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**Country Report The Netherlands 2017
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 COUNCIL, THE EUROPEAN CENTRAL BANK AND THE
EUROGROUP**

**2017 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**

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EXECUTIVE SUMMARY

This report assesses the economy of the Netherlands in the light of the European Commission's Annual Growth Survey published on 16 November 2016. In the survey the Commission calls on EU Member States to redouble their efforts on the three elements of the virtuous triangle of economic policy – boosting investment, pursuing structural reforms and ensuring responsible fiscal policies. In so doing, Member States should focus on enhancing social fairness in order to deliver more inclusive growth. At the same time, the Commission published the Alert Mechanism Report (AMR) that initiated the sixth round of the macroeconomic imbalance procedure. The in-depth review, which the 2017 AMR concluded should be undertaken for the economy, is presented in this report.

The economy is experiencing a steady expansion, after a longer period of declining and relatively slow growth. In 2012 and 2013, in particular private consumption declined alongside fixed investment, aggravated by the pronounced downturn in the housing market. Since 2014 the housing market has improved leading to a relatively sharp rise in transactions and prices, driving up household investment. In 2015 and 2016 the economic recovery accelerated based on strong investment activity and with private consumption increasingly contributing to economic growth.

Looking ahead, a growth rate of close to 2 % is expected, slightly above estimated potential growth rates. The European Commission winter 2017 forecast projects economic growth by 2.0 % in 2017 and 1.8 % in 2018, reflecting the continued strong performance of the domestic economy, including employment and wages growth. This growth is being driven entirely by domestic demand. Net exports, on the other hand, are expected to contribute slightly negatively to GDP growth given the increased external uncertainties.

In particular, housing investment has rebounded sharply in recent years. The weakness in economy-wide investment appears to have a strong cyclical character, and has been driven by a sharp decline in investment in housing. Public investment has also fallen, following substantial fiscal consolidation. While barriers to investment seem to be minor, procedures to obtain

building permits are relatively lengthy. Low investment in renewable energy could be linked to past market dynamics, market uncertainty and regulatory factors, even though some steps have been taken in the field of energy to counteract this.

Rising house prices are boosting household assets, but may also provide the basis for a build-up of more imbalances. Fuelled by low interest rates, an upward trend is visible in house prices, transaction volumes and housing investment. Rising house prices may cause positive wealth effects for household spending and investment, and will progressively lift affected households out of negative housing equity ('underwater mortgages'), thereby reducing their financial losses in the event of a forced home sale. Nevertheless, nominal debt levels have started to grow again as the volume of transactions and prices have increased. In view of this, the European Systemic Risk Board has issued a warning, as some city centre housing markets show signs of overheating.

Labour market conditions have been improving, but there are signs of labour market segmentation. Employment growth has increased, and the rate of unemployment is on a downward trend (falling to 5.4 % in December 2016). Nevertheless, there are signs of labour market segmentation as job creation is largely based on temporary contracts. The total number of permanent contracts has only increased marginally in recent years, while the wage premium for permanent contracts is high by international standards. In 2015, wage growth was outpaced by moderate productivity gains, resulting in a small decline in the nominal unit labour cost. However, robust wage growth is expected to drive unit labour costs up in the short term.

Public finances weathered the crisis well, but challenges remain. The Netherlands corrected its excessive government deficit in 2013. For 2017 a small budget surplus is forecast. However, challenges remain, in particular the quality of public expenditure. Public investment levels fell by almost 1 pp. of GDP between 2009 and 2015, and a turnaround is not yet projected. Public R&D investment and expenditure on education is low compared to the top performers. Although heavily debated, plans for an ambitious reform of the tax system have not been put into action, aside from a

substantial tax cut lowering the tax wedge on labour implemented in 2016 (EUR 5 billion, 0.7 % of GDP). Some features of the taxation system remain sensitive to international initiatives in the fight against tax avoidance. Lastly, despite the recent long-term care reform, public expenditure in this sector is still expected to increase relatively fast compared to other EU member states, indicating a possible challenge to fiscal sustainability.

Overall, the Netherlands has made limited progress in addressing the 2016 country-specific recommendations (CSR). With regard to the fiscal-structural part of CSR 1, no progress has been made in increasing public and private R&D expenditure. Regarding CSR 2, the Netherlands has made no progress in facilitating the transition to permanent employment contracts. While no specific measures were taken to reduce distortive tax incentives favouring self-employment or to increase the social protection coverage for self-employed, limited progress has been made in reducing incentives for the use of self-employed without employees. Similarly, the Netherlands has made limited progress on CSR 3. The government announced a general ambition to reform the second pillar pension system and currently different reform paths are being discussed, but tangible measures have been left for the next government term. No further measures have been taken to speed up the reduction in distortive tax incentives on the owner-occupied housing market.

Regarding progress in reaching the national targets under the Europe 2020 Strategy (see also Annex A), the Netherlands is performing well on employment, greenhouse gas emissions, energy efficiency, early school leaving, and tertiary education attainment, while more effort is needed on R&D investment, renewable energy and reducing poverty.

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

- **Housing market institutions have contributed to high household debt levels and inefficiencies remain.** Owner-occupancy rates are high and have been encouraged by the generous tax deductibility of mortgage interest payments. Before the crisis, interest-only

mortgages and very high loan-to-value ratios drove up household indebtedness to around 120 % of GDP in 2009. Although receding gradually, the household debt to GDP ratio is still twice the euro area average. The mortgage interest deductibility is reduced progressively, but the effective subsidy to debt-financed homeownership remains substantial. In conjunction with more stringent mortgage lending guidelines, the reforms, effective since 2013 may nonetheless limit the build-up of mortgage debt as the housing market recovers. Moreover, the social housing and rent-controlled sector is relatively large compared to other EU Member States. The combined problems of social tenants with income above the qualifying threshold (*scheefhuurders*) and the scarcity of social housing cause long waiting lists, while this is tackled only slowly. Moreover, the financial attractiveness of owner-occupancy and social housing partly accounts for the underdeveloped private rental market.

