Graph 4.1.3). In 2018, the government slightly improved the automatic stabilisation function of the budget by removing the non-discretionary, cyclical changes in expenditure on unemployment and social assistance from the expenditure ceiling. This allows for stronger automatic stabilisation via the expenditure side of the budget. As short-term expenditure multipliers tend to be larger than tax multipliers (thanks to smaller savings leakages, see also Coenen et al, 2012), the fiscal stabilisation function of the budget is expected to improve.

Graph 4.1.3: Fiscal policy stance, 1997-2020

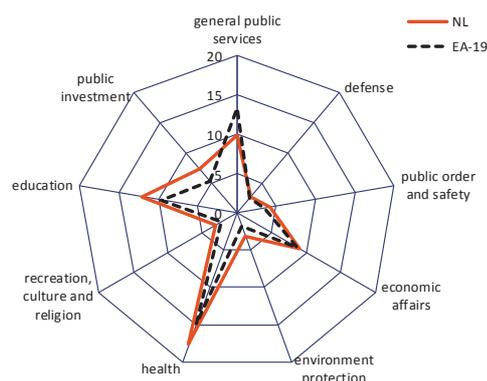


Source: European Commission 2018

The government expenditure mix is relatively growth-friendly. Government expenditure as the ratio to GDP has fallen, due to the acceleration of nominal GDP growth in recent years. Graph 4.1.4 assesses the government's expenditure mix by function compared to the euro area average, with expenditure categories expressed as a share of total government expenditure. This shows relatively high government spending on growth friendly

areas such as education and public investment⁽¹⁵⁾ and comparatively low share of expenditure on social protection and general public services, compared to other euro area countries.

Graph 4.1.4: Government expenditure by function (% of total government expenditure)



Selection of indicators; not represented is the share of expenditure for social protection (37.3% in NL, 42.1% in the EA), as this would affect the readability of the graph.

Source: Eurostat, Classification of the Functions of Government (2016)

⁽¹⁵⁾ The data used in the graph slightly differ from national accounts data. According to 2017 national accounts, public investment is 3.4% of GDP and 8.2% of total government expenditure in the Netherlands, compared to 2.6% and 5.5% respectively in the euro area.

4.2. FINANCIAL SECTOR

4.2.1. BANKING SECTOR

While there appear to be no imminent risks to financial stability, vulnerabilities in the banking sector remain. Dutch financial institutions meet regulatory requirements and their profitability improved last year supported by economic growth. Their asset quality is sound and the level of non-performing loans is one of the lowest in the EU. However, banks still largely rely on market funding — albeit with long maturity periods in most cases — and their leverage ratio stands below the EU average.

Concentration in the banking sector may give rise to competition issues. With total assets of 312% of GDP at in September 2018, the banking sector remains very large compared with the EU average of 274%. The market is characterised by a high concentration. This may affect competition in certain markets, such as credit to non-financial corporations, where banks are hardly challenged by other lenders. For instance in the small and medium-sized enterprises' loans market, the three largest Dutch banks provide circa 85% of total bank financing. On the other hand, the mortgage credit market has become more competitive in the last few years thanks to the emergence of new players such as insurance companies and pension funds. They currently account for around 30% of new mortgage production.

Dutch banks maintain sound financial resilience, but their reliance on market funding and leverage remain high. Their financial stability indicators, namely the solvency position and capital ratios, largely exceed the regulatory requirements. At sector level, the capital adequacy ratio stood at 22.1% and the Tier 1 ratio, which compares a bank's equity capital with its total risk-weighted assets, at 18.4% in Q2-2018 (see Table 4.2.1). Given the strong capital base and modest lending growth, the counter-cyclical buffer has been kept at 0% by the Dutch central bank (De Nederlandsche Bank, 2018a). At the same time, it maintained the 1% to 3% additional buffers imposed on the five systemic banks, which are gradually being increased between 2016-2019. Regardless of the sound capital levels, the banking sector continues to be highly leveraged with a fully phased-in leverage ratio (capital/total assets) of 4.4% in September 2018, which is one of the lowest in the euro area. Furthermore, with

deposits ⁽¹⁶⁾ accounting for a modest 49% of total funding (against 58% for the euro area average), the sector continues to rely heavily on market financing. Even though its maturity has been largely extended, thereby limiting liquidity risk, the cost of market funding could grow sharply in a stress situation.

Table 4.2.1: **Financial soundness indicators, all banks in the Netherlands**

(%)	2010	2011	2012	2013	2014	2015	2016	2017	2018Q2
Non-performing debt	2,3	2,4	2,7	2,7	3,0	2,4	2,2	1,9	1,8
Coverage ratio	36,5	40,4	37,6	41,0	37,8	37,8	35,6	29,8	27,2
Loan to deposit ratio*	120,3	119,5	119,2	117,8	114,1	113,4	110,1	107,8	105,5
Tier 1 ratio	11,8	11,8	12,3	12,9	15,4	16,6	17,9	18,6	18,4
Capital adequacy ratio	14,1	13,7	14,5	15,3	18,4	20,6	22,4	22,1	22,1
Return on equity**	7,5	6,0	4,1	5,0	3,3	7,0	7,3	8,8	-
Return on assets**	0,3	0,3	0,2	0,2	0,2	0,4	0,4	0,5	-

*ECB aggregated balance sheet: loans excl to gov and MFI / deposits excl from gov and MFI

**For comparability only annual values are presented

Source: ECB Central Bank Data

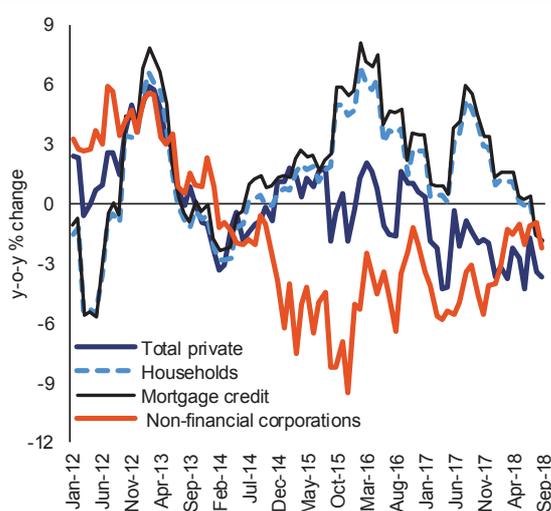
The profitability of Dutch banks has been rising, mirroring economic growth. The sector's return on equity reached almost 9% in 2017 compared to the EU average of 6%. However, given the continued squeeze on interest margins, the banks' profits increasingly rely on non-interest income sources and further cost-cutting measures. However, there is room for cost-to-income and efficiency improvement in the sector, among others by modernising IT systems and introducing digital solutions by smaller institutions, which would allow them to compete better against new fintech players.

Bank credit growth turned negative in 2018 in both household and corporate segments. In Q3-2018, the stock of household credit in the banking sector fell by around 2% year-on-year. It consisted of a 2% decrease in mortgage loans and a 5% decrease in consumer loans (Graph 4.2.1). The reduction was not only due to subdued new lending by banks, but also as a result of the large volume of redemptions and repayments made by consumers. In addition, the role of non-banks such as pension funds and insurers in the production of mortgages has been growing, as reflected in their

⁽¹⁶⁾ Deposit holdings at banks have been steadily growing since 2010. This positively impacted on the loan-to-deposit ratio standing below 107% in Q1 2018, coming from 120% in 2010.

expanding market share. It also appears that a high number of new residential investments have been financed from investors' equity or households' savings. Non-financial corporate credit growth also remained negative, at around 2% year-on-year in Q3-2018, partly due to a high volume of repayments. Furthermore, large corporates have been increasingly using corporate bonds as a source of finance to replace or complement bank credit. The issuance of corporate bonds by Dutch companies has grown by roughly 50% since 2014.

Graph 4.2.1: Credit growth



Source: European Central Bank

The funds of the Deposit Guarantee Fund, an independent legal entity, have been moved from a segregated account in the Dutch central bank to an account with the Treasury. The Dutch Deposit Guarantee Fund is being built up gradually and has so far accumulated around EUR 1 billion, with an additional EUR 4 billion to be paid by banks by 2024. Until 2018, these funds were kept in a ring-fenced account of the Dutch central bank with the intention to be invested in a diversified portfolio of low-risk assets in line with the Deposit Guarantee Scheme Directive. As of November 2018, the resources of the fund have been transferred to be kept in an account with the Dutch Treasury, instead of the central bank. The Treasury will now be able to use the funds for the financing of government expenditures. Once the fund needs to make payouts to depositors or finance interventions in accordance with its legal mandate, the Treasury will have to make the funds available. The transfer of the account of the fund to the

Treasury reduces the gross debt level, but has no effect on the public deficit as its contributions were already classified under the government sector based on the EUROSTAT decision from 2016. Nevertheless, if in case of a crisis the Dutch Treasury suddenly needs to raise market financing in order for the fund to make payouts, gross debt will increase, which may have an impact on financial stability.

The recovery and resolution framework for insurance companies (the Insurers Recovery and Resolution Act) was adopted, which should contribute to financial stability. Following the lessons learned during the crisis and given the vulnerabilities of the insurance sector — brought out by low interest rates and shrinking life insurance industry — the government proposed a legal framework for the recovery and orderly resolution of insurers. The legislation draws on the *Bank Recovery and Resolution Directive*. It mandates medium-sized and large insurance companies to set up crisis plans that outline measures to be taken when they are at risk of failing. Smaller players whose default would not have a major impact on society, financial markets or the economy would not be obliged to draw up crisis plans. In addition, the Dutch central bank as resolution authority would have to draw up resolution plans for the systemic insurance firms and would have the power to intervene in critical situations. Thanks to the new legislation, policy holders should be better protected and insurance companies more resilient, resulting in greater financial stability. The legislation was adopted on 27 November 2018 and is in force from 1 January 2019.

4.2.2. ACCESS TO FINANCE

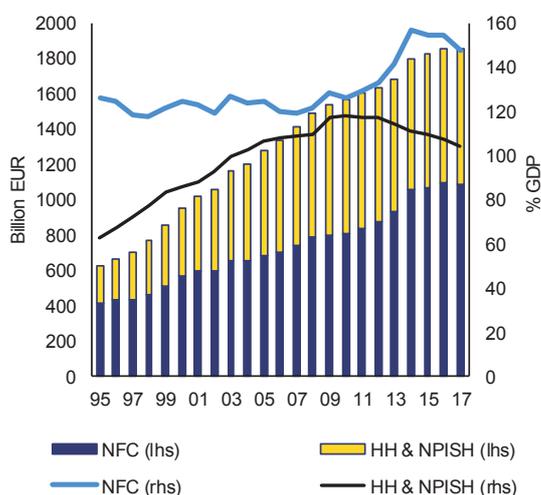
Overall, the Netherlands maintains a score in line with the EU average on access to finance, but the mark-up on smaller loans remains high. Demand for credit is rising, with the success rate slightly improving. The situation worsened somewhat at the end of 2017 compared to other euro area countries (ECB, 2018 and European Commission, 2018c). Small and medium-sized enterprises, which take out smaller loans on average, pay a relatively large mark-up: the cost of borrowing for small loans relative to large loans is the third highest in the EU, despite falling

marginally since 2016 (European Commission, 2018c). While remaining small, equity funding and business angel funding are relatively important and fast growing (OECDa, 2018). Various initiatives have been launched to support small and medium-sized enterprises financing. These include venture capital, increasing small and medium-sized enterprises credit supply or the emission of bonds via the stock exchange and the set-up of a dedicated investment institution (see Box 4.4.2).

4.2.3. PRIVATE DEBT*

The private debt level in the Netherlands continues to decline, but remains very high. The private debt ratio reached 252% of GDP in 2017, down from 262% in 2016, with both households and non-financial corporations contributing to the decline. Household debt accounted for 105% of GDP versus 148% for non-financial corporations. This is well above Commission calculations of prudential thresholds, which stood at 65% and 93% for households and non-financial corporations respectively in 2017⁽¹⁷⁾.

Graph 4.2.2: Private debt



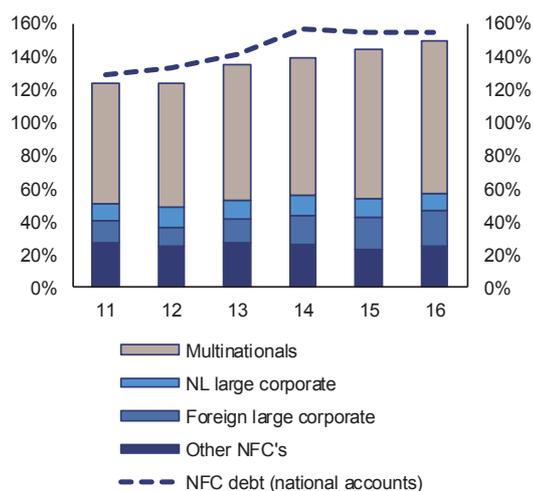
Source: Statistics Netherlands

High corporate debt is mainly driven by intra-group debt of multinationals. Until the crisis, non-financial corporate debt was relatively stable

⁽¹⁷⁾ Prudential thresholds represent the debt threshold beyond which the probability of a banking crisis is high, minimising the probability of missed crises and that of false alerts. See also European Commission (2017c).

at around 120% of GDP, but increased substantially during the crisis to over 150%, followed by a gradual decline. The high level of corporate debt and the recent increase are driven by multinational enterprises. Debt of other (non-multinational) firms has been broadly stable in recent years and does not exceed the prudential corporate debt threshold. As multinationals' debt largely consists of intra-group debt, it does not pose an immediate macro-economic risk (European Commission, 2018e). In 2019, a limitation on the deductibility of interest payments ('earnings stripping') was introduced as part of the implementation of the Anti-Tax Avoidance Directive. This reduces the incentive to take on debt for tax optimisation purposes and could help reduce corporate debt.

Graph 4.2.3: Disaggregation of NFC debt



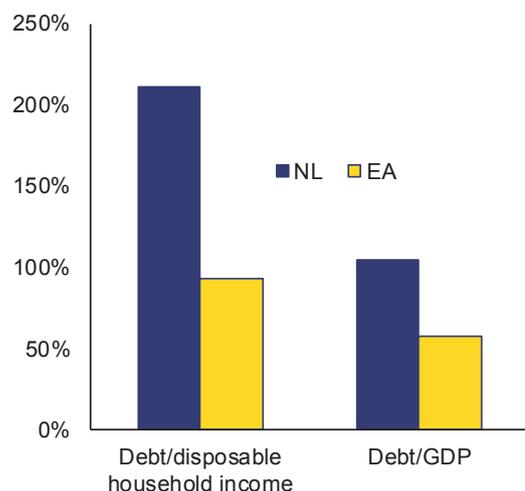
The split by corporation type is based on corporate financial accounts data (Financiën grote ondernemingen and Financiën alle ondernemingen), which do not fully match national accounts data.

Source: Statistics Netherlands.

Household debt declined to 105% of GDP in 2017 as nominal debt developments were outpaced by GDP growth. However, it remained well above prudential thresholds. After declining temporarily in 2013 and 2014, nominal household debt is increasing again. However, at 1% per year on average over 2015-2017 it is increasing at a much slower pace than before the crisis, when it grew by more than 8% per year over 2000-2008. Mortgage debt is the main driver of household debt, accounting for 86% of total household debt in 2017. Part of the relatively subdued growth is

explained by voluntary mortgage repayments, which are financially attractive given the low interest rates on deposits. According to the Dutch central bank, these have amounted to EUR 75 billion since 2013 (De Nederlandsche Bank, 2018c). Solid real GDP growth and higher inflation are expected to support further passive deleveraging (also see Section 1). However, household debt over GDP was still about 50 percentage points higher than the euro area average in 2017. As a share of household income, the difference is even greater as household income constitutes a relatively low share of GDP in the Netherlands (Graph 4.2.4).

Graph 4.2.4: Household debt (2017, % of GDP)



Source: European Commission

The share of underwater mortgages has decreased substantially. According to loan level data by the Dutch central bank, 6% of mortgages exceeded the value of the underlying property (“underwater mortgages”) in Q2-2018. This is a substantial decrease from 27% 3 years earlier, supported by a strong increase in house prices (see Section 4.2.4). The average loan-to-value ratio for new mortgages of those under 35, who are often first-time buyers, decreased from 96% to 90% over the same period. This can be related to stricter loan-to-value- and loan-to-income ratio’s for mortgages. These developments reduce the risk of remaining indebtedness when people sell their homes.

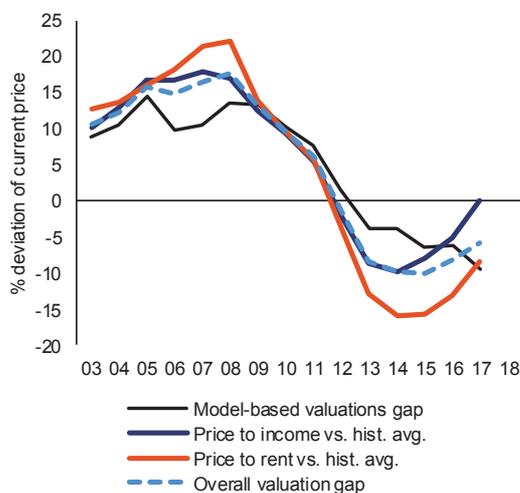
4.2.4. HOUSING MARKET*

The housing market moved from recovery into a phase of buoyancy. Nominal house prices increased by 9% in 2018, up from annual growth of 7.6% in 2017. Nationwide, house prices exceeded their 2008 nominal pre-crisis level in mid-2018, although they are still well below the pre-crisis level in real terms. Real house prices increased by 6% in 2017, thereby reaching the MIP scoreboard threshold, and accelerated further in 2018.

Price-to-income and price-to-rent ratios were broadly in line with historical averages in 2017.

A model-based assessment also does not suggest that house prices exceeded their fundamental value (Graph 4.2.5). These indicators suggest that house prices were overvalued before the crisis, followed by a strong correction during the crisis, and recovery in recent years. Overall, current housing market developments point to a lagging supply response rather than overvaluation. However, a continuation of price increases at this rapid rate could lead to a risk of overvaluation in the future. The ratio of average prices to income has already returned to a level that is higher than in most euro area economies.

Graph 4.2.5: House price valuation indicators



The overall valuation gap is estimated as an average of the price/income, price/rent and fundamental model valuation gaps. Long-term values for the price/income and price/rent ratios are computed over 1995-2016. For the model based valuation gaps, a Vector Error Correction Model has been estimated for a panel of 21 EU countries, using a system of five fundamental variables; the relative house price, total population, real housing investment, real disposable income per capita and real long-term interest rate.

Source: European Commission

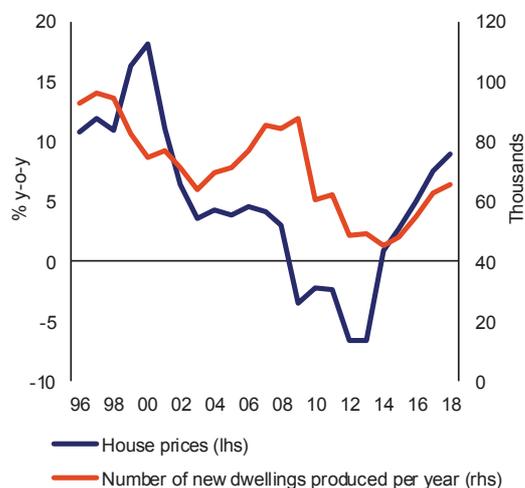
Behind national trends, substantial regional differences exist. The housing market recovery was led by the larger cities, where house prices have increased at a faster pace than the rest of the country. In the four largest cities, house prices increased by 11% to 13% per year on average in 2016-2018. In most provinces outside the *Randstad* region, house prices increased at a more modest rate of around 5-7% in the same period. This difference may be explained by the attractiveness of urban areas (PBL, 2015) and more restrictive supply constraints in those areas. A recent study by the Dutch central bank suggests that house prices react stronger to income increases in municipalities where a larger share of available land has already been developed (Öztürk et al., 2018).

While demographic trends and economic developments increase demand for housing, available housing supply has decreased substantially. While population growth was just below 0.5% per year over the last 10 years, the number of households increased at a substantially faster rate due to the increasing share of one-person households. Nominal disposable income per household, after stagnating during the crisis,

has been increasing again and was almost 8% higher in 2017 than in 2008. Financing costs have started to pick-up recently, but are still below pre-2008 levels due to low mortgage interest rates (De Nederlandsche Bank, 2018d). However, on the supply side of the market, the number of existing dwellings for sale has decreased by more than 70% between 2012 and 2018⁽¹⁸⁾. The number of transactions peaked at a historic high of 242 000 in 2017, but decreased by almost 10% in 2018. The slowdown is most pronounced in the larger cities, where supply shortages are largest, but is occurring in all provinces.

Building more homes could help ease current housing market pressures. Housing supply in the Netherlands has historically been relatively inelastic, although it has increased since the crisis according to a recent Centraal Plan Bureau--study (Michielsen et al., 2018). The development of new dwellings has declined drastically since 2009 and started to recover in 2015 (Graph 4.2.6). The government has stated an annual construction target of 75 000 dwellings until 2025 to address housing shortages and meet demographic trends (Ministry of the Interior, 2018a). In 2018 66 000 new dwellings were built and the number of new building permits, which reached 70 000 in 2017, remained roughly stable at that level.

⁽¹⁸⁾ Based on data by NVM, an organisation of real estate agents that covers around 75% of the Dutch housing market.

Graph 4.2.6: **House prices and development of new dwellings**

Source: Statistics Netherlands

4.2.5. PENSIONS*

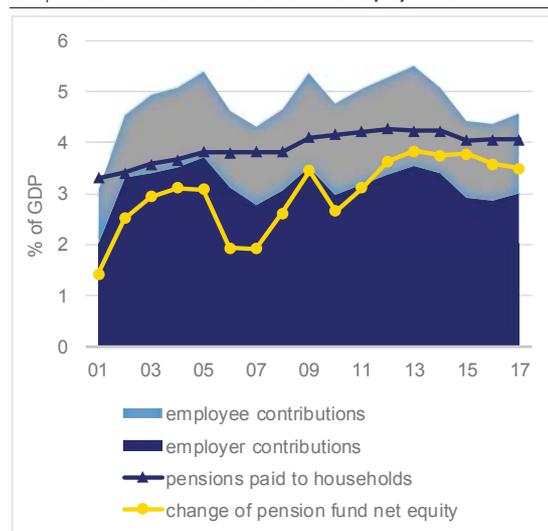
The three-pillar pension system scores well on pension adequacy and fiscal sustainability.

The first pillar is the pay-as-you-go state pension, funded by a specific contribution and general income taxes. To ensure its fiscal sustainability, the statutory retirement age has been linked to life expectancy by a fixed formula embedded in law. The second pillar is typically organised at industry or company level and is capital-funded. Participation is compulsory, and pension contributions and revenues depend on employment history. While some large industries have moved to defined contribution pension schemes, 90% of all participants still fall under defined benefit pension schemes. The third pillar is formed by individual pension products and only consists of tax relief on contributions paid on such products. The first and second pillar aim to provide a replacement rate of 75% of the average lifetime gross salary when people retire.

Pension funds are important economic agents in the economy that affect household saving and investment behaviour.

Annual actual contributions by employers and employees came to more than EUR 33 billion in 2017, fluctuating at around 5% of GDP. Pension pay-outs were just below EUR 30 billion in 2017, amounting to around circa 4% of GDP on average over the last

10 years (Graph 4.2.7). Compulsory savings via pension funds contribute to the domestic savings surplus and the current account balance. If the change in net equity of pension funds⁽¹⁹⁾ is taken as an approximation, this partial effect could be as high as 3% of GDP.

Graph 4.2.7: **Pension contributions and payments**

Source: European Commission (based on National Accounts)

The development of pension contributions and benefits amplifies the economic cycle.

Expansionary monetary policy affects funding ratios as lower interest rates increase liabilities. This leads to lower indexation of pensions, higher contributions and, as a last resort, lower benefits. This dampens private consumption growth due to the impact on disposable household income and precautionary savings behaviour. This was particularly the case right after the turn of the century, during the 2002-2003 recession, but also after the 2009 recession (Graph 4.2.7) pensions contributions increased⁽²⁰⁾.

Increased longevity, a changing labour market environment and lower interest rates pose

⁽¹⁹⁾ Change in pension fund net equity is National Accounts item D8 Adjustment for the change of net equity of pension funds. This comprises the difference between actual pension contributions and pension payments, an adjustment made for the operational costs by pension funds and a reallocation of received capital income, in the form of imputed social contributions paid by the household sector that 'owns' a claim on these resources.

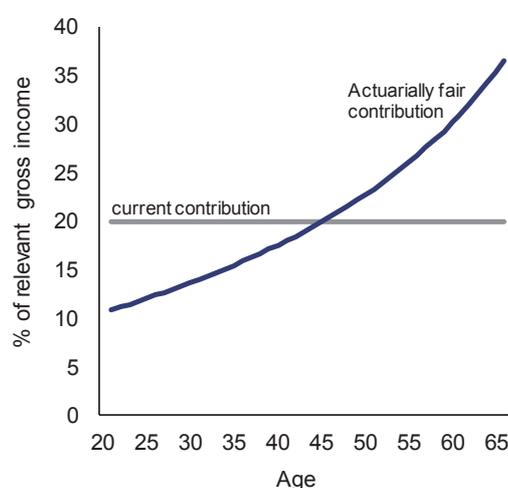
⁽²⁰⁾ Also for 2018 and 2019, the largest pension funds did not index pension payments and have increased or plan to increase contributions.

challenges to the current system. The occupational pension system is well developed, holds a large capital buffer (around 200% of GDP in Q3-2018) and ranks high in international comparisons of pension systems⁽²¹⁾. However, a specific combination of challenges points to vulnerabilities, leading to a broad consensus among social partners and the government on the need to reform. These challenges include ageing, the increase in non-standard forms of work not covered by the system and, in particular and the sensitivity of the system to low interest rates. Although the financial supervision framework was relaxed slightly in 2015, pension funds had to take measures to improve the funding ratio: indexation was scrapped, contributions were increased and nominal pension payments were cut in some cases. Taken together, these developments have negatively affected the trust in the system.

A generational divide, influenced by systemic redistribution from young to old workers via the average pay/average accrual system, lies beneath these challenges. Both older and younger generations claim to carry a disproportional part of the adjustment burden. For pensioners, the real value of their pensions has declined due to the lack of indexation and/or cuts in nominal pensions. Young generations have seen pension contributions go up and expect to receive lower pensions in the future. In addition, the current 'average pay, average accrual' system (*'doorsneesystematie'*) is considered in need of reform. In the current set-up, pension contributions paid in at any point of one's career entitles the beneficiary to the same amount of pension benefits, irrespective of their age and the investment horizon. While this system facilitates collective risk sharing, it is not actuarially fair (Graph 4.2.8). It leads to systemic redistribution from young workers (who pay too much compared to an actuarially fair contribution) to older workers (who pay too little compared to an actuarially fair contribution). While the shifts in value may be limited when measured over the full life-cycle, this system may lead to arbitrary outcomes depending on career paths. As it makes the link between contributions and pension savings less clear, it also reduces transparency. In addition, as lower pension

pay-outs are a last resort, the balance of risks is geared towards the active and young generations. In other words, ad hoc adjustments to indexation and pension contributions have led to pro-cyclical macroeconomic shocks and could give rise to intergenerational transfers at the expense of current younger generations, i.e. they pay higher contributions for a relatively lower guaranteed pension.

Graph 4.2.8: **Pension contribution (current and actuarially fair)**



Source: Lever, M.H.C. and S. Muns (2016) *Pensioenresultaat bij degressieve opbouw en progressieve premie*, CPB Notitie.

Despite a shared understanding among stakeholders, negotiations on a comprehensive pension reform have stalled. The government and social partners have been working on a substantial overhaul of the occupational pension system, based on four themes: (i) coverage: an adequate pension for all workers including the self-employed; (ii) actuarial fairness: a shift to a more actuarially fair system of accruing pension rights; (iii) transparency: moving towards a more transparent and simple pension contract, which would be aligned with more flexible work patterns; and (iv) flexibility: more room for customised solutions and options, including a greater focus on aligning compulsory pension savings with individual needs. Despite extensive negotiations over several months, no overall agreement could be reached and the negotiations on a comprehensive pension reform subsequently stalled. Early February 2019, the government informed Parliament with a letter setting out the

⁽²¹⁾ See for example the Melbourne Mercer 2018 Global Pension Index, which ranks pension systems in terms of adequacy, sustainability and integrity.

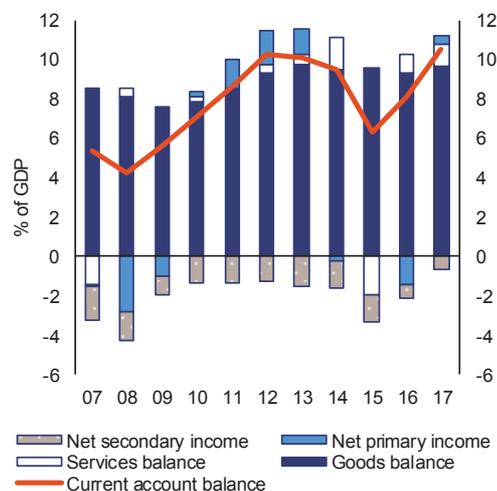
government initiatives to continue reforming the occupational pension system.

4.2.6. SAVINGS AND INVESTMENT IMBALANCE*

The Dutch economy has been running a current account surplus for the last three decades. In 2017 the surplus increased to a historic high of 10.5% of GDP, up from 8.1% in 2016 (Graph 4.2.9). Based on the latest four quarters for which data is available (Q4-2017 to Q3-2018), the current account has remained broadly stable since. From a balance of payments perspective, a persistent surplus trade surplus in goods is the main driver. In terms of product groups, the trade in chemicals and related products, together with food and live animals make a significant contribution. Just over half of goods exports in 2017 consisted of re-exports, illustrating the Netherlands' role as a trade hub. Statistics Netherlands has previously estimated the value added of one euro of re-exports at 11 cents, with a total GDP contribution of 3.8% in 2015 (CBS, 2016). The trade balance increased slightly in 2017 on the back of buoyant global trade developments. However, the balance on primary incomes increased by almost 2 pps. in 2017 and was therefore the main cause of the increase in 2017. According to Commission current account 'norm' estimations⁽²²⁾, fundamental drivers explain almost 4 pps of the surplus in 2017. For the Netherlands these fundamental drivers include the relatively high income per person, expected ageing relative to the rest of the world and the Netherlands' status as a financial centre.

⁽²²⁾ The benchmark is derived from reduced-form regressions capturing the main determinants of the saving-investment balance, including fundamental determinants (e.g. demography, resources), policy factors and global financial conditions. See also Coutinho, Turrini and Zeugner (2018). The methodology is akin to the External Balance Assessment (EBA) approach developed by the IMF (Phillips et al, 2013).

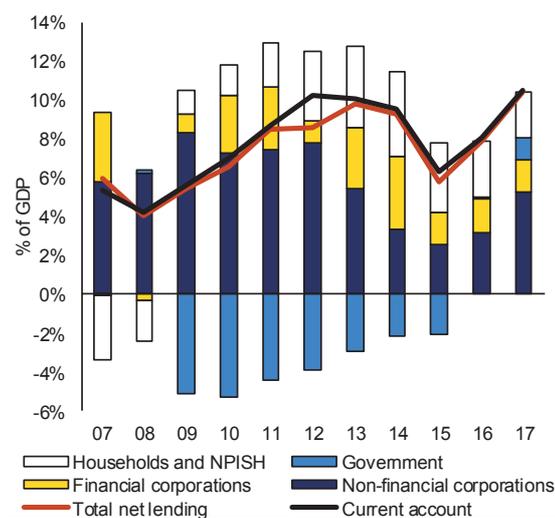
Graph 4.2.9: Current account balance



Source: Statistics Netherlands

All institutional sectors are in surplus. A breakdown by institutional sector points to the corporate sector (both the non-financial and financial sector) as the largest contributor (Graph 4.2.10). Developments in the household and public sector are also important. Before the crisis, households were net borrowers. However, since 2009 they have been net lenders adding to the surplus. Although the government sector was running large deficits during the crisis and in its aftermath, fiscal consolidation and buoyant revenue developments led to a strong net lending position.

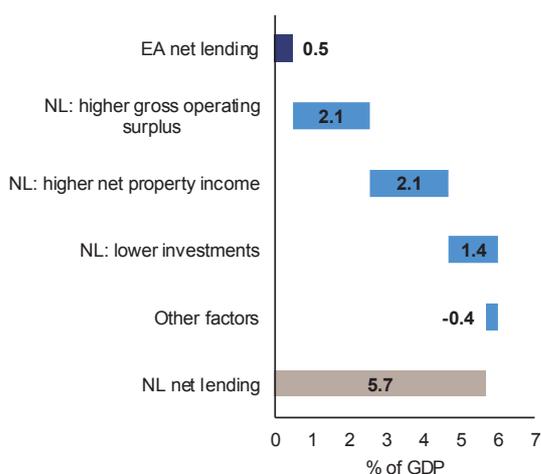
Graph 4.2.10: Net lending by sector



Source: Statistics Netherlands

The relatively high corporate surplus is driven by non-financial corporations. Non-financial corporations record relatively high profits and net foreign income, as well as comparatively low investments. A comparison with the euro area over 2008-2017 shows that both the gross operating surplus and net property income were 2.1 pps. higher in the Netherlands. Investments were 1.4 pps. lower (Graph 4.2.11). High profitability therefore does not seem to translate into higher distributed earnings or higher domestic investments. In total, this led to a difference of 5.2 pps in net lending. The contribution of financial corporations to the surplus is smaller than the contribution of non-financial corporations, but is also persistently positive. Within this subsector, there is no clear driver⁽²³⁾.

Graph 4.2.11: Net lending by non-financial corporations



2008-2017 average

Source: European Commission

Corporate sector net lending is likely to be positively influenced by the presence of multinational enterprises. In 2008-2017, gross value added of non-financial firms as a share of GDP exceeded the euro area average by 5.4 pps. This relatively large share in corporate sector value added is likely to be related to the presence of a relatively high number of multinational enterprises, which play an important part in corporate savings (see Eggelte et al., 2014,

⁽²³⁾ The Dutch central bank, other monetary financial institutions, insurers, and other financial institutions and intermediaries all recorded positive net lending positions in 2017.

European Commission, 2017d; and European Commission, 2018e). High corporate savings may be caused by relatively strong profitability as well as by profit shifting and aggressive tax planning. While earlier studies have pointed to the importance of multinationals for international trade (see for example CBS, 2018), available macro-economic data do not allow for a clear-cut estimation of their overall contribution to the current account surplus. The OECD and the IMF are currently working on an international methodology to develop disaggregations of the current account, and a separate identification of macro-economic transactions related to multinationals⁽²⁴⁾.

Household saving is to a large extent driven by institutional features of the housing market and the pension system. Following a housing market boom, the crisis led to a considerable dip in new construction. Residential investment as a share of GDP, declined from over 6% in 2008 to 3% in 2013, leading to an increase in household net lending. The decrease in house prices also resulted in a negative net housing equity position for many households. This wealth shock could have contributed to the strong fall in private consumption during the crisis⁽²⁵⁾, further boosting household saving. Policy factors like the introduction of mandatory mortgage repayment within 30 years to qualify for mortgage interest deductibility in 2013 also require homeowners to increase their savings. On the pension side, high pension contributions and investment income that exceed pension benefits also fuel the household surplus (see Section 4.2.5).