- **The current account continues to show a marked surplus.** The Netherlands has had a current-account surplus for the last 30 years. Its high level is mostly accounted for by the non-financial corporate sector. A comparably large savings surplus in the non-financial corporate sector is rooted in relatively high investment income and low levels of profit distribution of multinational enterprises. After the crisis, household deleveraging together with fiscal consolidation increased the current account surplus to a peak of 10.3% of GDP in 2012. The recent decline to 8.7% in 2015 was largely driven by lower receipts from foreign corporate participations. The autumn forecast projects a further gradual decline in the current account balance, following robust growth in domestic demand. An additional increase in domestic demand would lower the trade surplus and would also be passed on to the euro area through moderate spillover effects as about one third of imports into the Netherlands are sourced from other euro area countries.
- **The large second pillar pension system plays a central role in shaping household finances, especially in combination with high mortgage debt.** While the pension system

performs well in terms of quality and adequacy, it has drawbacks in terms of intergenerational fairness, transparency and flexibility. Second pillar pension contributions are high and fluctuate with financial market performance and may affect households' spending in a pro-cyclical manner. Moreover, risks seem to weigh disproportionately on the young age groups, as lower indexation and higher pension contributions seem to be the primary ways of adjusting. Importantly, households combine substantial housing and pension wealth with high mortgage debt, but the former are highly illiquid and unevenly distributed across generations. This makes households vulnerable to economic shocks and accentuates the pro-cyclical dynamics of household finances.

- **Pension funds hold the largest share of household savings, and invest mainly in securities and mostly abroad.** Total assets held by pension funds have increased substantially over the last 10 years, from 117 % of GDP in 2005 to 185 % of GDP in 2015.

Other key economic issues analysed in this report which point to particular challenges facing the Netherlands' economy are as follows:

- **The total tax and non-tax burden on labour is high.** This can create disincentives to work, especially for the low-skilled and second earners. The tax wedge is average, but compulsory non-tax payments such as pension contributions and healthcare premiums drive up the total burden of labour. This substantial collective redistribution may be equitable, but could also give rise to other inefficiencies, especially with respect to the aforementioned link between compulsory pension contributions and household finances.
- **The labour market is continuing to recover and is performing well overall, although long-term unemployment and the potential segmentation of the labour market remain a concern.** Total employment rose steadily and the unemployment rate continued to fall in 2016. However, long-term unemployment is high among older workers. Employment gains are largely concentrated in temporary contracts and self-employment. A high permanent wage premium combined with low transition rates from temporary to permanent contracts point to potentially segmented labour markets. Self-employed workers are more often under-insured against disability, unemployment and old age, which could affect the sustainability of the social security system in the long run. People born outside the EU face significant challenges, as their employment rate lags behind that of those born in the Netherlands.
- **Growth friendly public expenditures are lower than that of top performers, hampering the development of a more innovation-intensive economy.** The well-performing education system and scientific base of the Netherlands, which is marked an 'innovation leader', provides a sound basis for boosting innovation and growth capacity via education and R&D activities. Nevertheless, spending on education is substantially below that of top performers such as the Nordic countries, and the public R&D intensity is set to decline. Higher public expenditure on growth-friendly areas such as R&D and education has the potential to unlock investment in knowledge-based capital, including private R&D, and improve long-term growth potential.
- **The Netherlands is on track in reducing its CO₂-emissions, but the share of renewable energy production is still low by international standards.** Despite a slight increase and successful tenders for off-shore wind (see Box 4.5.1), the Netherlands had a comparatively low renewable energy share of 5.5 % in 2014, missing the interim target of 5.9 %. Furthermore, it is expected to miss its national target of 14 % by 2020, with the National Energy Outlook 2016 estimating a renewable energy share by 2020 of only 12.5 %. Relevant large-scale investments in the area are scheduled only for 2020-2023.

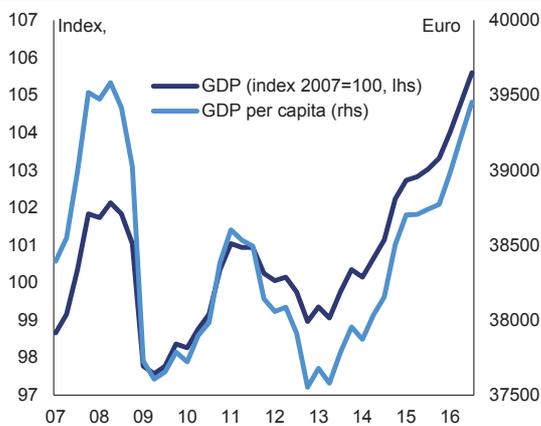
1. ECONOMIC SITUATION AND OUTLOOK

1.1. RECENT ECONOMIC DEVELOPMENTS

GDP growth

The economy is experiencing a period of steady growth. Economic growth is expected to have accelerated to 2.1 % in 2016, according to the European Commission winter 2017 forecast. The economic recovery in 2014 and 2015 was driven by a sharp rise in investment activity, following an increase in housing prices and transaction volumes leading to double digit annual growth in investment in housing. More recently, economic activity broadened with private consumption contributing significantly to economic growth as well. By the end of 2016, the total volume of GDP was substantially above the pre-crisis peak level and roughly at the pre-crisis peak level in per capita terms (Graph 1.1). In line with improved cyclical conditions, productivity growth (GDP per hour worked) increased slightly from very low levels to 1.5 % in 2015.