Higher wage growth could have a small but positive effect on external rebalancing. While the total compensation of employees as a share of GDP is close to the euro area average, wage growth in recent years has been below what would be expected based on fundamental drivers such as productivity, inflation and unemployment (see Section 1 and Section 4.3). Higher wages would boost imports through their positive effect on disposable household income. Insofar as wages translate into higher prices, the export volume would also decrease as a result of competitiveness

⁽²⁴⁾ See IMF (2018)

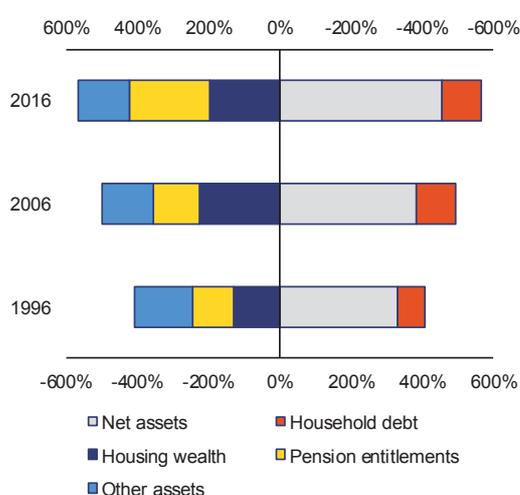
⁽²⁵⁾ See Van Es and Kranendonk (2014) for an analysis of the effect of wealth shocks on consumption.

effects. Taken together, these effects lead to a decline in the trade balance. This decline is partly counterbalanced by the fact that higher export prices have a positive impact on the nominal export value. An analysis based on the Commission's QUEST-model suggests that an autonomous wage increase of 1% would lead to a reduction in the trade balance of 0.1% compared to a baseline scenario.

4.2.7. POLICY PERSPECTIVE ON HOUSEHOLD BALANCE SHEETS*

Long household balance sheets make households vulnerable to financial shocks, with pro-cyclical effects. Pension entitlements as a share of GDP have been on an upward trend between 2007 and 2017 reaching almost 200% of GDP (Graph 4.2.12 and Section 4.2.5). Housing wealth decreased during the crisis, but has been increasing over a longer time horizon. However, both housing and pension wealth are typically illiquid. At the same time, almost half of all households own less than EUR 10 000 in liquid financial assets (Smid and Luginbuhl, 2018). High debt and low liquid savings make households vulnerable to financial shocks, and limit consumption smoothing over time. Low liquid assets are also associated with a higher volatility of consumption at the macro-level (Lukkezen and Elbourne, 2015).

Graph 4.2.12: Household balance sheets (% of GDP)



Source: Statistics Netherlands

Pension savings come with a large compulsory payment wedge on labour and low liquid savings. While high mandatory pension contributions lead to good pension adequacy, they make up a large part of the relatively large tax and non-tax compulsory payment wedge in the Netherlands (European Commission, 2018e). At EUR 33 billion in 2017, contributions amounted to almost 10% of total employee compensation just for the second pillar. The high pension assets that households build up over their lifetime are among the largest in the euro area, but are generally not accessible until retirement.

Mortgage interest deductibility is an important driver of household debt. This fiscal subsidy encourages households to enter the owner-occupied market and take on mortgage debt. Given housing supply-constraints, it also leads to higher house prices. The announced acceleration of the reduction in mortgage interest deductibility between 2020 and 2023, reducing the maximum applicable rate from 49% to 37%, has been turned into legislation (Belastingplan 2019). Nevertheless, the fiscal subsidy on home-ownership remains substantial.

Further developing the private rental market can contribute to reducing household debt. Implicit and explicit subsidies lead to a relatively large and highly regulated social housing sector (a share of 29% of the total housing market). The private rental market, as the only non-subsidised segment, remains underdeveloped with a share of 13% in total dwellings. It is often not affordable for middle-income households, while at the same time they are not eligible for social housing (Middelkoop and Schilder, 2017). In 2018, the government presented draft legislation to ease the requirements for housing corporations to build for the middle income rental segment (*Wet maatregelen middenhuur*). Municipalities also play an important role in increasing private rental supply, but may not be fully incentivised to do so. Since 2017, they can include minimum shares for the affordable private rental segment in their zoning plans. However, they can generate higher revenues by developing and selling land for new construction in the owner occupied segment market as mortgage interest deductibility pushes up prices in this segment (De Nederlandsche Bank, 2017). At the same time, according to a recent survey the percentage of municipalities that had

some form of policy aimed at increasing supply in this segment rose from 40% in 2016 to 53% in 2018 (Stec groep, 2018). Supply-side measures in the rental segment can provide an alternative for middle incomes to taking on mortgage debt, but the debt bias for households continues to exist as long as homeownership is fiscally subsidised.

Taken together, current pension and housing institutions may lead to a sub-optimal pattern of saving and consumption over the lifetime.

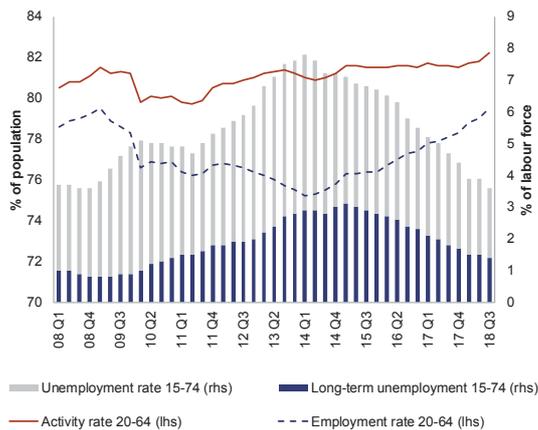
Households are encouraged to take on high mortgage debt. The introduction of mandatory mortgage repayment to qualify for interest deductibility in 2013 improves the incentive for households to repay their mortgage. However, higher monthly mortgage payment and high pension contributions both require substantial savings, which puts consumption under pressure. At the same time, replacement rates at retirement exceed 100% for many households, particularly in the case of homeowners (Studiegroep Duurzame Groei, 2016). This suggests potential welfare losses due to a lack of consumption smoothing over the lifecycle.

4.3. LABOUR MARKET, EDUCATION AND SOCIAL POLICIES

4.3.1. LABOUR MARKET

The labour market is performing well, with headline labour market indicators converging towards pre-crisis levels. Labour force participation continues to increase and now exceeds the pre-crisis level. Moreover, it is one of the highest in the EU at 82.2% in Q3-2018. In the last quarter of 2018, the unemployment rate reached the pre-crisis low level of unemployment of 3.6% (Graph 4.3.1) on the back of robust GDP growth. In addition, the long-term unemployment rate stood at 1.4% in the third quarter of 2008 (well below the EU average of 2.9%) and is declining for all age groups.

Graph 4.3.1: Labour market indicators

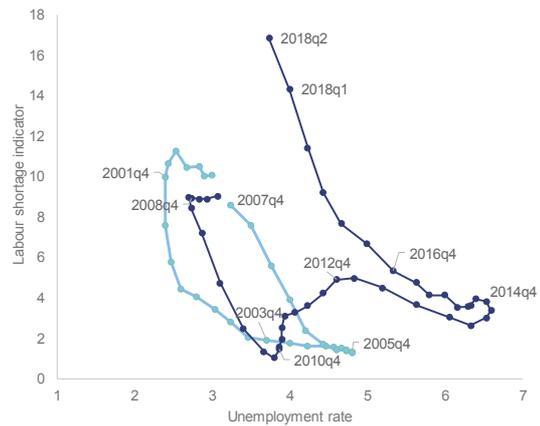


Source: European Commission

Labour shortages are starting to emerge. In line with the expansionary phase of the business cycle the movement along the Beveridge curve continued in the second quarter of 2018 (Graph 4.3.2). As labour shortages emerge, the slope becomes steeper, with the number of vacancies increasing more than the decline in unemployment. Moreover, the Beveridge curve shifted outwards, indicating that the matching efficiency worsened. The vacancy rate (i.e. number of vacant positions as a percentage of the sum of the number of vacant and occupied positions) reached 3.1% in the third quarter of 2018, and is particularly high in the Information and Communications Technologies, health and construction sector (Graph 4.3.3). In addition, the share of companies reporting difficulties in filling vacancies increased. Shortages are increasing in

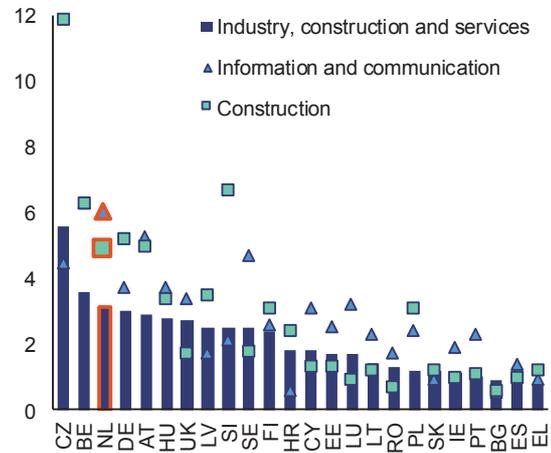
certain professions, such as secondary school teachers and nurses, and in certain regions more than others⁽²⁶⁾.

Graph 4.3.2: Beveridge curve



Source: European Commission. Labour shortages are the percentage of managers reporting labour as a limiting factor for their business in the industrial sector. Data are obtained from the Business and Consumer survey.

Graph 4.3.3: Vacancy rate by sector (% , 2018Q3)



Source: European Commission

Wage developments*

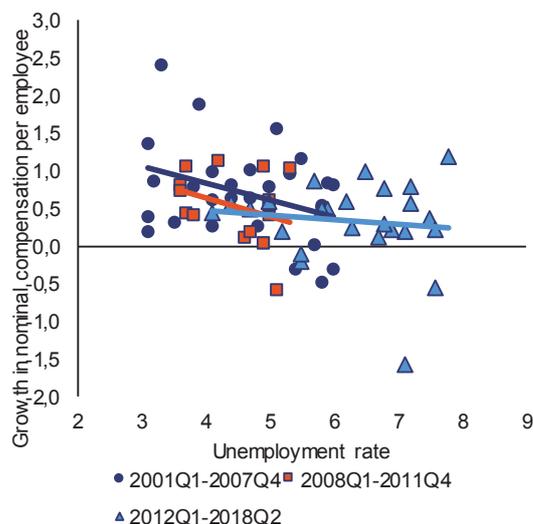
Despite increasing labour shortages, wage growth remained moderate. Nominal wage growth (measured as total compensation per employee in full time equivalents) remained

⁽²⁶⁾ Ministry of Social Affairs and Employment, Appendix *Arbeidsmarktbeleid*, letter to Parliament of 15.6.2018, Kamerstuk 29544 nr. 833, vergaderjaar 2017-2018, available at <https://zoek.officielebekendmakingen.nl/blg-845833>

subdued at 1.1% in 2017. Wage growth was also relatively muted in the sectors with fast growing vacancy rates. In combination with increasing inflation, this resulted in nearly zero real wage growth in 2017. While trade unions may have foregone wage demands in recent years in exchange for employment protection, the largest trade union has set far higher wage demands for 2019, with 5% compared to 3.5% in 2018. The government has also repeatedly acknowledged the need for higher real wage growth. With the further tightening of the labour market, nominal wage growth is expected to accelerate to 2.7% and 3.3%, in 2018 and 2019, according to the Commission's Autumn 2018 Economic Forecast.

Wage growth is lower than it was before the crisis with similar levels of unemployment. The Philips curve, which measures the extent to which wages react to changes in unemployment, has flattened since the start of the economic recovery (Graph 4.3.4). This implies that wage growth has become less responsive to changes in unemployment. Wage growth remains subdued even when controlling for unemployment, inflation and productivity (see Section 1).

Graph 4.3.4: **Flattening of the Philips curve**



Source: European Commission

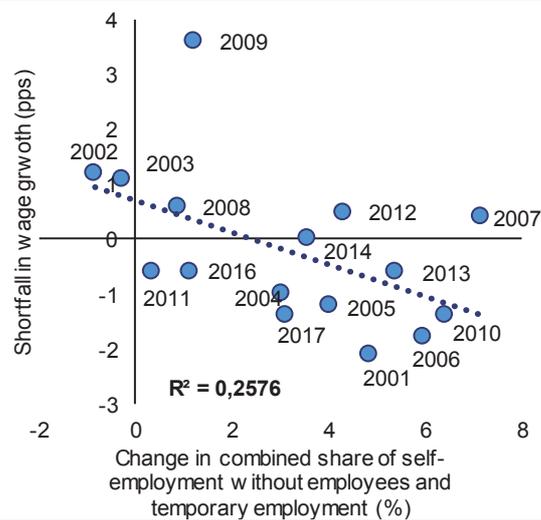
In addition to labour market slack, increased labour market segmentation may have been an important driver of low wage growth in the last

decade⁽²⁷⁾. In 2000-2017, the increase in the share of non-standard employment correlates negatively with the shortfall in wage growth⁽²⁸⁾. The downward pressure on wages can be partly explained by the fact that overall wages for temporary employees are substantially lower than wages for permanent employees (European Commission, 2018e, Box 4.3.1). As a result, the increase in the share of temporary employees negatively affected wage growth across the wage distribution with the largest impact at the bottom (European Commission, 2018h). Lower tax and social contributions for the self-employed may also lead to downward pressure on wages. Self-employed without employees pay lower tax and social security contributions compared to employees. This may result in unfair competition and downward pressure on wages and unfair competition, in particular for those at the bottom of the earnings distribution.

⁽²⁷⁾ Other factors include the increasing automatisisation and digitalisation, the globalisation of production processes and labour, the relatively high level of employers' obligations and weakening bargaining power of workers, see amongst others Baarsma and Vrieselaar (2018), 'Acht redenen waarom de lonen achterblijven', RABOResearch, OECD (2015) 'The Labour Share in G20 Economies', De Beer and Keune (2018), 'De erosie van het poldermodel', Mens en Maatschappij, p. 231-260 and De Nederlandsche Bank (2018b), 'Flexibilisering arbeidsmarkt gaat gepaard met daling arbeidsinkomensquote'.

⁽²⁸⁾ Defined as the difference in actual and predicted wage growth

Graph 4.3.5: **Shortfall in wage growth (pps) and combined share of temporary employees and self-employed without employees (% of the workforce)**



Note: Shortfall in wage growth is the difference between actual and predicted wage growth based on inflation, productivity and unemployment. Data for 2015 are missing due to a data break in the series.

Source: European Commission

Labour market segmentation

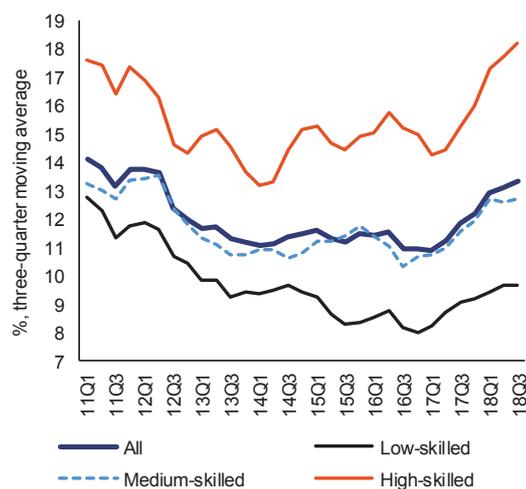
Flexible employment represents a growing share of the labour market. Both temporary employment and self-employment without employees increased considerably in the last ten years. Important drivers of the trend towards flexible employment relationships are distinct institutional factors, including favourable tax treatment (for the self-employed without employees) and differences in social security legislation as well as large differences in applicable labour regulations and labour protection rules for permanent and temporary contracts⁽²⁹⁾. Self-employed are not obliged to be insured against labour-related risks such as accidents at work, unemployment and old age (second pillar). These factors and differences may create financial

⁽²⁹⁾ See European Commission, 2016, pp. 46-49, European Commission, 2017d, p. 30; European Commission 2018e, pp. 34-36 and p.39.

(dis)incentives with particularly distortive effects at the margin of the labour market impeding on fair working conditions, hampering smooth labour market transitions and inclusive growth. In addition, labour market segmentation may have a negative impact on wage developments and not provide adequate social protection coverage for all.

While job creation in recent years has mainly been due to temporary employment and self-employment, job growth for employees with permanent contracts has recently outpaced that for temporary employment. Since the second half of 2017 there has been an increase for the first time in the transition rate from temporary to permanent contracts. This increase applies to all education levels, but is particularly strong for high-skilled workers (almost 4 pps). As a result, for the first time in years the share of temporary employees (as a percentage of total employment) decreased slightly in the third quarter of 2018 (14.8%) compared to one year before (15.2%). An increasingly tight labour market may have provided incentives for employers to offer more open-ended contracts.

Graph 4.3.6: **Transition rate from temporary to permanent employee by educational level**



Source: Statistics Netherlands

Box 4.3.1: Monitoring performance in light of the European Pillar of Social Rights

The **European Pillar of Social Rights** is designed as a compass for a renewed process of upward convergence towards better working and living conditions in the European Union⁽¹⁾. It sets out twenty essential principles and rights in the areas of equal opportunities and access to the labour market; fair working conditions; and social protection and inclusion.