Graph 1.1: GDP and GDP per capita (2007-2016Q3)

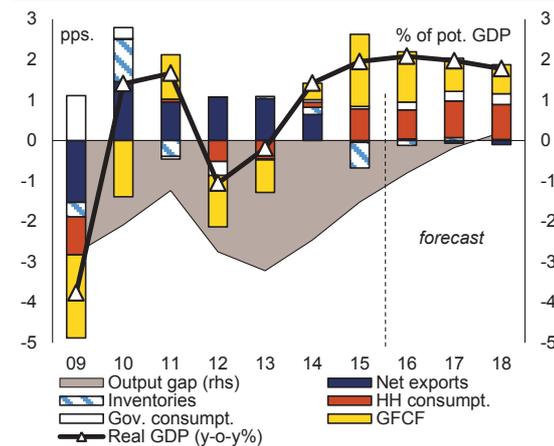


Source: European Commission (Eurostat)

Private consumption is expected to be the main driver of economic growth as the economic cycle matures. Real GDP is projected to increase on average by roughly 2 % per year between 2016 and 2018, according to the European Commission winter 2017 forecast. In line with the current phase of the economic cycle, domestic demand is expected to be the main driver of economic growth. In particular private consumption is expected to pick up as wage- and employment growth improve household disposable income. The

growth contribution from net exports is expected to be fairly limited given the relatively weak outlook for world markets and global uncertainties (Graph 1.2).

Graph 1.2: GDP growth and contributions

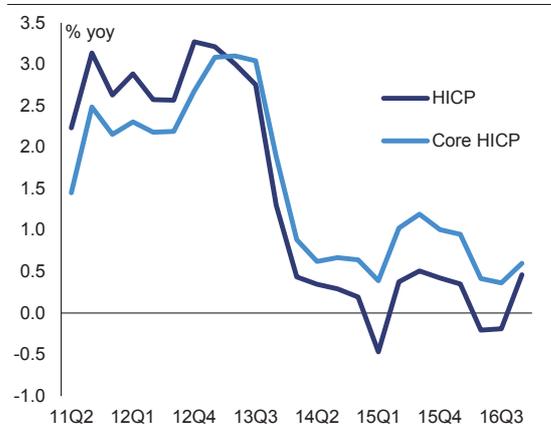


Source: European Commission, winter 2017 forecast

Inflation

Inflation has declined substantially compared to pre-crisis years, but is expected to pick up. Declining energy prices have had a negative impact on inflation for a couple of years in a row. Nevertheless, a relatively stable difference of 0.5 pps between headline and core inflation illustrates relatively small overall second-round effects (Graph 1.3). Looking ahead, inflation is expected to pick up based on higher energy prices and positive base effects.

Graph 1.3: HICP Inflation

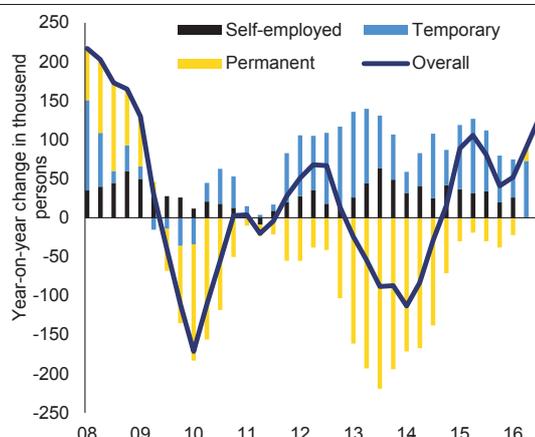


Source: European Commission (Eurostat)

Labour market

Job creation has gained momentum. The recent labour market recovery is reflected in a steadily declining unemployment rate (5.5 % in 2016Q4, down 1.2 pps from 2015Q4). Although the number of permanent contracts has increased somewhat, the increase in jobs is mainly attributable to flexible, temporary contracts (Graph 1.4). Job finding rates have started to pick up in 2015. As this concerned mostly those with unemployment spells of less than 12 months, long-term unemployment remained relatively high in 2015, in particular among older workers. Also youth unemployment is falling steadily, while it remains particularly high for people born in a non-EU country.

Graph 1.4: Employment by type (year-on-year changes)



Source: Statistics Netherlands

Social developments

Income inequality is relatively low, compared to the EU average, but wealth inequality is high. Although income inequality is low by international standards (according to the Eurostat Gini-coefficient or quintile income share ratio⁽¹⁾), wealth inequality is relatively high. Statistics Netherlands estimates a Gini coefficient of almost 0.9 in 2014 for the distribution of household wealth (including housing), which is roughly three times the Gini-coefficient for the distribution of disposable income. Also by international comparison, net wealth is relatively unequally distributed in the Netherlands (Carroll, Slacalek and Tukuoka, 2014). The unequal distribution of wealth seems to be driven by intergenerational differences. In 2014, almost 80 % of measured household wealth (including housing) belonged to households with a main income earner older than 50 years; 55 % of total wealth in 60+ households and more than 25 % of total household wealth belonged to the generation 70+. The age group 65-75 has an average net wealth of more than EUR 250 000, which is for a large part related to

(1) The Gini-coefficient is an indicator which measures the inequality of a income distribution. For incomes the coefficient is bounded by 0 (no inequality) and 1 (maximum inequality), for wealth the coefficient can take values above 1 as households may have negative net wealth. The income quintile share ratio measures the incomes of the richest 20 % of the population compared to the incomes of the poorest 20 %. For the Netherlands the Gini-coefficient for equivalised disposable income stood at 0.267 in 2015 compared to 0.310 for the EU-average, while the income quintile share ratio was 3.8 in 2015, compared to a ratio of 5.0 for the EU average.

the possession of a (nearly) debt-free house. It should be noted however that substantial parts of household wealth are not included in the standard household wealth statistics, such as pension wealth or savings in mortgage related financial products (*'kapitaal verzekering eigen woning'*). According to calculations by Caminada and Goudszwaard (2014) and by Kooiman and Lejour (2016), allocating pension wealth to the household wealth distribution would lead to a substantially lower Gini-coefficient, given that pension entitlements are relatively more equally distributed than financial or housing wealth. However, given the collective pension system and illiquidity, pension wealth is intrinsically different than individual financial wealth (Van Bavel, 2014).

Generational earnings mobility is average, compared with other European countries. The annual statistical observations above do not take mobility into account, which typically may matter. In the Netherlands, inequalities measured over a full life cycle tend to be lower than inequality measured at one point in time (Lever and Waaijers, 2012; De Beer, 2014). To better understand social developments, it is relevant to assess the income relationship between parents and offspring. A low intergenerational wage elasticity implies that personal income is determined by personal capacities; a high elasticity points to a high influence of the parent's income. Van den Brakel and Moonen (2013) estimated an intergenerational wage correlation of 0.27 for the Netherlands, which is somewhat larger than the available estimates for Scandinavian countries (below 0.2, Corak, 2006), but substantially smaller than the estimates for Anglo-Saxon countries (0.5 in the UK, *ibid.*).

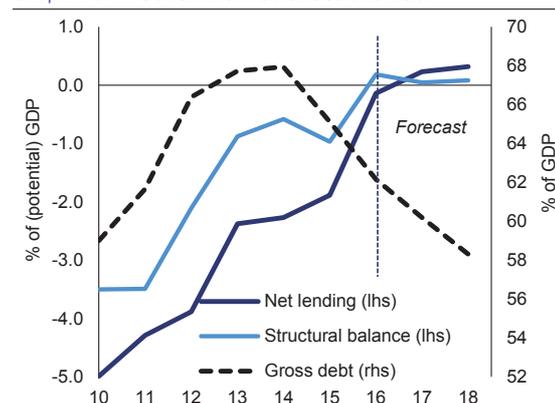
External position

The very large current account surplus is declining slowly. Following sluggish domestic demand and strong export performance, the current account surplus peaked above 10 % of GDP in 2013. Largely as a consequence of a declining primary income account, the current account surplus has declined to 8.7 % of GDP in 2015. The trade surplus is projected to decline only slowly in line with the projected increase in domestic demand as generally positive developments in price competitiveness are expected to continue to provide support to export growth (see section 4.4).

Public finances

Public finances are sound. The headline government deficit is set to fall from 1.9 % of GDP in 2015 to -0.1 % of GDP in 2016, as lower gas revenues and a tax stimulus are more than offset by strong endogenous increases in tax revenues, in particular corporate taxes. For 2017 and 2018 a small budget surplus is projected (Graph 1.5). As a result of the sustained improvement in the headline balance and stable GDP growth, the debt-to-GDP ratio is forecast to decrease from 62.2 % of GDP in 2016 to 58.3 % in 2018. The debt reduction also depends on further steps towards reprivatization of financial institutions.

Graph 1.5: Government balances and debt



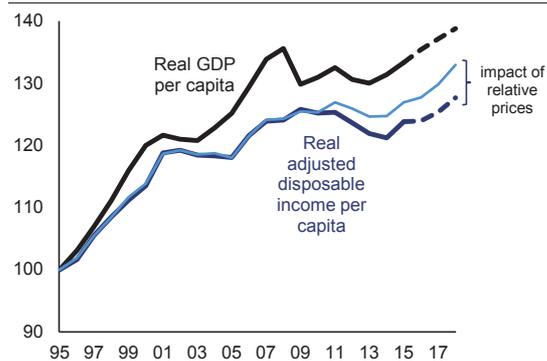
Source: European Commission, winter 2017 forecast

1.2. THE ECONOMY IN PERSPECTIVE

The recent recovery of domestic demand follows a long period of slow domestic demand growth and stagnating household income (Graph 1.6). Whereas GDP per capita increased sharply right before the crisis, this did not translate into an equal increase in household income (adjusted disposable income, which includes government transfers in kind such as education and healthcare). However, at the onset of the crisis, the household sector was protected against the immediate impact of the crisis. GDP per capita fell sharply in 2009, but household disposable income slightly increased as fiscal buffers absorbed the immediate impact of the crisis. In the aftermath of the 2009 recession, household disposable income

declined sharply in 2012 and 2013, while GDP per capita declined marginally. More recently, GDP per capita and disposable income have started to grow again.

Graph 1.6: **Real GDP and disposable income per capita (index 1995=100)**



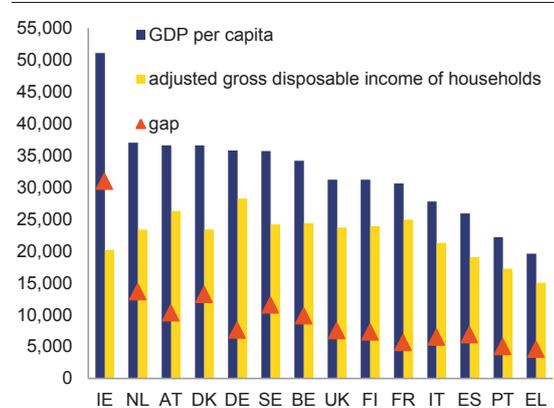
Adjusted disposable income includes income from economic activity and property income, social benefits in cash and social transfers in kind (goods and services such as healthcare, education and housing, received free of charge or at reduced prices). GDP is deflated with the GDP deflator and disposable household income is deflated with the price of actual individual consumption (and in the thin line with the GDP deflator to illustrate the impact of relative price developments).