The Netherlands performs very well on most indicators of the Social Scoreboard supporting the European Pillar of Social Rights. It has an overall good standing in terms of labour market performance and

SOCIAL SCOREBOARD FOR NETHERLANDS		
Equal opportunities and access to the labour market	Early leavers from education and training (% of population aged 18-24)	Better than average
	Gender employment gap	Better than average
	Income quintile ratio (S80/S20)	Better than average
	At risk of poverty or social exclusion (in %)	Good but to monitor
	Youth NEET (% of total population aged 15-24)	Best performers
Dynamic labour markets and fair working conditions	Employment rate (% population aged 20-64)	Best performers
	Unemployment rate (% population aged 15-74)	Better than average
	Long-term unemployment (% population aged 15-74)	Better than average
	GDHI per capita growth	On average
	Net earnings of a full-time single worker earning AW	Better than average
Social protection and inclusion	Impact of social transfers (other than pensions) on poverty reduction	Best performers
	Children aged less than 3 years in formal childcare	On average
	Self-reported unmet need for medical care	Better than average
	Individuals' level of digital skills	Better than average

Members States are classified according to a statistical methodology agreed with the EU average, but it is improving fast. For methodological details, please consult the draft Joint Employment Report 2019, COM (2018) 761 final. Data update of 29 January 2019. NEET: neither in employment nor in education and training; GDHI: gross disposable household income.

social situation. Per capita real gross disposable income of households continued to rise, with income inequality below the EU average. In the area of social protection and inclusion the weakening of the situation with the risk of poverty or social inclusion is a point of attention. However the Netherlands is still among the top performers, with a low level of poverty.

The issue of labour market segmentation deserves further attention with regard to equal opportunities in the labour market and fair working conditions. Flexible employment still represents a relatively large share of the labour force. In the last 10 years both temporary employment as well as self-employment without employees increased considerably.

The vocational education and training sector performed well overall. It has a participation rate higher than EU average and provides recent graduates with better labour market opportunities. However, students with a migrant background appear to benefit from it less. To better address the challenge of skills shortages a new initiative was launched in 2018 to allow colleges to better reflect the regional specifics in cooperation with the (regional) business community. A new agreement was signed in February 2018 between the Ministry of Education, Culture and Science and schools for 2018-2022. Schools should draw up strategic plans to improve the quality of vocational

education and training in line with regional needs and in close collaboration with regional stakeholders. Furthermore, the curricula will be made more flexible in terms of time, place and type of learning methods (e.g. blended learning) to better address the specific needs of adults.

⁽¹⁾ The European Pillar of Social Rights was proclaimed on 17 November 2017 by the European Parliament, the Council and the European Commission. https://ec.europa.eu/commission/priorities/deeper-and-fairer-economic-and-monetary-union/european-pillar-social-rights/european-pillar-social-rights-20-principles_en

In order to find a better balance on the labour market, a draft bill, the law labour market in balance (*Wet arbeidsmarkt in balans*), was sent to Parliament on 7 November 2018. This bill constitutes a first concrete step in a broader process of labour market regulation reform measures and ongoing reflections on how to best tackle distinct institutional drivers comprehensively. It follows a previous major reform (*Wet werk en zekerheid*) in 2015⁽³⁰⁾. The new draft bill contains a package of measures intended to make it easier to hire of employees on a permanent basis and to make flexible contracts less flexible by tackling a number of the institutionally driven factors of the increasing flexibility in the labour market. The package includes measures such as (1) the introduction of a new, additional ground for dismissal; (2) the possible extension of the probation period from 2 to 5 months; (3) the extension of the duration period for temporary contracts to 3 years; (4) the entitlement to the transition allowance as of day 1 of temporary contracts; (5) minimum labour conditions applicable to employees working on a payroll basis; (6) the introduction of limits to the use of zero-hours contracts; and (7) the possibility to differentiate unemployment contributions by type of contract⁽³¹⁾. At the same time, a committee of independent experts was established to advice the government on how to regulate the labour market in the future taking into account the changing economy and society. It should present its report and findings at the latest by 1 November 2019.

Important challenges remain, in particular with respect to self-employed without employees. With respect to possible initiatives concerning self-employed without employees and the state of play of ongoing reflections, the Minister of Social Affairs and Employment informed the Parliament

by letter⁽³²⁾ that (1) the criterion 'under the control and direction' (*gezagsverhouding*) has been clarified as of 1 January 2019, while (2) a web module will be developed to qualify the working relationship of self-employed, in particular when there is no employment relationship. The latter should be ready by the end of 2019. However, the government plans to (3) introduce a minimum hourly rate of EUR 15-18 to reduce (bogus) self-employment at the margins of the labour market and unfair competition, while (4) providing an opt-out from payroll taxes and employee insurances for those self-employed applying a high hourly tariff will be delayed due to the fact that the government considers that more work is needed to ensure full compatibility with EU law. Further details on possible alternative proposals are expected to be provided by spring 2019 in view of them becoming law by 1 January 2021. Furthermore, on (5) possible social security coverage for sickness/disability for self-employed, the Minister⁽³³⁾ announced the intention to work together with insurers and stakeholders on developing a programme to introduce concrete instruments to increase and strengthen well informed choices by the self-employed as well as a plan of action to be presented at the beginning of 2019. Moreover, on the employer's obligation to continue to pay salaries for 2 years in case of illness, the Minister announced⁽³⁴⁾ that an agreement reached between employers' organisations and insurers will offer more suitable insurances to cover the risk of sickness (so called *MKB verzuim-ontzorg-verzekering*). In addition, the government intends to provide for a discount in sickness contributions of EUR 450 million as of 2021 to compensate small and medium size enterprises for the salary costs of the second year of illness.

Social dialogue is an established institutionalised approach and an essential feature of the so-called Dutch *poldermodel* and has worked well in general in the past. Social partners were consulted on the intention and possible policy options to reform the second pillar

⁽³⁰⁾ The specifics and preliminary results of this reform were discussed in detail in previous European Semester country reports (see European Commission 2015, p. 38/39, European Commission, 2017, p.31 and European Commission, 2018e, p. 35/36)

⁽³¹⁾ During the vote in the Second Chamber on 5 February 2019, the possible extension of the probation period from 2 to 5 months was voted down, while accepting that for workers younger than 21 years working less than 12 hours a week on average the lower differentiated unemployment contributions would apply and the possibility for derogations by collective agreement was introduced for seasonal work due to climatological circumstances.

⁽³²⁾ 'Voortgang uitwerking maatregelen 'werken als zelfstandige', 26.11.2018

⁽³³⁾ Letter to Parliament of 26 November 2018 'Gesprekken met verzekeraars over arbeidsongeschiktheidsverzekeringen voor zelfstandigen'

⁽³⁴⁾ Letter to Parliament of 20 December 'Loondoorbetaling by ziekte'

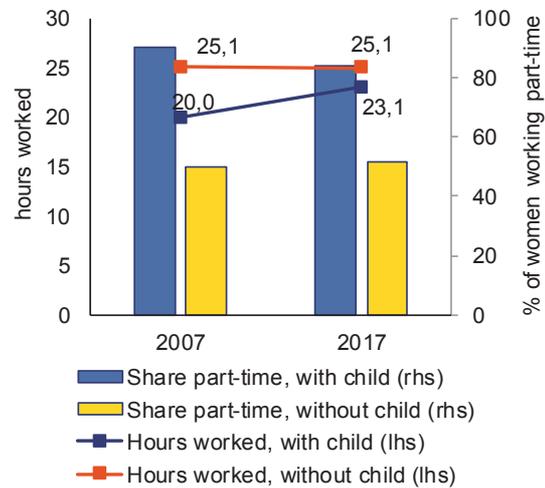
of the pension system and the ambitious agenda to reform the labour market.

Female labour market participation

Despite the positive labour market performance, part-time employment is particularly high for women. While the employment rate of women is high and on the increase (74.1% in 2017 compared to 71.6% in 2016), almost three out of four women (74.1% in 2017) work part-time⁽³⁵⁾. As a result, the full-time equivalent employment rate of women is low (42.5% in 2017) and the gender gap in full-time equivalents one of the highest in the EU (26.6 pps in 2017). The share of part-time employment is particularly high among women with care responsibilities, although many women already start working shortly after leaving education, before having children (SCP 2018b). However, in recent years, the hours worked by women with children have increased, while there is no similar trend visible for women without children (Graph 4.3.7). Differences in work intensity result in a relatively large earnings gap (47.5% in 2017) and one of the largest gender pension gap later in life (45.2% in 2016). Recent analysis by a consultancy (McKinsey Global Institute 2018) shows for instance that incentivising women to work a few hours a week more could increase gender equality and help significantly reduce existing labour shortages.

⁽³⁵⁾ Note that also for men the share of part-time employment is high and well above the EU average (22.6 vs. 8.2% in 2017).

Graph 4.3.7: Hours worked and share of part-time work for women in 2007 and 2017



Note: The graph represents the share of part-time employment of women (aged 30-45) and their average usual hours worked dependent on the presence of children under the age of 14 in the household.

Source: European Commission

Historically speaking, part-time employment of women has always been high in the Netherlands and is a result of a combination of multiple factors and institutional drivers. According to McKinsey (2018), the vast majority of Dutch women work in education or healthcare - both sectors with mostly part-time jobs, take responsibility for most care tasks and are conditioned by their choice of degrees and professions (McKinsey Global Institute 2018). Drivers of part-time employment include the design of family-related leaves, as well as the intermediate cost and availability of full-time childcare and after school care (Portegijs et al., 2008; Task Force Part-time Plus, 2010). Parental leave is in most cases unpaid, which may discourage main earners (mostly men) from using it. On 2 October 2018 a reform was adopted by the Second Chamber of Parliament to increasing paternity birth leave from 2 to 5 days in 2019 with a further 5 weeks of additional leave possible as of 1 July 2020, to be taken within the first 6 months of the birth. Furthermore, the government plans to undertake an extensive interinstitutional policy analysis study on part-time work. The study should especially focus more on the consequences of part-time work choices, including women's economic

independence. The report is expected to be delivered in spring 2019.

Labour market situation of people with a migrant background

While the overall participation rate is very high in the Netherlands, people with a migrant background face challenges in their employment situation ⁽³⁶⁾. Even if in absolute numbers the labour participation of people with a migrant background is around the EU average, in 2017 the employment rate among non-EU born was around 59.9% (compared to 58.9% in 2016), 20.6 pps below the level for natives (80.5%), one of the largest gaps in the EU. Compared to the previous year (2016) the gap remained unchanged. This is a concern as non-EU born persons represented as much as 11%⁽³⁷⁾ of the working age population (20-64) in the Netherlands in 2017. The gap is particularly high for non-EU born women⁽³⁸⁾.

Part of the unfavourable labour market situation of non-EU-born migrants in the Netherlands compared to natives is due to some of their socio-economic characteristics and the reasons for migration. Among them is the relatively high share of low-educated people, although the situation is improving⁽³⁹⁾, and limited level of language proficiency. However, even when accounting for differences in education level, literacy, age and sex⁽⁴⁰⁾, the relative performance of third-country migrants was worse in the Netherlands than in other EU countries (with an adjusted employment probability 14 pps lower than for the native born- the largest gap in all EU countries covered by the analysis). This suggests that other factors such as lack of recognition of qualifications, language skills, limited professional networks or discrimination play a role (European Commission, 2017e). Reasons for migration also

impact the employment rate of third-country immigrants among whom there is a higher share of migrants for family reasons, but also beneficiaries of international protection⁽⁴¹⁾.

The labour market outcomes of the native-born with a migrant background (the 'second generation') are also unfavourable. Among native-born persons aged 15-34, those with at least one foreign-born parent represented around 10.5% in 2016⁽⁴²⁾. Despite being born and educated in the Netherlands, their employment situation is less favourable. This is especially true for those with two foreign-born parents who had an employment rate of around 67% in 2016, 21 pps lower than among native-born persons, one of the largest gaps among EU countries⁽⁴³⁾. The gap was more pronounced for young women with an employment rate of around 61%, 26 pps lower than among those with a native background. Men performed better, with an employment rate of around 73%, 13 pps lower than among those with a native background. While daughters of immigrant parents fare well in the education systems (often better than young men), this does not always translate into success in the labour market. An even wider gender gap appears among the low-educated, where low educational attainment among women frequently leads to inactivity on the labour market⁽⁴⁴⁾.

The unfavourable employment situation faced by native born with a migrant background can only in part be related to lower educational outcomes⁽⁴⁵⁾. Native children with immigrant parents are less likely than native children to be tertiary-educated (25% and 35% respectively), although the gap is relatively small compared to other similar countries⁽⁴⁶⁾. Part of the disadvantages faced by second generation young people is due to the lower socio-economic level inherited from their parents (see OECD

⁽³⁶⁾ Rapport 'De positie op de arbeidsmarkt van verschillende groepen personen met een niet-westerse achtergrond' SEO economisch onderzoek, March 2018

⁽³⁷⁾ 8% of those in employment, but 1 out of 5 unemployed and 19% of the inactive population.

⁽³⁸⁾ Employment rate of 51.9% compared to 72.1% for native-born women

⁽³⁹⁾ The share of non-EU born residents (aged 25-54) with low level of education was 31.2% in 2017 compared to 16.0% for natives. However it was down from 35.0% in 2014

⁽⁴⁰⁾ OECD (2014) IMO. Note: literacy level as measured by PIAAC (2012), migrants measured as all foreign-born.

⁽⁴¹⁾ OECD-EU Settling in 2015, chapter 1

⁽⁴²⁾ Latest data available. Source: Dutch LFS, quoted in OECD-EU Settling in 2018

⁽⁴³⁾ Latest data available. Source: Dutch LFS, quoted in OECD-EU Settling in 2018. Definition used is employment rate among 15-34 excluding those still in education.

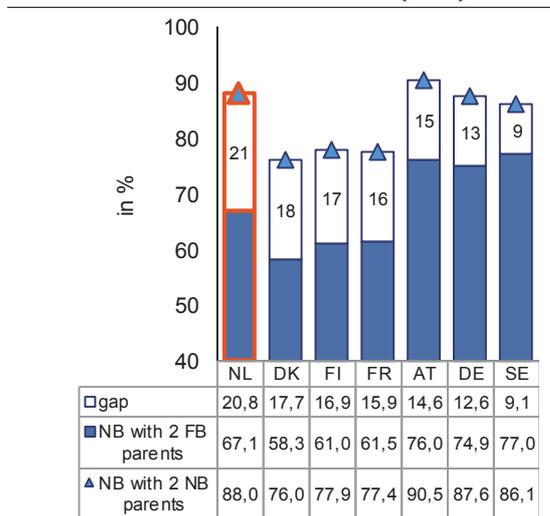
⁽⁴⁴⁾ OECD (2017a)

⁽⁴⁵⁾ Employment rate of 44.5% in 2017, one of the lowest across EU MS

⁽⁴⁶⁾ OECD (2017a), There is also evidence (for instance by Zorlu (2011)) that children of immigrants in the Netherlands are more likely to drop out of university education.

(2018a))⁽⁴⁷⁾. Other factors include early tracking in fields of education with limited possibilities for good transitions to the labour market and the lack of network and role models, while also (indirect) discrimination plays a role (Ministry of Social affairs and Employment, VIA, 2018). In general, prioritising investments in employability of people with a migrant background could contribute to both social inclusion for this group and expansion of economic activities.

Graph 4.3.8: **Employment rate of native born with migrant background (two foreign born parents) compared to native-born with native background (two native born parents) in the Netherlands and other EU MS (15-34), 2016-17**



Source: Eurostat

In March 2018, the government presented its programme⁽⁴⁸⁾ *Further Integration on the Labour Market* proposing a multi-track approach to improve the labour market situation of people with a migrant background and those granted asylum status. In addition, the government's approach to tackling discrimination was set out in detail in April 2018⁽⁴⁹⁾. The subsequently adopted action plan on labour market discrimination focusses on monitoring and control, research and knowledge gathering, and awareness-

⁽⁴⁷⁾ In Chapter 4. Crul finds that the difference in educational outcomes is reduced by half for the children of Turkish immigrants and by three-quarters for the children of Moroccan immigrants when accounting for the educational level of their parents.

⁽⁴⁸⁾ 'Verdere Integratie op de arbeidsmarkt: de economie heeft iedereen nodig', Kamerstukken II 2017/18, 29544, nr. 821

⁽⁴⁹⁾ Kamerstukken II 2017/18, 30 950, nr. 156

raising⁽⁵⁰⁾. Furthermore, the Federation of Private Employment Agencies (*Algemene Bond Uitzendondernemingen*, ABU) published its action plan on diversity in the labour market on 1 May 2018 to address discriminatory practices⁽⁵¹⁾.

Integration programmes also remain challenging and will be reformed.

There have been a number of policy changes over the last years, also driven by the inflows of asylum seekers. Measures were taken to improve the early integration of asylum applicants⁽⁵²⁾ even before a residence permit is issued. These include improving the quality and accessibility of courses to prepare for the civic integration test and by giving additional responsibilities to municipalities to provide social counselling. Further changes to improve and reform the integration system are planned from 2020 onwards⁽⁵³⁾. These include involving the municipalities more in the integration process with an individual integration programme and increasing in the level of language required to pass the test for obtaining a permanent residence permit⁽⁵⁴⁾. The main goal of the new integration system is to have newcomers working as soon as possible and learning the language as they go.

Labour market situation people with disabilities

The labour market situation of people with disabilities remains challenging and in particular young people with disabilities face vulnerability risks. Important implications for the labour market situation of specific categories of people with disabilities stem from the introduction of the Participation Act (*Participatiewet*) in 2015 (European Commission, 2015b, p.38, European Commission, 2017d, p.29). As a result, the inflow into sheltered workplaces (*Sociale*

⁽⁵⁰⁾ Letter to Parliament of 19 June 2018, Hoofdlijnen Actieplan Arbeidsdiscriminatie 2018-2021; Kamerstukken II 2017/18, 29544-834. See also the implementation plan Labour market discrimination sent to Parliament on 22 November 2018.