Source: European Commission (Eurostat)

A larger corporate sector share, increasing pension and healthcare contributions and different price developments explain a gap between GDP and household disposable income growth. The central bank (DNB, 2013) points to an increasing corporate sector income share, and higher pension- and healthcare contributions as main drivers behind an increasing gap between GDP and household incomes. Also different price developments play a role. Prices of healthcare and other consumption goods tend to increase faster than the price of investment goods, such as ICT. The thin line in Graph 1.6 shows household income corrected for price differences. ⁽²⁾

⁽²⁾ A recent OECD study places these developments in international perspective and conclude that differences between growth in GDP and household disposable income could be related to different developments in prices faced by producers versus prices faced by consumers and a rising profit share of corporations (OECD 2016d).

Graph 1.7: **GDP per capita and household disposable income (2015)**



Adjusted gross disposable income includes individual government expenditure (such as government expenditure on healthcare or education). Income gap is the nominal difference between GDP per capita and adjusted household income per capita. International comparison based on purchasing power standards (pps).

Source: European Commission (Eurostat)

The size of the gap between GDP per capita and household disposable income is relatively large.

A gap between household disposable income and GDP per capita occurs in many countries, and is usual as households are only one sector in the economy, next to the corporate sector and the government sector. Graph 1.7 shows the difference between GDP and household income for the EU 15 countries in per capita terms. This difference is relatively large in the Netherlands. It indicates a larger share in value added of other institutional sectors and substantial taxation and compulsory saving. Moreover, the graph implies that the material living standard of households in western European countries, measured in purchasing power standards, is more comparable than GDP per capita numbers suggest.

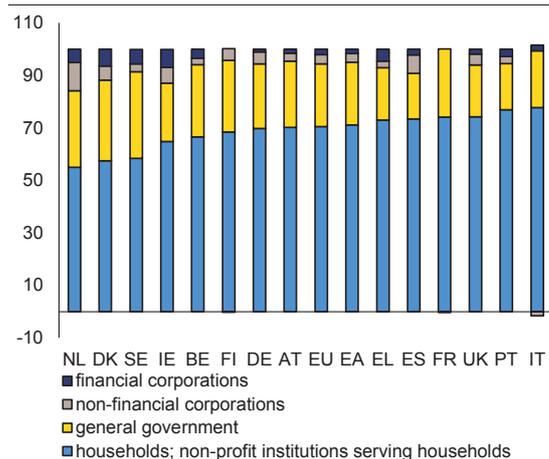
The household income share is comparatively low.

One explanation of a relatively large difference between GDP per capita and disposable income is a relatively low income share of households. The share of net national income ⁽³⁾ attributed to households was 72 % in 2015, compared to 80 % for the euro area. The difference is even bigger where the distribution of net national disposable income (NDI) is concerned. The difference between these concepts lies in the taxes paid and benefits received; after correcting

⁽³⁾ Net national income equals GDP plus the balance of primary incomes, after depreciation of fixed capital.

for these, households receive only 55 % of national income, compared to 71 % in the euro area (see also DNB, 2014). This share is the lowest in the EU (Graph 1.8).

Graph 1.8: **Distribution of net disposable income by institutional sector (2015)**



Source: European Commission (Eurostat)

By contrast, the income share of the corporate sector is relatively large, while collectively-financed healthcare drives up the income share of the government sector. With 10.8 % of NDI, the income share of the non-financial corporate sector is almost three times the euro area average. This difference can largely be explained by retained earnings. While this is partly related to the presence of headquarters of multinational enterprises and related financial flows from abroad (see Section 4.4), tax incentives limit the profit distribution of corporations in general. Also, the income share of the financial corporate sector is relatively large in the Netherlands, which reflects the large financial sector, including pension funds⁽⁴⁾. The share of the government sector in NDI is 29 %, which is 5 pps higher than euro area average. This high share can be attributed to the comparatively extensive collective arrangements, in particular for the healthcare system. This leads to redistribution within the household sector and may reduce social and income inequality. However, it may also entail a negative impact on growth and welfare through a suboptimal allocation of resources. Specifically, it limits the choice of households' ability to absorb shocks and to shift their income over time, and according to

⁽⁴⁾ Relatively high compulsory pension contributions shift income from households to pension funds.

their preferences (Lukkezen and Elbourne, 2015). In addition, high compulsory contributions can effectively impose liquidity constraints on households, especially for those with high mortgage debt and child expenses. The current arrangements put a significant burden on the younger generations, who benefit from collective institutions only to a limited extent. The low share of income for households, combined with an uneven distribution across generations might signal imbalances in policy settings related to household balance sheets⁽⁵⁾.

Stagnating disposable income may be at the root of slow growth in domestic demand, which only recently has started to grow again.

Whereas the housing market dynamics and wealth effects may partly explain volatility in private consumption growth, the relatively low share of households in net national disposable income and slow growth in disposable income could explain the overall sluggish development. Stagnating household disposable income could be linked to a period of relatively low wage growth (see section 4.3) and high compulsory contributions on labour (see section 4.1, the combination of taxes, healthcare and pension contributions). These developments increased the saving surplus, as domestic demand only absorbs production to a limited extent, leading to a persistent current account surplus. The flip side of this large current account surplus is an outflow of capital. In line with the high pension savings that are mostly invested abroad (section 4.4) and increased foreign direct investment by corporations based in the Netherlands, the Netherlands is a net exporter of capital to other countries. The size and persistence of these outflows in combination with low consumption growth could reflect suboptimal resource allocation. Starting in 2014, domestic demand increased again in line with rising household disposable income and some policy measures such as a pension reform lowering pension contributions (adjustment of the so-called *Witteveen kader*), and an income tax cut in 2016. A major pension overhaul, which may reduce pro-cyclical household saving and may lead to lower pension contributions and higher disposable income is currently being discussed (Section 4.2 and Box 3.1).

⁽⁵⁾ See also DNB 2015c and the report of the non-partisan study group on sustainable growth (Rijksoverheid, 2016a).