⁽⁵¹⁾ <https://www.abu.nl/actueel/persberichten/abu-gaat-discriminatie-te-lijf-actieplan-diversiteit-arbeidsmarkt-verstuurd-naar-tweede-kamer>

⁽⁵²⁾ Central Agency for the Reception of Asylum Seekers (COA) programme "Vroege integratie en participatie"

⁽⁵³⁾ Letter 'Inburgering op de schop' from Minister to Parliament 2.7.2018; further details on the timeframe, priorities and overview responsibilities were given in the letter to Parliament on 23.10.2018

⁽⁵⁴⁾ From A2 to B1 language level

Werkvoorziening) was blocked and the number of workers with disabilities in sheltered workplaces dropped from 102 855 in 2014 to 86 959 in 2017 (Panteia 2018). Only 30% of those on the (former) waiting list for the sheltered workspaces succeeded in finding work, whereas this figure had been 50% before (Sadiraj et al., 2018). The social benefits scheme for young persons with disabilities (Wajong) was also reformed. As a result, the entitlement to a Wajong benefits was restricted to fully people with disabilities who reach the age of 18 years as from 2015 onwards. All other categories are entitled to social benefits and receive assistance from municipalities to find work.

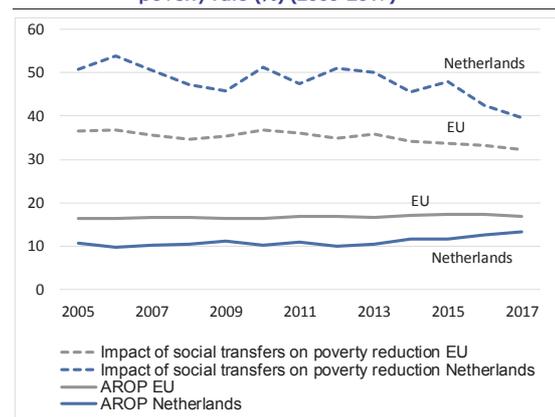
Most of jobs available to persons with disabilities consist of part-time and fixed-term contracts with low job security. Although the share of employed young persons with disabilities increased from 22% in 2014 to 27% in 2015 (Kok et al, 2018), recent research shows that most of them employed as part of the Job Agreement (*Banenafspraken*) have a fixed-term contract (Smit, and Scheeren, 2018). Their wage depends on the level of the lowest wage scale that is included in the applicable collective agreement. Those who are unable to hold a regular job can be offered a new sheltered workplace (*beschut werk*) created by a municipality. By the end of 2018 only 4 600 of these sheltered workplaces had been created and most are located in the ‘old’ social workshops (*Sociale Werkplaats*) where workers are seconded by the municipality, usually on a fixed-term contract (Smit and Scheeren, 2018). To increase the labour market perspectives of persons with disabilities, the government has launched a broad offensive to help more of them to get a job.

Poverty and social exclusion in the Netherlands

The Netherlands has one of the lowest rates of at risk of poverty or social exclusion, although it increased in recent years. The population at-risk of poverty or social exclusion further increased from 364 000 in 2016 (16.7%) to 432 000 (17%) in 2017, up by 67 000. The increase is mainly driven by an increase in monetary poverty as reflected by the at-risk-of-poverty rate. This increased for all population groups, in particular for those living in very low work intensity households (Graph 4.3.9). Moreover, the poverty reducing impact of social

transfers (excluding pensions) has weakened considerably in recent years falling from 51% in 2012 to 40% of the at-risk-of-poverty rate before transfers in 2017. The redistributive impact of social transfers decreased more for individuals of working age (18-64), households with no children and single parents. The reduced impact of social transfers could be partly explained by a break in the series in 2015, as well as the (combined) effect of improving labour market conditions and reforms in the social assistance system and disability schemes. In addition, the depth of monetary poverty before social transfers is also increasing. The latter may explain why the share of working poor has also increased (SCP, 2018a).

Graph 4.3.9: Impact of social transfers on reducing the at-risk of poverty rate (%) and the at-risk of poverty rate (%) (2005-2017)



EU figures for 2005-2009 refer to the EU27; for 2010-2017 to the EU28

Source: European Commission

Non-EU-born people face a higher risk of poverty or social exclusion. Among the population aged 18 and over born in the Netherlands, the proportion of people at risk of poverty or social exclusion remained fairly stable from 2008 to 2016 at 13.7% despite certain fluctuations over the years. However, it increased to 15.2% in 2017. Among non-EU-born residents, it increased with significant fluctuations over time from 31.7% in 2009 to 39.6% in 2016, then fell to 35.8% in 2017. This is directly related to the vulnerable labour market position of many non-EU-born migrants and the corresponding investment priorities.

Poverty and social exclusion also have an urban dimension. Large cities face higher rates of

unemployment and higher rates of poverty and social exclusion. Figures from 2017 show that the at-risk-of-poverty or social exclusion rate stands at 19.8% for cities, while it ranges from 13.4% to 13% for towns and suburbs and rural areas. In Greater Amsterdam, The Hague and Rotterdam, some 22%, 20% and 18% of people were at risk of poverty in 2015 respectively. In cities, 11.6% of people live in households with very low work intensity compared to 7.2% and 5.1% respectively for towns and suburb and rural areas (2017). Furthermore, cities are characterised by a higher unemployment rate (5.5%) and a lower employment rate (74.1%) than towns and suburbs (77.9%; 4.1%) and rural areas (79.6%; 3.8%) (2017). Migrants with a non-western background - a group that does not score well on poverty and labour market indicators - live more in and around the four big cities. They make up more than 30% of the population in Amsterdam, Rotterdam and The Hague.

4.3.2. EDUCATION AND SKILLS

Despite performing well in general, there has been a decline in some basic skills and increasing differences in performance levels between schools. While the proportion of low achievers in the 2015 OECD Programme for International Student Assessment was still below the EU average, the OECD programme and *Trends in International Mathematics and Science Study 2015* have shown declining trends for mathematics and science. The share of students achieving the target level in the 2017 end-of-primary school tests has increased in somewhat in mathematics by 9%, while it has dropped significantly, by 17%, in reading (Inspectorate of Education, 2018).

Children of lower and higher educated parents are increasingly being educated in different schools. Differences between schools have the largest impact on pupils' performance of all OECD countries (OECD, 2016), and are strongly linked to the different tracks offered (Inspectorate of Education, 2017). The parental choice system contributes to creating different schools (Ladd et al, 2011) and strengthens the effects of residential segmentation (Inspectorate of Education, 2018). The strongest factor in students' being educated in different schools is parents' educational attainment levels, followed by their income levels and

immigrant status (Inspectorate of Education, 2018).

The higher education attainment rate of persons with a migrant background remains a challenge. Although the gap in educational attainment between foreign-born and native-born has been closing in secondary education, it remains significant at higher education: 34.6% of foreign-born 30-34 year olds hold a tertiary diploma against 50.7% among native-born residents.

The Netherlands faces an increasing shortage of teachers. The teacher shortage at primary schools is expected to amount to 4 100 full time equivalents by 2022. From 2018 the government is making available an additional EUR 270 million in salaries for teachers at primary schools. A collective labour agreement has been reached on how exactly this will be spent. In addition, the 'work pressure agreement' on reducing work pressure in primary education was signed in early 2018. This means that as of 2018-2019, primary schools will receive EUR 237 million extra to tackle excessive work pressure. In the 2021-2022 school year, funding for this purpose will be increased to EUR 430 million.

While there are no skills mismatches at macroeconomic level, the demand for skilled workers is expected to grow substantially. There is growing evidence⁽⁵⁵⁾ of increasing labour shortages in specific sectors (such as information and communications technologies, , construction, and health care) and for people with the necessary technical skills, as well as for certain professions (such as secondary school teachers and nurses) and/or at regional level⁽⁵⁶⁾. At the same time, there is a low take-up of science, technology, engineering and mathematics study fields: only 15% of students graduated from these fields against an EU-average of 26%.

The Netherlands ranks among the frontrunners in terms of the number of individuals using the

⁽⁵⁵⁾ Getting Skills Right: Skills for Jobs Indicators, OECD 2017; ROA Rapport 'De arbeidsmarkt naar opleiding en beroep tot 2022, ROA-R-2017/10, December 2017

⁽⁵⁶⁾ Bijlage: de stand van de krapte op de Nederlandse arbeidsmarkt, Appendix letter Arbeidsmarktbeleid of the Ministry of Social Affairs and Employment to Parliament of 15.6.2018, Kamerstuk 29544 nr. 833, vergaderjaar 2017-2018, available at <https://zoek.officielebekendmakingen.nl/blg-845833>

internet and those with advanced digital skills. However, there is significant demand for highly skilled ICT professionals in big data, cybersecurity and artificial intelligence. In January 2018, there were more than 33 000 online ICT vacancies, with demand growing by 50% over the last 12 months.

Overall, adult participation in learning increased in 2017 although lifelong learning remains a challenge for those in a vulnerable labour market situation. Adult participation in learning increased to 19.1% in 2017, far exceeding the EU average of 10.9% ⁽⁵⁷⁾. In 2015, 85% of the Dutch companies (compared to the EU average of 72.6%) provided vocational training to their employees and 41.4% of employees participated in this type of training (compared to the EU average of 40.8%). Despite these positive developments, recent research⁽⁵⁸⁾ shows that employers are far less willing to invest in training for employees with temporary contracts than permanent employees. Often they restrict training to what is strictly necessary for the present job and/or organisation instead of investing to enable employees in a vulnerable labour market position to follow training that may increase their employability.

all, facilitate career transitions, and promote professional mobility and lifelong learning. Improving society's innovation capacity also requires investments to support education in the field of science, technology, engineering and mathematics.

Investment needs

Increased investment in skills, education and training are important for improving access to the labour market and employability, while fostering equal opportunities and active inclusion. The employment situation of low(er) skilled workers, (young) people with disabilities, people with a migrant background and third country nationals, asylum seekers and status holders, which remains challenging, points to the need to invest more in targeted active inclusion policies for those operating at the margin of the labour market and economically inactive people. Technical skills and qualified professionals are crucial for the Dutch economy's innovation capacity and productivity growth. This points to the need to invest more in training, to promote flexible upskilling and reskilling opportunities for

⁽⁵⁷⁾ According to the Benchmarking Framework on Skills conducted within the Social Policy Committee. For details, see the draft Joint Employment Report 2019, COM(2018) 761 final.

⁽⁵⁸⁾ ROA Rapport 'Leren onder werkenden met een kwetsbare positie op de arbeidsmarkt', 2018/5

4.4. COMPETITIVENESS REFORMS AND INVESTMENT

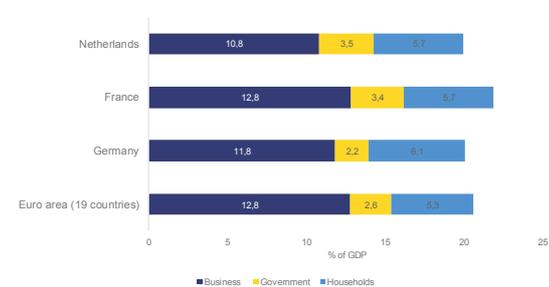
4.4.1. PRODUCTIVITY AND INVESTMENT NEEDS*

Investments in R&D, human capital and climate and energy are needed to boost productivity and to maintain a strong innovation capacity. While R&D investment intensity rose to 1.99% in 2017, it is still well below the 2.5% national target and the level of top performers. On productivity levels, the Netherlands is close to or at the frontier in many sectors. This implies that productivity growth should come from new innovations. A further increase in R&D investment, especially in the private sector, is needed for this to happen. Technical skills and qualified professionals are crucial for the Dutch economy's innovation capacity and productivity growth (see Section 4.3). The energy transition and reduction of greenhouse gas emissions requires substantial investments to support a more sustainable and resource efficient economic development. Annex D identifies key priorities for support by the European Regional Development Fund and the European Social Fund Plus over 2021-2027, building on the analysis of investment needs and challenges outlined in this report.

Investment and productivity

Investment is increasing but remains below pre-crisis peaks. The ratio of investment over GDP reached 20.5% in 2017, up from 17.5% in 2014, but still below pre-crisis peak levels. Despite the increase, private business investment remains relatively low, in particular in relation to corporate savings. Public investment rebounded slightly in 2017 to 3.4% of GDP. While this is significantly above the euro area average at 2.6% of GDP, it remains below pre-crisis levels (Graph 4.4.1). At the same time, the government is implementing an expansionary fiscal package including higher public investment in defence and infrastructure (Section 4.1).

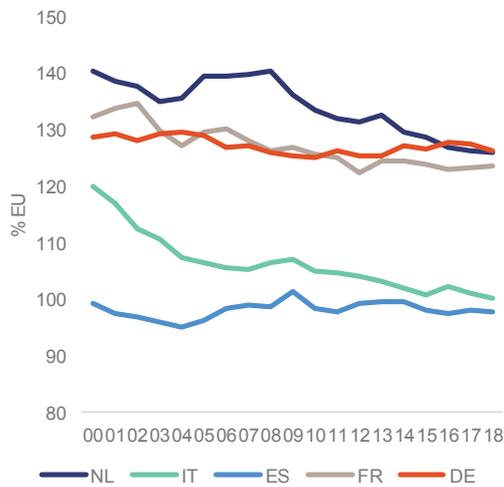
Graph 4.4.1: Investment share by sectors (2017)



Source: Eurostat

Although productivity growth slowed down more than in peer countries, the Dutch economy remains one of the most productive in the EU. Annual productivity growth has gone from 4% per year in the 1960s to less than 1% per year today. This trend is partly due to economic activity shifting to sectors that have traditionally had lower productivity growth, e.g. support services or education, health, and social work. For the last decade, it might also be explained by cyclical factors related to the impact of the global financial crisis. Other specific factors, such as labour hoarding, also affected productivity. The slowdown of productivity growth in the Netherlands was relatively pronounced. However, with hourly productivity 26% above the EU average, it still has one of the most productive economies in the EU (Graph 4.4.2). The Netherlands has appointed the CPB Netherlands Bureau for Economic Policy Analysis, as National Productivity Board in 2017. National Productivity Boards are mandated to investigate productivity challenges through neutral and independent analysis, contributing to evidence-based policymaking and domestic ownership of structural reforms.

Graph 4.4.2: Productivity level compared to EU average

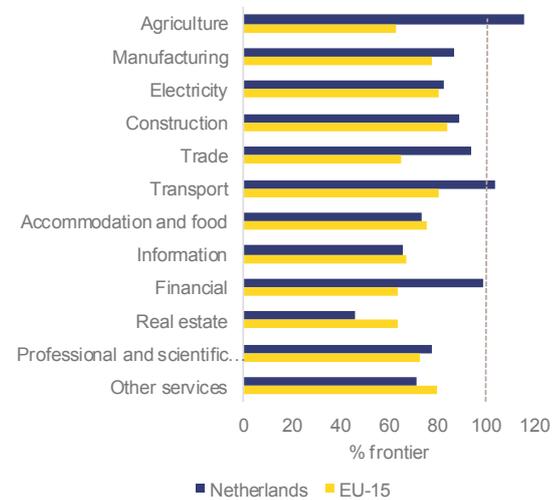


(1) Productivity is measured as GDP per hour worked in purchasing power standards.

Source: European Commission

At sectoral level, the Netherlands generally performs well and is among the top performers in agriculture and transport. In most other sectors, productivity is relatively close to the EU-15 average but below the top performers, suggesting potential scope for higher productivity growth (Graph 4.4.3). At corporate level, big firms performed better than small and medium size enterprises during and after the economic crisis. They also reported higher profitability. Recent OECD research and CompNet data suggest that laggard firms do not follow the pace of productivity growth of leading firms, which may imply that there is a hold-up in knowledge transmission. However, analysis on register data covering all Dutch firms does not find evidence of a divide in productivity growth between leading firms and laggard firms (CPB, 2018b).

Graph 4.4.3: Productivity by sector (2015)



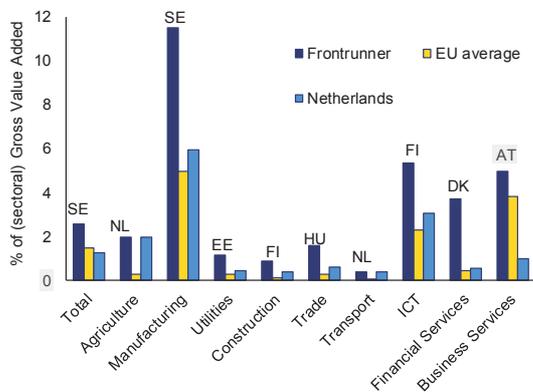
(1) Productivity is measured as value added in purchasing power standards per hour worked. The frontier is defined as the 90th percentile, separating the top 10% best performers.

Source: European Commission (EU KLEMS Database)

Investment in R&D

Despite the Netherlands being a top innovator, R&D expenditure remains below national targets. R&D intensity was 1.99% in 2017, lower than the national R&D target of 2.5% and below other top innovators. Private R&D expenditure is relatively low in high-tech manufacturing. Private R&D reached 1.17% of GDP in 2017, up from 0.79% in 2009, but below the EU average (1.3%) and top performers. This difference is usually explained by the structure of the Dutch economy, with a relatively small R&D intensive manufacturing sector and a relatively large service sector. A sectoral analysis of business expenditure on R&D shows that the Netherlands is the European leader in sectors such as agriculture and transport. However, in other sectors such as ICT or manufacturing (e.g. pharma and hardware, including computer and optic instruments), the country trails significantly behind the frontrunners (Graph 4.4.4). When considering intangibles in general the Netherlands is one of the largest investors in the EU. This explains its high ranking in international benchmarks (such as the European Innovation Scoreboard).

Graph 4.4.4: Business expenditure on R&D, 2015



Source: Ecorys, 2018

Leveraging further private investment is needed to meet the 2.5% of GDP target. According to analysis by the Rathenau Institute, total R&D expenditure needs to increase by EUR 5.8 billion between 2016 and 2020 to reach the national target (Vennekens and De Jonge, 2018). Looking ahead, the government is seeking to use public R&D investment to bolster private R&D via public-private partnerships. A potential policy lever to achieve higher public and private investment may come from the Dutch enterprise policy and the new mission-driven innovation policy. The latter focuses on maximising the economic opportunities that accrue from societal challenges through public-private partnerships in certain top sectors.