Table 1.1: Key economic, financial and social indicators

	2004-2008	2009	2010	2011	2012	2013	2014	2015	forecast		
									2016	2017	2018
Real GDP (y-o-y)	2.6	-3.8	1.4	1.7	-1.1	-0.2	1.4	2.0	2.1	2.0	1.8
Private consumption (y-o-y)	0.9	-2.1	0.0	0.2	-1.2	-1.0	0.3	1.8	1.6	2.0	1.9
Public consumption (y-o-y)	3.4	4.7	1.0	-0.2	-1.3	-0.1	0.3	0.2	0.8	0.9	1.1
Gross fixed capital formation (y-o-y)	4.2	-9.2	-6.5	5.6	-6.3	-4.3	2.3	9.9	6.4	4.0	3.5
Exports of goods and services (y-o-y)	5.8	-8.9	10.5	4.4	3.8	2.1	4.5	5.0	3.3	3.4	3.2
Imports of goods and services (y-o-y)	5.6	-7.7	9.3	3.5	2.7	1.0	4.2	5.8	3.8	3.9	3.8
Output gap	0.1	-2.8	-2.1	-1.2	-2.8	-3.2	-2.5	-1.5	-0.8	-0.2	0.2
Potential growth (y-o-y)	1.7	1.0	0.7	0.8	0.5	0.3	0.6	1.0	1.3	1.3	1.4
Contribution to GDP growth:											
Domestic demand (y-o-y)	2.0	-1.9	-1.1	1.1	-2.1	-1.3	0.6	2.6	2.2	2.0	1.8
Inventories (y-o-y)	0.0	-0.4	1.1	-0.4	0.0	0.1	0.2	-0.6	-0.1	0.1	0.0
Net exports (y-o-y)	0.6	-1.5	1.5	0.9	1.1	1.0	0.6	0.0	0.0	-0.1	-0.1
Contribution to potential GDP growth:											
Total Labour (hours) (y-o-y)	0.4	0.2	0.1	0.1	0.0	0.0	0.3	0.4	0.6	0.5	0.5
Capital accumulation (y-o-y)	0.7	0.5	0.3	0.5	0.3	0.1	0.2	0.4	0.5	0.6	0.6
Total factor productivity (y-o-y)	0.6	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3
Current account balance (% of GDP), balance of payments	7.2	5.5	7.0	8.7	10.3	9.9	8.9	8.7	.	.	.
Trade balance (% of GDP), balance of payments	8.6	7.3	8.4	8.5	9.6	10.7	10.8	10.8	.	.	.
Terms of trade of goods and services (y-o-y)	0.0	0.8	-1.1	-1.5	-0.3	0.4	-0.1	0.7	0.2	-0.7	-0.8
Capital account balance (% of GDP)	-0.4	0.1	-0.4	0.1	-1.4	0.1	-0.1	-5.0	.	.	.
Net international investment position (% of GDP)	-6.1	1.4	11.2	20.4	27.0	31.0	57.8	63.9	.	.	.
Net marketable external debt (% of GDP) (1)	-79.2	-99.8	-109.3	-110.3	-107.6	-102.3	-92.5	-76.2	.	.	.
Gross marketable external debt (% of GDP) (1)	314.8	344.8	358.3	371.7	373.5	354.0	373.9	363.3	.	.	.
Export performance vs. advanced countries (% change over 5 years)	6.4	2.6	-0.6	0.1	-2.4	-2.8	-4.2	-6.36	.	.	.
Export market share, goods and services (y-o-y)	-1.2	0.6	-6.7	-3.4	-2.9	1.5	0.5	-4.1	.	.	.
Net FDI flows (% of GDP)	5.8	5.5	8.9	4.3	0.6	10.1	-5.0	1.3	.	.	.
Savings rate of households (net saving as percentage of net disposable income)	4.8	7.1	4.9	5.8	7.2	7.3	6.3	6.0	.	.	.
Private credit flow, consolidated (% of GDP)	10.6	8.5	2.8	3.5	2.1	2.1	-1.7	-1.6	.	.	.
Private sector debt, consolidated (% of GDP)	214.8	231.5	229.4	228.1	229.0	226.9	229.6	228.9	.	.	.
of which household debt, consolidated (% of GDP)	107.5	117.6	118.0	117.6	117.6	113.9	112.3	111.2	.	.	.
of which non-financial corporate debt, consolidated (% of GDP)	107.3	113.9	111.4	110.5	111.4	113.0	117.3	117.7	.	.	.
Corporations, net lending (+) or net borrowing (-) (% of GDP)	9.0	10.6	11.3	11.2	10.2	9.0	8.5	3.9	7.4	6.9	6.9
Corporations, gross operating surplus (% of GDP)	27.5	27.5	29.1	28.7	28.8	28.4	28.1	28.4	27.5	27.4	27.3
Households, net lending (+) or net borrowing (-) (% of GDP)	-1.4	1.0	1.1	1.6	2.9	3.3	2.2	1.5	1.5	1.2	0.8
Deflated house price index (y-o-y)	1.9	-3.5	-2.7	-4.0	-8.0	-8.2	0.0	3.6	.	.	.
Residential investment (% of GDP)	6.1	5.6	4.7	4.2	3.5	3.0	3.0	3.7	.	.	.
GDP deflator (y-o-y)	2.1	0.4	0.8	0.1	1.4	1.4	0.1	0.1	0.5	0.8	0.8
Harmonised index of consumer prices (HICP, y-o-y)	1.7	1.0	0.9	2.5	2.8	2.6	0.3	0.2	0.1	1.4	1.4
Nominal compensation per employee (y-o-y)	2.7	2.8	0.6	2.4	2.5	2.2	1.6	0.4	2.3	2.6	2.4
Labour productivity (real, person employed, y-o-y)	1.4	-2.9	2.1	0.8	-0.9	1.0	1.7	1.0	.	.	.
Unit labour costs (ULC, whole economy, y-o-y)	1.3	5.6	-1.4	1.3	2.9	1.2	-0.1	-0.6	1.6	2.0	1.9
Real unit labour costs (y-o-y)	-0.7	5.2	-2.2	1.2	1.5	-0.2	-0.2	-0.7	1.1	1.2	1.1
Real effective exchange rate (ULC, y-o-y)	0.3	2.9	-3.4	0.6	-1.1	1.9	-0.7	-4.0	1.6	1.1	0.2
Real effective exchange rate (HICP, y-o-y)	-0.3	1.9	-3.9	-0.4	-1.8	2.7	-0.1	-3.1	1.1	-0.9	.
Tax rate for a single person earning the average wage (%)	32.5	31.8	32.8	31.4	32.1	31.2	30.5	29.9	.	.	.
Tax rate for a single person earning 50% of the average wage (%)	22.9*	21.5	21.9	21.4	21.4	21.6	19.3	18.7	.	.	.
Total Financial sector liabilities, non-consolidated (y-o-y)	10.2	4.4	7.0	8.6	5.4	-0.9	8.2	3.3	.	.	.
Tier 1 ratio (%) (2)	.	12.4	11.8	11.7	12.1	12.5	15.0	16.2	.	.	.
Return on equity (%) (3)	.	-0.4	7.2	7.3	5.6	5.5	3.6	7.5	.	.	.
Gross non-performing debt (% of total debt instruments and total loans and advances) (4)	.	2.6	2.3	2.4	2.7	2.7	3.0	2.4	.	.	.
Unemployment rate	4.9	4.4	5.0	5.0	5.8	7.3	7.4	6.9	6.0	5.2	4.7
Long-term unemployment rate (% of active population)	1.4	0.8	1.2	1.6	1.9	2.5	2.9	3.0	.	.	.
Youth unemployment rate (% of active population in the same age group)	10.2	10.2	11.1	10.0	11.7	13.2	12.7	11.3	10.8	.	.
Activity rate (15-64 year-olds)	77.7	79.7	78.2	78.1	79.0	79.4	79.0	79.6	.	.	.
People at risk of poverty or social exclusion (% total population)	15.8	15.1	15.1	15.7	15.0	15.9	16.5	16.4	.	.	.
Persons living in households with very low work intensity (% of total population aged below 60)	9.7	8.5	8.4	8.9	8.9	9.3	10.2	10.2	.	.	.
General government balance (% of GDP)	-0.3	-5.4	-5.0	-4.3	-3.9	-2.4	-2.3	-1.9	-0.1	0.2	0.3
Tax-to-GDP ratio (%)	36.5	35.9	36.7	36.4	36.5	37.1	38.0	38.2	39.8	39.8	39.7
Structural budget balance (% of GDP)	.	.	-3.5	-3.5	-2.1	-0.9	-0.6	-1.0	0.2	0.0	0.1
General government gross debt (% of GDP)	48.0	56.5	59.0	61.7	66.4	67.7	67.9	65.1	62.2	60.2	58.3