Further innovation and investment in R&D are needed to achieve the long-term targets of climate policy and the energy transition. The draft Climate Agreement recognises that forward-looking research and innovation are necessary to enable the achievement of the 2030 targets for emission reduction and create the basis for the realisation of the 2050 ambitions. The new mission-driven innovation policy will support an agenda for climate and energy whereby public investments in R&D needs to be tuned with private resources. Eco-innovation and innovative technologies would lead to necessary cost reductions for environmental improvements and competitive business development.

The composition of innovation support mechanisms may need to be examined. Effectively supporting private R&D investment

requires the right mix between direct and indirect government instruments. The Act for the Stimulation of Research & Development (*Wet Bevordering Speur- & Ontwikkelingswerk*) is an R&D tax credit that lowers the wage costs of R&D employees and other R&D costs, while the ‘innovation box’ provides a tax break on corporate profits from innovative activities. In 2018 these indirect instruments amounted to EUR 1.2 billion (0.2% of GDP) and EUR 1.5 billion (0.2% of GDP) respectively. In 2016, direct subsidies to private R&D amounted to just EUR 137 million, limiting the direct steering capacity of the government. In addition, while tax benefits based on the wages of researchers appear to be a more effective tool to boost R&D, especially among SMEs, the effectiveness of the innovation box remains limited (European Commission 2015a, Dumont 2017, CPB 2018a, Alstadsæter et al. 2015).

Regional innovation strategies for smart specialisation⁽⁵⁹⁾ strengthen innovation ecosystems thanks to concentrated investments based on regional needs and potential. Regional differences in R&D expenditure largely correspond to the relative concentration of R&D intensive large firms in some regions and the predominance of small firms, with relatively lower R&D expenditure, in other regions. Smart specialisation in the Netherlands concentrates investment in R&D and innovation on selected priorities, identified in four regional smart specialisation strategies covering the country, where the impact on competitiveness can be the greatest, and stimulates cooperation between research institutes and businesses, in particular small and medium size enterprises. This regional dimension of the innovation policy strengthens cooperation across stakeholders and across sectors and triggers targeted additional investments that complement national innovation policy based on particular regional strengths. The provinces, supported by the European Regional Development Fund, are the main public funding resource for

⁽⁵⁹⁾ Smart specialisation strategies aim to prioritise public research and innovation investments through a bottom-up approach for the economic transformation of regions, building on their strengths and competitive advantages and facilitating market opportunities in new inter-regional and European value chains (see also https://ec.europa.eu/regional_policy/sources/docoffic/2014/com_2017_376_2_en.pdf)

regional smart specialisation that leverage significant private funding. The four current strategies will be revisited in 2019 in parallel with further development of the national mission driven innovation policy.

Investment in climate and energy

Despite missing short-term targets, including that of the Europe 2020 strategy the Netherlands is expected to meet its national 2023 target of 16% renewable energy thanks to investments in off-shore wind farms. With a 6.0% renewable energy share in gross final energy consumption in 2016, the Netherlands missed its 2015-2016 indicative trajectory. With a renewable energy share growing to 6.6% in 2017, the Netherlands is expected to miss its target of 14% by 2020. One of the reasons is the slow progress on achieving a target of 6 gigawatt of onshore wind in 2020, with only 3.2 gigawatt achieved by the end of 2017. The national target of 16% renewable energy by 2023 is expected to be met, mainly due to the build out of offshore wind to almost 4.5 gigawatt by 2023 (from 1 gigawatt installed in 2017), with most wind farms coming online between 2020 and 2023. As part of the new climate programme, the Dutch government has already agreed on a further build out of offshore wind parks to more than 10 gigawatt by 2030. According to national projections submitted to the Commission and taking into account existing measures, the Netherlands will meet its 2020 target of reducing greenhouse gas emissions by 16% compared to 2005, with a margin of 10%.

For the longer term, the Dutch government has launched a process to establish a policy to reduce greenhouse gas emission by 49% in

2030, compared to 1990 levels. The government is currently drawing up sectoral plans for meeting its climate objective in collaboration with stakeholders and knowledge institutes, in order to conclude a "National Climate Agreement", a draft of which was presented in December 2018. The government has proposed a Climate Change Act as an overarching framework to help achieve the long-term goal of a -95% reduction in greenhouse gas emissions by 2050 compared to 1990. It has been adopted by the House of Representatives, but not yet by the Senate. Once completed, the National Climate Agreement and accompanying assessments will provide a strong basis for deciding on policy and investment priorities. In its National Energy and Climate Plan to be adopted by 31 December 2019 in line with the Regulation on the Governance of the Energy Union and Climate Action⁽⁶⁰⁾, the Netherlands will provide an overview of its investment needs until 2030 for the different dimensions of the Energy Union, including renewable energy, energy efficiency, security of supply, and climate mitigation and adaptation. The information provided, including in the draft plan submitted on 21 December 2018, will further contribute to the identification and assessment of energy and climate-related investment needs for the Netherlands.

⁽⁶⁰⁾ Regulation (EU) 2018/1999 of the European Parliament and of the Council of 11 December 2018 on the Governance of the Energy Union and Climate Action, amending Regulations (EC) No 663/2009 and (EC) No 715/2009 of the European Parliament and of the Council, Directives 94/22/EC, 98/70/EC, 2009/31/EC, 2009/73/EC, 2010/31/EU, 2012/27/EU and 2013/30/EU of the European Parliament and of the Council, Council Directives 2009/119/EC and (EU) 2015/652 and repealing Regulation (EU) No 525/2013 of the European Parliament and of the Council (Text with EEA relevance.)

Box 4.4.1: Circular economy

The Netherlands is in many cases leading by example and partnering up to push circularity in the EU. Circular (secondary) use of materials in the Netherlands stood at 29% of total material use in 2016, compared to an EU-28 average of 11.7%⁽¹⁾. Following the government's commitment to a greener economy and its good practice of over 200 'green deals'⁽²⁾ already with private sector and other organisations, a new green deal on circular procurement was signed by 50 public and private organisations and companies in June 2018, leading to EUR 100 million in 'green' purchasing power. Circularity is for example also applied in the area of medicine waste. The Royal Dutch Pharmacists Organisation has initiated medicine use monitoring and incentives for a new waste collection system in pharmacies. This should reduce the amount of unused medications ending up in the environment.

There are still a number of barriers to promoting innovation in the circular economy. The Netherlands ranks surprisingly low in the EU Eco-Innovation Index, with scores below the EU average for 4 out of 5 indicators: eco-innovation inputs, outputs, activities, and socio-economic outcomes (e.g. changes in employment, turnover or exports that can be related to eco-innovation activities). The country only scores (slightly) above the EU average on resource efficiency outcomes (material, water, energy productivity and greenhouse gas emissions intensity)⁽³⁾.

Investments in waste management are needed to meet the municipal waste recycling targets (up to 65% of all municipal waste). Moreover, projects that support a shift in recyclable waste away from incineration towards recycling should be prioritised as, recycling is more in line with the circular economy and is also higher up in the 'waste hierarchy'⁽⁴⁾ than incineration.

⁽¹⁾ Eurostat, Circular material use rate. This indicator measures the share of material recovered and fed back into the economy.

https://ec.europa.eu/eurostat/tgm/table.do?tab=table&init=1&language=en&pcode=cei_srm030&plugin=1

⁽²⁾ A *Green Deal* is a mutual agreement or covenant under private law which is closed between central government, a coalition of companies, civil society organizations and local and regional government, aimed at overcoming barriers to sustainable innovation. For further details see: <https://www.greendeals.nl/>

⁽³⁾ https://ec.europa.eu/environment/ecoap/netherlands_en

⁽⁴⁾ The EU's approach to waste management is based on the waste hierarchy (see <http://ec.europa.eu/environment/waste/index.htm>) which sets a priority order when shaping waste policy and managing waste: prevention, (preparing for) reuse, recycling, recovery and, as the least preferred option, disposal (which includes landfilling and incineration without energy recovery).

Investment needs to decarbonise the economy are substantial and differ per sector. The Netherlands Environmental Assessment Agency (PBL) analysed the additional annual investment needed to achieve the target for the reduction in greenhouse gas emissions (Koelemeijer et al., 2018). A significant reduction will be achieved through investments in renewable energy and energy efficiency. Six different scenarios have been explored. The most cost-effective scenario (which uses the cheapest options in all sectors to achieve the target) would require additional annual investments of EUR 2.2 billion per year. The most ambitious scenario (which includes additional investments up to 2030 to help the Netherlands achieve the target of a 95% reduction in emissions by 2050) would require EUR 4.1 billion per year. The electricity sector, whose emissions must be

reduced the most by 50%, would require additional investment of EUR 1.1 billion per year depending on the options chosen (solar power or offshore wind and scale of deployment). The industrial sector could need further investment of between EUR 0.9-1.6 billion per year depending on the scenarios - from the scaling up of recycling to a new infrastructure for carbon capture and storage to full electrification. The construction sector could make use of additional investment ranging from EUR 0.1-1.3 billion per year in insulation to reach its target of near-zero energy consumption buildings.

The Dutch government also uses fiscal instruments and minimum prices for CO₂ emissions. While the tax burden on labour is being reduced, taxation in the fields of energy,

environment and consumption is being increased. The government also aims to introduce a minimum price for CO₂ from electricity generation - a carbon price floor - starting at EUR 18 in 2020 and rising to EUR 43 by 2030 to supplement the price signal from the EU Emissions Trading System. Companies that produce electricity would be charged an additional levy based on the price difference between the EU allowances and the price floor. To better reflect CO₂ emissions, the energy tax on consumers will be recalibrated across energy products. The rate on natural gas will increase while the rate on electricity will fall.

Climate change is expected to increase flood risks and may warrant additional investment.

With more than 60% of the country vulnerable to flooding and 75% of the population living in those areas, the Netherlands has introduced new standards to respond to the challenges linked to climate change, urban development and economic growth (OECD, forthcoming). The Delta programme and other public initiatives have helped protect the country from flooding. However, climate change is expected to increase risks; in the absence of measures, potential damage can be sizeable (RPA, 2014).

Box 4.4.2: Investment challenges and reforms

Section 1. Macroeconomic perspective

In 2018 business and residential investment supported economic growth. The tight labour market and high capacity utilisation rate combined with the positive economic outlook, low capital cost and high profitability led to an increase in business investment. Total investment reached 20.5% of GDP in 2017, slightly above long term average but still some 2 percentage points below the pre-crisis peak level. This is largely explained by the dynamics in construction investment. Residential investment fell sharply during the economic recession and has not yet recovered entirely. The ratio of business investment to GDP edged up to 11.3% of GDP, while public investment stabilised at 3.5% of GDP.

Section 2. Assessment of barriers to investment and ongoing reform

Public administration/ Business environment	Regulatory/ administrative burden		Financial Sector / Taxation	Taxation	
	Public administration			Access to finance	
	Public procurement /PPPs		R&D&I	Cooperation btw academia, research and business	
	Judicial system			Financing of R&D&I	CSR
	Insolvency framework		Sector specific regulation	Business services / Regulated professions	
	Competition and regulatory framework			Retail	
Labour market/ Education	EPL & framework for labour contracts			Construction	
	Wages & wage setting			Digital Economy / Telecom	
	Education, skills, lifelong learning			Energy	
				Transport	

Legend:

	No barrier to investment identified		Some progress
CSR	Investment barriers that are also subject to a CSR		Substantial progress
	No progress		Fully addressed
	Limited progress		Not assessed yet

The Netherlands benefits from an investment-friendly institutional and political setting. Overall, there are very few genuine regulatory barriers to investments (see European Commission, 2015b and the Flash Eurobarometer 459: Investment in the EU Member States). The Netherlands qualifies as an “innovation leader” (European Innovation Scoreboard 2018), benefiting from an attractive research system and an innovation friendly environment. However, the level of R&D investment remains a weak point. While the Netherlands performs reasonably well in terms of public R&D investment, it underperforms on private investment compared to both the EU average and the top performers. The government has reaffirmed the intention to increase efforts to reach an R&D intensity of 2.5% of GDP. This will require extra investments from the government and private sector (see Section 4.4). According to the World Bank Ease of Doing Business indicators, some sectoral regulations, such as obtaining a building permit may be burdensome and hamper construction investments. On this indicator, the Netherlands fell from 76th to 84th position in 2018. In order to boost investment, the government announced that a new development and investment institution will be established: Invest-NL. The Netherlands Investment Agency will merge with Invest-NL. Invest-NL will provide risk capital: guarantees, subordinated loans and equity to project sponsors and enterprises if necessary. The government will be the sole shareholder, investing up to EUR 2.5 billion in Invest-NL.

4.4.2. SINGLE MARKET INTEGRATION

Connectivity

The Netherlands is one of the best performers in the area of connectivity. It has already achieved the Digital agenda 2020 targets and for the future the government has set even more

ambitious goals than the Gigabit Society Strategy objectives. Fixed broadband coverage and take-up are high (>99.5% and 98% respectively) and fourth generation mobile broadband is available to the entire population. Ultrafast broadband coverage is nearly complete (97%) with take-up at around one third of households. Mobile broadband take-up is relatively low (88 subscriptions per 100 people), possibly due to the wide availability of

WiFi networks. A fifth generation frequency auction is planned for 2019 or early 2020.

The Netherlands plays an important role in the Single Market and has particularly benefitted from the integration in the Single Market. It is also among the largest importers of goods in the EU, with Rotterdam as the largest port in the EU. In this position, the Netherlands play an important role in ensuring that non-compliant products do not enter the EU. However, according to the Dutch authorities, a lot of shipments that answer risk-based criteria for inspection are not inspected due to the high number of shipments entering through the port of Rotterdam in relation to the available workforce for inspection⁽⁶¹⁾.

Digitalisation

Dutch enterprises have stepped up their efforts to integrate digital technologies. The Knowledge and Innovation Agenda 2018-2021 opens up new topics (such as creative industries) and more cross-sectoral ones, while developing societal challenges and key technologies. The information and communications technologies agenda is instrumental in developing a more cross-sectoral approach and in fostering radical innovation. For 2018-2021, it recognises the strategic cross-sectoral impact of big data, cybersecurity, artificial intelligence, blockchain and fifth generation (European Commission, 2018d). In 2014-2017, the Smart Industry programme, the most important cross-cutting scheme for digitalisation of the manufacturing industry, created 35 field labs and 5 regional Smart Industry Hubs. An investment of EUR 163 million is put in place to help companies and knowledge institutes develop and test information and communications technologies applications. The Smart Industry Implementation Agenda 2018 – 2021 aims to further increase productivity, create new jobs and therefore help solve societal challenges such as reducing raw materials and energy consumption. Nonetheless, while small and medium size enterprises selling online have improved their turnover, the percentage exploiting the opportunities of e-commerce is still below the EU average (European Commission, 2018c). The government has repeatedly expressed its intention to strategically invest in digital technologies, including via

programmes funded or coordinated by the EU. For example, it is a member of the EuroHPC Joint Undertaking (developing supercomputers to process big data), it has the European Blockchain Partnership, and has signed the EU Declaration on Artificial Intelligence. In December 2018, pursuant to the EU eIDAS Regulation on electronic identification, authentication and signatures, the Netherlands notified its e-Identification scheme for businesses. This is a welcome first step, which is expected to be followed by the notification of an e-Identification for citizens.

4.4.3. INSTITUTIONAL QUALITY

Business environment

The Netherlands maintains a business-friendly environment. According to the World Economic Forum Global Competitiveness Index, the Netherlands ranked 6th out of 140 countries in 2018, just behind four non-EU countries and Germany. In comparison to other EU countries, its score is significantly high in infrastructure, innovation and business sophistication. The number of registered businesses has grown consistently in recent years. The number of new businesses created (including sole-proprietors) continued to increase reaching 130% of the 2012 level (OECD, 2018b). The number of bankruptcies has declined in recent years, and in 2017 reached 40% of the 2012 level. Nonetheless there is still room for improvement since its scores on *enforcing contracts* and *getting credit* are significantly below the euro area average (World Bank, 2018).

Public procurement

The public procurement system generally works well, but transparency and accountability could be improved. The Netherlands scores below the EU average on the publication rate of public tenders, which was 2.4% of GDP in 2015. Moreover, the level of direct awards is also relatively high (6%) compared to peer countries. It has doubled compared to 2016 when it was 2.9%. Direct awards prevent the benefits of competitive tendering being reaped in terms of choice of suppliers and price. The current contract register includes currently available information (contract notices and contract award

⁽⁶¹⁾ See <https://ec.europa.eu/docsroom/documents/32863>

notices). Its expansion to cover other aspects (e.g. contract completion, payment register) would greatly contribute to help improve the transparency and accountability of public procurement.

Cooperation between public buyers may improve expertise in public procurement. In February 2018, the Ministry of Economic Affairs and Climate (2018) released the ‘Better Public Procurement’ (*Beter Aanbesteden*). This aims to improve the procurement expertise of municipalities and government entities. One way to improve the expertise of public buyers is to enhance cooperation between them. In 2016, only 4% of procedures involved more than one buyer, one of the lowest levels in the EU. There are currently 50 municipal procurement partnerships varying from actual cooperative procurement to knowledge sharing.

Small and medium size enterprises still encounter many problems when bidding for public contracts. The Public Procurement Act (*Aanbestedingswet 2012*) provided legal tools to improve the participation of small and medium size enterprises. However, these firms still consider the requirements laid down in tendering procedures to be too high. This means that the new law helped improve access for them in the tender practice to a limited extent. For instance, the division of contracts into lots slightly increased compared to the situation before the Public Procurement Act became law (KWINK, 2015). However, the practice of clustering of contracts that are above the EU thresholds has not changed.

An ambitious digitalisation strategy could simplify procedures for the benefit of buyers and suppliers. The e-procurement services in the Netherlands are provided to contracting authorities by the market together with the government-run TenderNed system. However, there is no plan yet to connect the national databases to facilitate implementation of the ‘once-only’ principle. In particular, the European Single Procurement Document – a standard self-declaration form created by the Commission – is not linked to the national databases.