(1) Sum of portfolio debt instruments, other investment and reserve assets

(2,3) domestic banking groups and stand-alone banks.

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

(*) Indicates BPM5 and/or ESA95

Source: European Commission, ECB

2. PROGRESS WITH COUNTRY-SPECIFIC RECOMMENDATIONS

Progress on the implementation of the recommendations addressed to the Netherlands in 2016 has to be seen from the longer-term perspective of the launch of the European Semester in 2011. The Netherlands has been able to achieve a timely and durable correction of its excessive deficit. Between 2012 and 2014, the nominal government balance was improved from -3.9 % to -2.4 % of GDP and the structural balance from -2.3 % to -0.6 % of GDP. Since 2012, public spending on education expenditure and R&D has been roughly stable as a percentage of GDP. Total support for R&D, including both direct and indirect (fiscal) measures, has stabilised at around 0.9 % of GDP during this period of fiscal consolidation, which is low in comparison to other advanced European countries. However, starting in 2017, available budgetary projections indicate a risk of a substantial decrease in the years to come.

On pensions and long-term care, substantial measures were taken, while reforms for the second pillar are being discussed. The statutory retirement age in the first pillar is being increased to 67 by 2021 and a linked to life expectancy thereafter. There is a consensus on the need for far-reaching reforms and several approaches to reform the pension system are being discussed (see Section 4.2.4). In the area of long-term care, a major reform has been implemented. Large tasks have been shifted to municipalities and the role of individuals and family members in long-term care has been emphasized. Nevertheless, expenditure in this sector is still projected to increase relatively fast compared to EU average.

There have been important reforms in the owner-occupied housing market and the rental market to limit the distortions caused by tax incentives and rent regulation. The mortgage interest deductibility (MID) is being gradually reduced to 38% until 2041 and the requirement to repay on the principal of the mortgage in order to qualify for the MID was introduced. Since 2013 no further steps were taken to reduce mortgage interest deductibility. Concerning the rental sector, limited progress has been made through the implementation of a new point system that allows for more market-oriented rents and higher rent increases in the regulated sector for tenants above the income threshold. With the introduction of short-term rental contracts, the government

provides scope for a more flexible rental market, but it is too early to assess the impact of these reforms.