ANNEX A: OVERVIEW TABLE

Commitments	Summary assessment (1)
2018 country-specific recommendations (CSRs)	
<p>CSR 1: While respecting the medium-term objective, use fiscal and structural policies to raise public and private investment in research, development and innovation. Take measures to reduce the debt bias for households and the remaining distortions in the housing market, in particular by supporting the development of the private rental sector</p> <p>While respecting the medium-term objective, use fiscal and structural policies to raise public and private investment in research, development and innovation.</p> <p>Take measures to reduce the debt bias for households and the remaining distortions in the housing market, in particular by supporting the development of the private rental sector</p>	<p>Netherlands has made substantial progress in addressing CSR 1</p> <p>Substantial progress. The government is implementing a fiscal stimulus, which includes public investment, while respecting the medium-term objective. The announced increase in R&D expenditure in 2019 has been incorporated in the budget law. The R&D tax credit budget (WBSO) will also be increased from 2020 onwards, increasing the subsidy on R&D related costs. At the same time, a gap remains compared to the R&D target of 2.5% of GDP.</p> <p>Some progress. The announced acceleration of the reduction in mortgage interest deductibility has been adopted by Parliament and will take effect between 2020 and 2023. While this helps to address the debt bias for households, a substantial subsidy on debt-financed homeownership remains. The government also submitted a draft law to Parliament to increase supply in the mid-priced rental market (<i>Wet maatregelen middenhuur</i>).</p>
<p>CSR 2: Reduce the incentives to use temporary contracts and self-employed without employees, while promoting adequate social protection for the self-employed, and tackle bogus self-employment. Create conditions to promote higher wage growth, respecting the role of the social partners. Ensure that the second pillar of the pension system is more transparent, inter-generationally fairer and more resilient to shocks.</p> <p>Reduce the incentives to use temporary contracts and self-employed without employees, while promoting adequate social protection for the self-employed,</p>	<p>Netherlands has made limited progress in addressing CSR 2</p> <p>Limited progress. The draft bill <i>Wet Arbeidsmarkt in Balans</i> (sent to Parliament on 7 November 2018) contains a package of proposed measures to make it easier to hire permanent employees and to make flexible contracts less flexible. It should be seen as a first step in a broader process of labour market regulation reform measures and ongoing reflections</p>

<p>and tackle bogus self-employment.</p> <p>Create conditions to promote higher wage growth, respecting the role of the social partners.</p> <p>Ensure that the second pillar of the pension system is more transparent, inter-generationally fairer and more resilient to shocks.</p>	<p>on how to best tackle distinct institutional drivers properly. In addition, a committee of independent experts was set up to advise the government on how to regulate the labour market in the future taking into account the changing economy and society. It should present its report and findings at the latest by 1 November 2019. On possible initiatives for the self-employed without employees, the Minister informed Parliament on 26 November 2018 on the current state of play of ongoing reflections on possible social security coverage for sickness and disability of the self-employed. However, no concrete measures have been announced/adopted yet.</p> <p>No progress. Despite ongoing reflections and discussions on how to tackle bogus self-employment no concrete measures have been adopted or announced.</p> <p>Some progress. Wages in collective agreements increased on average by 2.1% in 2018. Public sector wages increased at a faster rate (by 3% in the second half of 2018), with wage agreements leading to a nominal increase of 7% in two years for all civil servants in central government. Additional funding has been provided to increase the salaries of primary school teachers. The government has taken tax measures that support higher disposable real incomes of households. Overall, wage growth is expected to increase further due to a further tightening labour market.</p> <p>Limited progress. Despite a shared understanding among stakeholders of the need for comprehensive pension reform, negotiations stalled in mid-November 2018. The government informed Parliament with a letter setting out the government initiatives to continue reforming the occupational pension system in early February 2019.</p>
<p>Europe 2020 (national targets and progress)</p>	
<p>Employment rate target set in the 2016 NRP: 80%.</p>	<p>The employment rate is on an upward trend, reaching 79.6% in Q3-2018. The Netherlands is on target to reach this goal by 2020.</p>
<p>R&D target set in the NRP: 2.5% of GDP</p>	<p>At 1.99% of GDP in 2017, a substantial increase both in private and public R&D is necessary to reach the target by 2020.</p>

	In 2017, R&D intensity in the Netherlands was composed of 59% private investment (1.17% of GDP) and 41% public investment (0.82% of GDP).
National greenhouse gas (GHG) emissions target: -16% in 2020 compared with 2005 (in sectors not included in the EU emissions trading scheme)	According to national projections, the Netherlands is expected to overachieve its greenhouse gas reduction target under the Effort Sharing Regulation of -16% by 10 pp compared to 2005.
2020 renewable energy target: 14%	Despite a strong increase in renewable energy from offshore wind farms, the target of 14% for renewable energy consumption in 2020 will not be met, with an expected share of 12.4% according to the national outlook. In 2016, the renewable energy share was 6%.
Energy efficiency, 2020 energy consumption targets: - 60.7 Mtoe in primary energy consumption - 52.2 Mtoe in final energy consumption	With an estimated absolute level of final energy consumption of 49.5 Mtoe, the Netherlands has already exceeded its target.
Early school/training leaving target: <8.0%.	After achieving the target in 2016, the percentage of early school leavers has been further reduced. In 2017, the percentage amounted to 7.1%.
Tertiary education target: >40% of population aged 30-34.	The rate was 47.9% in 2017, which is well above the national target and the EU average.
Target for reducing the number of people at risk of poverty or social exclusion: 100 000 thousands less people living in jobless household (compared to 2008)	The number of people in jobless households was 1 516 000 in 2017. This is 97 000 less than in 2008 (1 613 000). Thus the target has almost been reached.

(1) The following categories are used to assess progress in implementing the country-specific recommendations (CSRs):

No progress: The Member State has not credibly announced nor adopted any measures to address the CSR. This category covers a number of typical situations to be interpreted on a case by case basis taking into account country-specific conditions. They include the following:

- no legal, administrative, or budgetary measures have been announced in the national reform programme, in any other official communication to the national Parliament/relevant parliamentary committees or the European Commission, publicly (e.g. in a press statement or on the government's website);
- no non-legislative acts have been presented by the governing or legislative body;
- the Member State has taken initial steps in addressing the CSR, such as commissioning a study or setting up a study group to analyse possible measures to be taken (unless the CSR explicitly asks for orientations or exploratory actions). However, it has not proposed any clearly-specified measure(s) to address the CSR.

Limited progress: The Member State has:

- announced certain measures but these address the CSR only to a limited extent; and/or
- presented legislative acts in the governing or legislative body but these have not been adopted yet and substantial further, non-legislative work is needed before the CSR is implemented;
- presented non-legislative acts, but has not followed these up with the implementation needed to address the CSR.

Some progress: The Member State has adopted measures

- that partly address the CSR; and/or

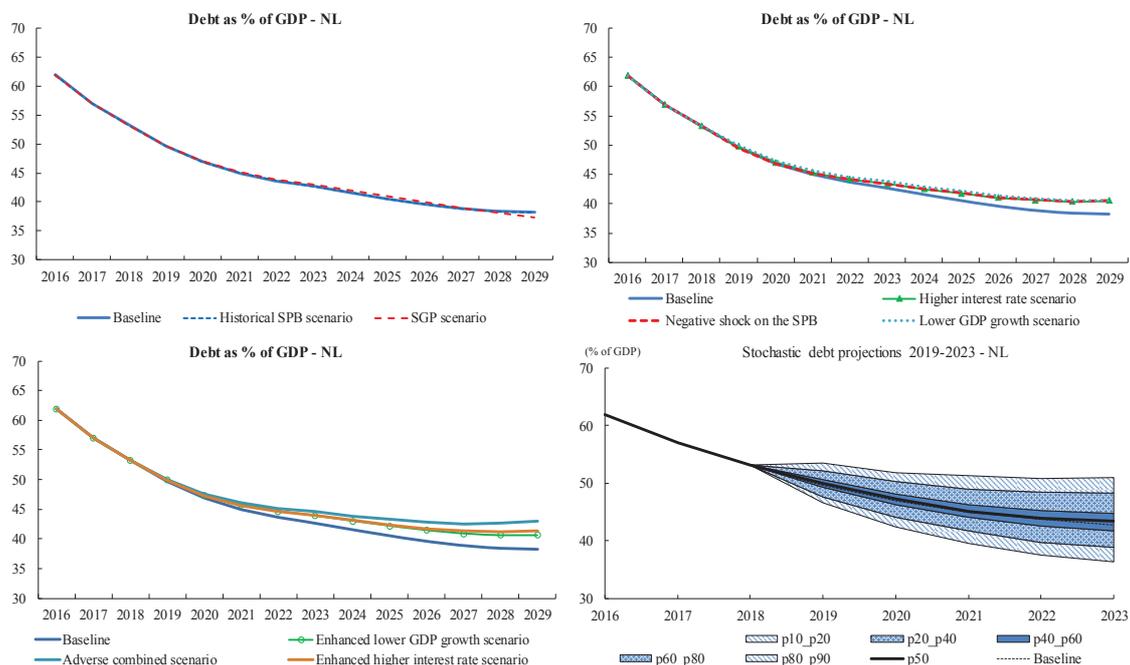
- that address the CSR, but a fair amount of work is still needed to fully address the CSR fully as only a few of the measures have been implemented. For instance, a measure or measures have been adopted by the national Parliament or by ministerial decision but no implementing decisions are in place.

Substantial progress: The Member State has adopted measures that go a long way towards addressing the CSR and most of them have been implemented.

Full implementation: The Member State has implemented all measures needed to address the CSR appropriately.

ANNEX B: COMMISSION DEBT SUSTAINABILITY ANALYSIS AND FISCAL RISKS

General Government debt projections under baseline, alternative scenarios and sensitivity tests													
NL - Debt projections baseline scenario	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Gross debt ratio	57.0	53.2	49.6	46.9	45.0	43.7	42.7	41.6	40.6	39.6	38.9	38.4	38.2
Changes in the ratio (-1+2+3) of which	-4.9	-3.7	-3.6	-2.8	-1.9	-1.3	-0.9	-1.1	-1.0	-1.0	-0.7	-0.5	-0.2
(1) Primary balance (1.1+1.2+1.3)	2.2	1.9	1.8	1.6	1.2	0.9	0.6	0.6	0.6	0.7	0.6	0.4	0.3
(1.1) Structural primary balance (1.1.1-1.1.2+1.1.3)	1.7	1.1	0.5	0.6	0.5	0.5	0.6	0.6	0.6	0.7	0.6	0.4	0.3
(1.1.1) Structural primary balance (bef. CoA)	1.7	1.1	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
(1.1.2) Cost of ageing					0.1	0.2	0.2	0.3	0.4	0.4	0.6	0.8	1.1
(1.1.3) Others (taxes and property incomes)					0.0	0.1	0.2	0.3	0.4	0.4	0.6	0.7	0.7
(1.2) Cyclical component	0.0	0.6	1.0	1.0	0.7	0.3	0.0						
(1.3) One-off and other temporary measures	0.4	0.1	0.3	0.0									
(2) Snowball effect (2.1+2.2+2.3)	-1.4	-1.8	-1.7	-1.1	-0.7	-0.5	-0.4	-0.5	-0.4	-0.3	-0.2	0.0	0.1
(2.1) Interest expenditure	1.0	0.8	0.7	0.7	0.7	0.7	0.7	0.8	0.9	0.9	1.0	1.1	1.2
(2.2) Growth effect	-1.7	-1.5	-1.2	-0.8	-0.5	-0.3	-0.3	-0.5	-0.5	-0.4	-0.4	-0.4	-0.4
(2.3) Inflation effect	-0.7	-1.1	-1.3	-1.0	-0.9	-0.9	-0.9	-0.8	-0.8	-0.8	-0.8	-0.8	-0.8
(3) Stock-flow adjustments	-1.3	0.0											



Short term	Medium term	S1	Debt sustainability analysis (detail)						DSA	S2	Long term
			Baseline	Historical SPB	Lower GDP growth	Higher interest rate	Negative shock on SPB	Stochastic projections			
LOW (S0 = 0.1)	LOW	LOW (S1 = -1.7)	LOW	LOW	LOW	LOW	LOW	LOW	MEDIUM (S2 = 3)	MEDIUM	
Risk category			LOW						LOW		
Debt level (2029)			38.2	38.2	40.6	40.5	40.5				
Debt peak year			2018	2018	2018	2018	2018				
Percentile rank			47.0%	47.0%							
Probability debt higher								5.5%			
Dif. between percentiles								14.7			

Note: For further information, see the European Commission Fiscal Sustainability Report (FSR) 2018.

[1] The first table presents the baseline no-fiscal policy change scenario projections. It shows the projected government debt dynamics and its decomposition between the primary balance, snowball effects and stock-flow adjustments. Snowball effects measure the net impact of the counteracting effects of interest rates, inflation, real GDP growth (and exchange rates in some countries). Stock-flow adjustments include differences in cash and accrual accounting, net accumulation of assets, as well as valuation and other residual effects.

[2] The charts present a series of sensitivity tests around the baseline scenario, as well as alternative policy scenarios, in particular: the historical structural primary balance (SPB) scenario (where the SPB is set at its historical average), the Stability and Growth Pact (SGP) scenario (where fiscal policy is assumed to evolve in line with the main provisions of the SGP), a higher interest rate scenario (+1 pp. compared to the baseline), a lower GDP growth scenario (-0.5 pp. compared to the baseline) and a negative shock on the SPB (calibrated on the basis of the forecasted change). An adverse combined scenario and enhanced sensitivity tests (on the interest rate and growth) are also included, as well as stochastic projections. Detailed information on the design of these projections can be found in the FSR 2018.

[3] The second table presents the overall fiscal risk classification over the short, medium and long-term.

a. For the short-term, the risk category (low/high) is based on the S0 indicator. S0 is an early-detection indicator of fiscal stress in the upcoming year, based on 25 fiscal and financial-competitiveness variables that have proven in the past to be leading indicators of fiscal stress. The critical threshold beyond which fiscal distress is signalled is 0.46.

b. For the medium-term, the risk category (low/medium/high) is based on the joint use of the S1 indicator and of the DSA results. The S1 indicator measures the fiscal adjustment required (cumulated over the 5 years following the forecast horizon and sustained thereafter) to bring the debt-to-GDP ratio to 60% by 2033. The critical values used are 0 and 2.5 pps. of GDP. The DSA classification is based on the results of 5 deterministic scenarios (baseline, historical SPB, higher interest rate, lower GDP growth and negative shock on the SPB scenarios) and the stochastic projections. Different criteria are used such as the projected debt level, the debt path, the realism of fiscal assumptions, the probability of debt stabilisation, and the size of uncertainties.

c. For the long-term, the risk category (low/medium/high) is based on the joint use of the S2 indicator and the DSA results. The S2 indicator measures the upfront and permanent fiscal adjustment required to stabilise the debt-to-GDP ratio over the infinite horizon, including the costs of ageing. The critical values used are 2 and 6 pps. of GDP. The DSA results are used to further qualify the long-term risk classification, in particular in cases when debt vulnerabilities are identified (a medium / high DSA risk category).

ANNEX C: STANDARD TABLES

Table C.1: **Financial market indicators**

	2013	2014	2015	2016	2017	2018
Total assets of the banking sector (% of GDP) ¹⁾	332.7	359.4	352.3	353.5	322.5	312.3
Share of assets of the five largest banks (% of total assets)	83.8	85.0	84.6	84.7	83.8	-
Foreign ownership of banking system (% of total assets) ²⁾	7.5	6.7	7.2	6.9	7.4	7.6
Financial soundness indicators: ²⁾						
- non-performing loans (% of total loans)	-	3.4	2.7	2.4	2.1	2.0
- capital adequacy ratio (%)	15.3	18.4	20.6	22.4	22.1	22.1
- return on equity (%) ³⁾	5.0	3.3	7.0	7.3	8.8	9.4
Bank loans to the private sector (year-on-year % change) ¹⁾	-1.1	1.1	-1.9	0.5	-2.0	-3.7
Lending for house purchase (year-on-year % change) ¹⁾	-0.1	1.3	5.4	3.5	3.3	-1.9
Loan to deposit ratio ²⁾	-	127.0	122.2	119.6	117.7	115.7
Central Bank liquidity as % of liabilities ¹⁾	-	0.6	0.7	0.8	1.5	1.4
Private debt (% of GDP)	254.9	268.1	264.2	262.1	252.1	-
Gross external debt (% of GDP) ²⁾ - public	38.0	40.6	37.6	32.5	25.5	23.1
- private	316.8	332.9	349.7	353.8	349.3	347.0
Long-term interest rate spread versus Bund (basis points)*	39.2	29.2	19.4	20.3	20.4	17.6
Credit default swap spreads for sovereign securities (5-year)*	49.0	28.2	16.1	23.4	17.9	9.6

1) Latest data Q3 2018. Includes not only banks but all monetary financial institutions excluding central banks.

2) Latest data Q2 2018.

3) As per ECB definition of gross non-performing debt instruments

4) Quarterly values are not annualised

* Measured in basis points.

Source: European Commission (long-term interest rates); World Bank (gross external debt); Eurostat (private debt); ECB (all other indicators).

Table C.2: **Headline Social Scoreboard indicators**

	2013	2014	2015	2016	2017	2018 ⁶
Equal opportunities and access to the labour market						
Early leavers from education and training (% of population aged 18-24)	9.3	8.7	8.2	8.0	7.1	:
Gender employment gap (pps)	10.5	11.4	11.1	11.0	10.5	10.2
Income inequality, measured as quintile share ratio (S80/S20)	3.6	3.8	3.8	3.9	4.0	:
At-risk-of-poverty or social exclusion rate ¹ (AROPE)	15.9	16.5	16.4	16.7	17.0	:
Young people neither in employment nor in education and training (% of population aged 15-24)	5.6	5.5	4.7	4.6	4.0	:
Dynamic labour markets and fair working conditions[†]						
Employment rate (20-64 years)	75.9	75.4	76.4	77.1	78.0	79.0
Unemployment rate ² (15-74 years)	7.3	7.4	6.9	6.0	4.9	3.8
Long-term unemployment rate ³ (as % of active population)	2.5	2.9	3.0	2.5	1.9	1.5
Gross disposable income of households in real terms per capita ⁴ (Index 2008=100)	97.8	98.9	100.1	101.5	102.0	:
Annual net earnings of a full-time single worker without children earning an average wage (levels in PPS, three-year average)	26958	27800	28570	28768	:	:
Annual net earnings of a full-time single worker without children earning an average wage (percentage change, real terms, three- year average)	0.2	0.9	1.4	1.2	:	:
Public support / Social protection and inclusion						
Impact of social transfers (excluding pensions) on poverty reduction ⁵	50.0	45.5	48.0	42.5	39.7	:
Children aged less than 3 years in formal childcare	46.0	44.6	46.4	53.0	61.6	:
Self-reported unmet need for medical care	0.4	0.5	0.1	0.2	0.1	:
Individuals who have basic or above basic overall digital skills (% of population aged 16-74)	:	:	72.0	77.0	79.0	:

1 People at risk of poverty or social exclusion (AROPE): individuals who are at risk of poverty (AROP) and/or suffering from severe material deprivation (SMD) and/or living in households with zero or very low work intensity (LWI).

2 Unemployed persons are all those who were not employed but had actively sought work and were ready to begin working immediately or within two weeks.

3 Long-term unemployed are people who have been unemployed for at least 12 months.

4 Gross disposable household income is defined in unadjusted terms, according to the draft Joint Employment Report 2019.

5 Reduction in percentage of the risk of poverty rate, due to social transfers (calculated comparing at-risk-of poverty rates before social transfers with those after transfers; pensions are not considered as social transfers in the calculation).

6 Average of first three quarters of 2018 for the employment rate, unemployment rate and gender employment gap. Data for unemployment rate is seasonally adjusted.

Source: European Commission

Table C.3: Labour market and education indicators

Labour market indicators	2013	2014	2015	2016	2017	2018 ⁴
Activity rate (15-64)	79.4	79.0	79.6	79.7	79.7	:
Employment in current job by duration						
<i>From 0 to 11 months</i>	11.5	11.9	13.0	13.9	14.6	:
<i>From 12 to 23 months</i>	8.2	7.6	7.7	8.4	9.2	:
<i>From 24 to 59 months</i>	16.0	15.6	14.8	14.4	14.7	:
<i>60 months or over</i>	63.0	63.6	63.0	61.8	60.0	:
Employment growth*						
(% change from previous year)	-1.2	-0.1	1.0	1.1	2.2	2.5
Employment rate of women (% of female population aged 20-64)	70.6	69.7	70.8	71.6	72.8	73.9
Employment rate of men	81.1	81.1	81.0	82.6	82.2	84.1

* Non-scoreboard indicator

1 Difference between the average gross hourly earnings of male paid employees and of female paid employees as a percentage of average gross hourly earnings of male paid employees. It is defined as "unadjusted", as it does not correct for the distribution of individual characteristics (and thus gives an overall picture of gender inequalities in terms of pay). All employees working in firms with ten or more employees, without restrictions for age and hours worked, are included

2 PISA (OECD) results for low achievement in mathematics for 15 year-olds.

3 Impact of socio-economic and cultural status on PISA (OECD) scores. Values for 2012 and 2015 refer respectively to mathematics and science.

4 Average of first three quarters of 2018. Data for youth unemployment rate is seasonally adjusted.

Source: European Commission, OECD

Table C.4: Social inclusion and health indicators

	2012	2013	2014	2015	2016	2017
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* Non-scoreboard indicator

1 At-risk-of-poverty rate (AROP): proportion of people with an equivalised disposable income below 60 % of the national equivalised median income.

2 Proportion of people who experience at least four of the following forms of deprivation: not being able to afford to i) pay their rent or utility bills, ii) keep their home adequately warm, iii) face unexpected expenses, iv) eat meat, fish or a protein equivalent every second day, v) enjoy a week of holiday away from home once a year, vi) have a car, vii) have a washing machine, viii) have a colour TV, or ix) have a telephone.

3 Percentage of total population living in overcrowded dwellings and exhibiting housing deprivation.

4 People living in households with very low work intensity: proportion of people aged 0-59 living in households where the adults (excluding dependent children) worked less than 20 % of their total work-time potential in the previous 12 months.

5 Ratio of the median individual gross pensions of people aged 65-74 relative to the median individual gross earnings of people aged 50-59.

6 Fixed broadband take up (33%), mobile broadband take up (22%), speed (33%) and affordability (11%), from the Digital Scoreboard.

Source: European Commission, OECD

Table C.5: Product market performance and policy indicators

Performance indicators	2012	2013	2014	2015	2016	2017
Labour productivity per person ¹ growth (t/t-1) in %						
Labour productivity growth in industry	0.40	2.98	-0.49	-1.69	0.50	1.33
Labour productivity growth in construction	-5.67	0.42	6.14	7.88	8.87	3.55
Labour productivity growth in market services	-0.28	1.33	1.50	0.49	0.36	0.39
Unit Labour Cost (ULC) index ² growth (t/t-1) in %						
ULC growth in industry	2.11	-0.60	3.99	0.89	1.82	0.32
ULC growth in construction	7.92	-1.97	-6.46	-8.70	-6.41	-1.88
ULC growth in market services	1.66	0.16	-1.05	-1.27	1.28	1.03
Business environment	2012	2013	2014	2015	2016	2017
Time needed to enforce contracts ³ (days)	514	514	514	514	514	514
Time needed to start a business ³ (days)	5.0	4.0	3.5	3.5	3.5	3.5
Outcome of applications by SMEs for bank loans ⁴	1.80	1.58	1.64	1.30	0.90	0.72
Research and innovation	2012	2013	2014	2015	2016	2017
R&D intensity	1.92	1.93	1.98	1.98	2.00	1.99
General government expenditure on education as % of GDP	5.50	5.40	5.40	5.30	5.30	:
Employed people with tertiary education and/or people employed in science and technology as % of total employment	46	47	47	48	48	48
Population having completed tertiary education ⁵	29	29	30	31	31	32
Young people with upper secondary education ⁶	79	78	79	80	81	82
Trade balance of high technology products as % of GDP	2.83	2.23	2.71	1.60	1.67	1.70
Product and service markets and competition				2003	2008	2013
OECD product market regulation (PMR) ⁷ , overall				1.49	0.96	0.92
OECD PMR ⁷ , retail				1.47	0.91	0.91
OECD PMR ⁷ , professional services				1.57	1.28	1.23
OECD PMR ⁷ , network industries ⁸				2.06	1.71	1.57

1 Value added in constant prices divided by the number of persons employed.

2 Compensation of employees in current prices divided by value added in constant prices.

3 The methodologies, including the assumptions, for this indicator are shown in detail here:

<http://www.doingbusiness.org/methodology>.

4 Average of the answer to question Q7B_a. "[Bank loan]: If you applied and tried to negotiate for this type of financing over the past six months, what was the outcome?". Answers were codified as follows: zero if received everything, one if received 75% and above, two if received below 75%, three if refused or rejected and treated as missing values if the application is still pending or don't know.

5 Percentage population aged 15-64 having completed tertiary education.

6 Percentage population aged 20-24 having attained at least upper secondary education.

7 Index: 0 = not regulated; 6 = most regulated. The methodologies of the OECD product market regulation indicators are shown in detail here: <http://www.oecd.org/competition/reform/indicatorsofproductmarketregulationhomepage.htm>

8 Aggregate OECD indicators of regulation in energy, transport and communications (ETCR).

Source: "European Commission; World Bank — Doing Business (for enforcing contracts and time to start a business); OECD (for the product market regulation indicators); SAFE (for outcome of SMEs' applications for bank loans)."

Table C.6: **Green growth**

Green growth performance		2012	2013	2014	2015	2016	2017
Macroeconomic							
Energy intensity	kgoe / €	0.13	0.12	0.12	0.11	0.11	0.11
Carbon intensity	kg / €	0.30	0.30	0.29	0.29	0.29	-
Resource intensity (reciprocal of resource productivity)	kg / €	0.28	0.26	0.27	0.28	0.24	0.24
Waste intensity	kg / €	0.19	-	0.20	-	0.21	-
Energy balance of trade	% GDP	-2.6	-1.4	-1.6	-1.1	-0.6	-0.7
Weighting of energy in HICP	%	11.28	11.66	11.69	9.77	9.36	8.67
Difference between energy price change and inflation	%	3.6	0.0	-1.5	-2.9	-5.6	0.4
Real unit of energy cost	% of value added	13.9	10.5	9.2	9.6	10.1	-
Ratio of environmental taxes to labour taxes	ratio	0.16	0.16	0.16	0.17	0.16	-
Environmental taxes	% GDP	3.2	3.3	3.3	3.3	3.4	3.3
Sectoral							
Industry energy intensity	kgoe / €	0.11	0.11	0.11	0.11	0.11	0.11
Real unit energy cost for manufacturing industry excl. refining	% of value added	25.3	19.4	16.1	17.2	18.3	-
Share of energy-intensive industries in the economy	% GDP	8.5	8.6	8.1	7.7	7.6	7.3
Electricity prices for medium-sized industrial users	€ / kWh	0.10	0.09	0.09	0.09	0.08	0.08
Gas prices for medium-sized industrial users	€ / kWh	0.04	0.04	0.04	0.04	0.03	0.03
Public R&D for energy	% GDP	0.02	0.02	0.01	0.02	0.01	0.02
Public R&D for environmental protection	% GDP	0.01	0.01	0.00	0.00	0.00	0.00
Municipal waste recycling rate	%	49.4	49.8	50.9	51.8	53.1	54.2
Share of GHG emissions covered by ETS*	%	39.9	44.6	47.6	48.0	48.1	-
Transport energy intensity	kgoe / €	0.55	0.54	0.51	0.52	0.53	0.53
Transport carbon intensity	kg / €	1.23	1.21	1.09	1.11	1.14	-
Security of energy supply							
Energy import dependency	%	30.6	23.7	30.9	48.4	45.9	51.8
Aggregated supplier concentration index	HHI	15.8	15.3	17.0	21.0	25.6	-
Diversification of energy mix	HHI	0.34	0.34	0.33	0.32	0.33	0.34

All macro intensity indicators are expressed as a ratio of a physical quantity to GDP (in 2010 prices)

Energy intensity: gross inland energy consumption (in kgoe) divided by GDP (in EUR)

Carbon intensity: greenhouse gas emissions (in kg CO₂ equivalents) divided by GDP (in EUR)

Resource intensity: domestic material consumption (in kg) divided by GDP (in EUR)

Waste intensity: waste (in kg) divided by GDP (in EUR)

Energy balance of trade: the balance of energy exports and imports, expressed as % of GDP

Weighting of energy in HICP: the proportion of 'energy' items in the consumption basket used for the construction of the HICP

Difference between energy price change and inflation: energy component of HICP, and total HICP inflation (annual % change)

Real unit energy cost: real energy costs as % of total value added for the economy

Industry energy intensity: final energy consumption of industry (in kgoe) divided by gross value added of industry (in 2010 EUR)

Real unit energy costs for manufacturing industry excluding refining: real costs as % of value added for manufacturing sectors

Share of energy-intensive industries in the economy: share of gross value added of the energy-intensive industries in GDP

Electricity and gas prices for medium-sized industrial users: consumption band 500–20 000 MWh and 10 000–100 000 GJ; figures excl. VAT.

Recycling rate of municipal waste: ratio of recycled and composted municipal waste to total municipal waste

Public R&D for energy or for the environment: government spending on R&D for these categories as % of GDP

Proportion of GHG emissions covered by EU emissions trading system (ETS) (excluding aviation): based on GHG emissions (excl. land use, land use change and forestry) as reported by Member States to the European Environment Agency.

Transport energy intensity: final energy consumption of transport activity (kgoe) divided by transport industry gross value added (in 2010 EUR)

Transport carbon intensity: GHG emissions in transport activity divided by gross value added of the transport industry

Energy import dependency: net energy imports divided by gross inland energy consumption incl. consumption of international bunker fuels

Aggregated supplier concentration index: covers oil, gas and coal. Smaller values indicate larger diversification and hence lower risk.

Diversification of the energy mix: Herfindahl index covering natural gas, total petrol products, nuclear heat, renewable energies and solid fuels

* European Commission and European Environment Agency

Source: European Commission and European Environment Agency (Share of GHG emissions covered by ETS); European Commission (Environmental taxes over labour taxes and GDP); Eurostat (all other indicators)

ANNEX D: INVESTMENT GUIDANCE ON COHESION POLICY FUNDING 2021-2027 FOR THE NETHERLANDS

Building on the Commission proposal for the next Multi-Annual Financial Framework for the period 2021-2027 of 2 May 2018 (COM (2018) 321), this Annex presents the preliminary Commission services views on priority investment areas and framework conditions for effective delivery for the 2021-2027 Cohesion Policy. These priority investment areas are derived from the broader context of investment bottlenecks, investment needs and regional disparities assessed in the report. This Annex⁽⁶²⁾ provides the basis for a dialogue between the Netherlands and the Commission services in view of the programming of the cohesion policy funds (European Regional Development Fund and European Social Fund Plus).

Policy Objective 1: A Smarter Europe – Innovative and smart industrial transformation

Even though the Netherlands ranks high in terms of innovation and competitiveness indices, expenditure on research and development relative to gross domestic product remains below national targets, with private expenditure on research and development below the EU average. High priority investment needs⁽⁶³⁾ have been identified to **enhance research and innovation capacities and the uptake of advanced technologies**, within the framework of regional smart specialisation strategies that identify priority areas based on regional needs and potential, and in particular to:

- develop and utilise the innovation eco-system and stimulate market oriented cooperation between business and research centres in order to increase business investment in research and innovation, in particular in small and medium-sized enterprises;
- stimulate interregional cooperation in new value chains, also with other Member States;
- strengthen investment in developing new processes, products and services;
- support the development of campuses and living labs with participation of small and medium-sized enterprises;
- address skills challenges for smart specialisation and the innovation capacity of small and medium-sized enterprises, linked in an integrated manner to investments in the above areas.

Such investments could also help address the important challenges that the Netherlands faces related to the energy and climate transition and the circular economy.

Policy Objective 4: A more social Europe – Implementing the European Pillar of Social Rights

The employment situation of low(er) skilled workers, (young) people with disabilities, people with a migrant background and third country nationals, asylum seekers and status holders remains challenging, while some groups face an increased risk of (in-work) poverty. High priority investment needs have therefore been identified to **improve access to employment for those operating at the margins of the labour market and of inactive people**, to **foster active inclusion and improve employability** and to **promote the socio-economic integration of third country nationals** in particular to:

- develop active and preventive labour market measures as well as integrated active inclusion policies in cooperation with various actors providing for integrated pathways and targeted individualised support; on-the-job training; and access to mainstream services;

⁽⁶²⁾ This Annex is to be considered in conjunction with the EC Proposal for a Regulation of the European Parliament and of the Council on the European Regional Development Fund and on the Cohesion Fund COM(2018) 372 and the EC Proposal for a Regulation of the European Parliament and of the Council on the European Social Fund Plus COM(2018) 382, in particular as regards the requirements for thematic concentration and urban earmarking outlined in these proposals.

⁽⁶³⁾ The intensity of needs is classified in three categories in a descending order – high priority needs, priority needs, needs.

- increase registration with employment services of non-registered unemployed, (young) people with disabilities, people with a migrant background and inactive persons;
- support advocacy and awareness measures to improve hiring practices of the employers, to fight discrimination and overcome prejudices, in particular against people with migrant background and third-country nationals;
- support measures providing access to integrated social services for third-country nationals.

Ensuring basic skills and adapting to new skills requirements pose considerable challenges. High priority investment needs have therefore been identified to **promote lifelong learning, flexible upskilling and reskilling, taking into account digital skills, better anticipating change and new skills requirements, facilitate career transitions and promote professional mobility**, and in particular to:

- implement comprehensive lifelong learning strategies in cooperation with social partners, civil society, employers and other relevant stakeholders;
- implement schemes to incentivise investment in training by employers, promoting workplace learning and career progression or supporting workers' professional mobility to another employer /sector;
- upgrade the basic skills of those at the margins of the labour market and create new opportunities to capitalise on their existing knowledge and skills;
- support innovative actions and experimentation aimed at better anticipating change and new (digital) skills requirements, and facilitating career transitions and professional mobility.

Policy Objective 5 – A Europe closer to citizens by fostering the sustainable and integrated development of urban, rural and coastal areas and local initiatives

Large Dutch cities face important challenges with regard to employment, poverty and social inclusion. Cities are also drivers of innovation and economic development, but face important societal challenges such as the transition to a low-carbon and circular economy. Therefore, investment needs have been identified to **foster integrated social, economic and environmental development in urban areas**, and in particular to:

- support the regeneration of deprived urban neighbourhoods in an integrated manner, including those with important integration challenges for their migrant population, by promoting business incubators and investment support for micro-enterprises and business/job creation and social innovation, supporting equipment and infrastructure upgrades aimed at re/upskilling people in order to secure their life-long learning, employability and adaptation to labour market changes and to integrate them into the workforce, and addressing the complex and interlinked needs of people, notably in the fields of skills and employment;
- strengthen investment by cities in research and innovation, in cooperation with all stakeholders; promote social innovation and demonstration or test projects in support of the low-carbon agenda and the transition to a circular economy;
- promote cooperation in these areas between cities, also across borders.

Factors for effective delivery of Cohesion policy
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Broader use of financial instruments and/or contributions to a compartment for the Netherlands under InvestEU for revenue-generating and cost-saving activities.
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Strong support and involvement of social partners, local authorities and other public bodies and stakeholders are essential for effective implementation.

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