Overall, the Netherlands has made limited⁽⁶⁾ progress in addressing the 2016 country-specific recommendations. With respect to the fiscal-structural part of CSR 1, no notable measures have been identified to improve R&D investment and, thus, the assessment points to no progress. Regarding CSR 2, in view of the absence of dedicated measures, the Netherlands has made no progress in facilitating the transition to permanent employment contracts. No specific measures were taken to reduce distortive tax incentives favouring self-employment or increase the social protection coverage for self-employed. Limited progress has been made in reducing incentives for the use of self-employed without employees. The Employment Relationships Deregulation Act (Wet DBA), which aims at reducing bogus self-employment, has been adopted and is gradually being implemented. However, its enforcement has been suspended until at least the beginning of 2018. In addition, the government has announced the intention to increase the coverage of the second pillar pension system, specifically with regard to self-employed and contract workers. Overall, this implies limited progress on CSR 2. Similarly, the Netherlands has made limited progress on CSR 3. While the government has announced a general ambition to reform the second pillar pension system, tangible measures have been left for the next government term. No further measures have been taken to reduce the distortions in the housing market and the debt bias for households.

⁽⁶⁾ Information on the level of progress and actions taken to address the policy advice in each respective subpart of a CSR is presented in the Overview table in the Annex. This overall assessment does not include an assessment of compliance with the Stability and Growth Pact.

Table 2.1: **CSR progress**

The Netherlands	Overall assessment of progress with 2016 CSRs: limited progress (draft assessment)
<p><u>CSR1:</u> Limit the deviation from the medium-term budgetary objective in 2016 and achieve an annual fiscal adjustment of 0.6 % of GDP in 2017.</p> <p>Prioritise public expenditure towards supporting more investment in research and development.</p>	<p>The Netherlands has made no progress in addressing the structural part of CSR1⁽¹⁾:</p> <ul style="list-style-type: none"> • No progress has been made in prioritising public expenditure towards supporting more investment in research and development.
<p><u>CSR 2:</u> Tackle remaining barriers to hiring staff on permanent contracts and facilitate the transition from temporary to permanent contracts.</p> <p>Address the high increase in self-employed without employees, including by reducing tax distortions favouring self-employment, without compromising entrepreneurship, and by promoting access of the self-employed to affordable social protection.</p>	<p>The Netherlands has made limited progress in addressing CSR2:</p> <ul style="list-style-type: none"> • No (further) progress has been made to tackle remaining barriers to hiring staff or to facilitate transition from temporary to permanent contracts. • Limited progress has been made in addressing the increase in using self-employed without employees. No progress has been made in reducing tax distortions favouring self-employment or increasing the social protection coverage of self-employed.
<p><u>CSR 3:</u> Take measures to make the second pillar of the pension system more transparent, inter-generationally fairer and more resilient to shocks.</p> <p>Take measures to reduce the remaining distortions in the housing market and the debt bias for households, in particular by decreasing mortgage interest tax deductibility</p>	<p>The Netherlands has made limited progress in addressing CSR 3:</p> <ul style="list-style-type: none"> • Limited progress has been made in making the second pillar of the pension system more transparent, inter-generationally fairer and more resilient to shocks. • No progress has been made regarding the distortions in the housing market.

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

Source: European Commission

Box 2.1: Contribution of the EU budget to structural change in the Netherlands

The total allocation of the European Structural and Investment Funds (ESI Funds) in the Netherlands amounts to EUR 1.9 billion for the period 2014-2020. This is equivalent to 1.1 % of the expected national public investment ⁽¹⁾. EUR 97 million is planned to be invested through financial instruments, such as loan, equity and guarantee funds. By 31 December 2016, an estimated EUR 614 million, which represents about 33 % of the total allocation for ESI Funds, have already been allocated to concrete projects.

Financing under the European Fund for Strategic Investments (EFSI), Horizon 2020, the Connecting Europe Facility (CEF) and other directly managed EU funds is additional to the ESI Funds. By end 2016, the Netherlands has signed agreements for EUR 260 million for projects under the Connecting Europe Facility. The EIB Group approved financing under EFSI amounts to nearly EUR 359 million, which is expected to trigger EUR 1.9 billion in total investments (as of end 2016).

Necessary reforms and strategies as required by the ex-ante conditionalities ⁽²⁾ were put in place thus ensuring a timely and efficient up-take of the funds. In the context of investments in the promotion of cost-effective improvements of energy end use efficiency and cost-effective investment in energy efficiency, an action plan has been agreed.

All relevant CSRs were taken into account when designing the 2014-2020 programmes. The ESI Funds play a role in strengthening employability and job creation, by focussing specifically on enhancing the overall labour market participation of vulnerable groups and by investing in measures that improve the job prospects of older workers. In addition, the ESI Funds' investments target an increase in the private and public investments in Research and Innovation, while strengthening the innovation potential of the regions by enhancing cooperation between enterprises and knowledge institutions and by supporting SMEs in their efforts to turn innovations into marketable products. <https://cohesiondata.ec.europa.eu/countries/NL>

⁽¹⁾ National public investment is defined as gross capital formation + investment grants + national expenditure on agriculture and fisheries

⁽²⁾ At the adoption of programmes, Member States are required to comply with a number of ex-ante conditionalities, which aim at improving framework and investment conditions for the majority of areas of public investments. For Members States that do not fulfil all the ex-ante conditionalities by the end 2016, the Commission has the possibility to propose the temporary suspension of all or part of interim payments

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

The Alert Mechanism Report 2017 called for further in-depth analysis to monitor progress in the unwinding of the imbalances identified in the 2016 macroeconomic imbalance procedure (MIP) cycle. Because in spring 2016 the Netherlands was identified as having macroeconomic imbalances in the form of a high current account surplus, reflecting a saving and investment imbalance, and a high private debt level, in particular mortgage debt, a new in-depth review (IDR) is needed to assess how these imbalances have evolved.

Analysis integrated into this country report provides an IDR of how the imbalances identified have developed. In particular IDR-relevant analysis can be found in the following sections: the tax and regulatory framework in section 4.1; private indebtedness in section 4.2; and saving and investment imbalances in section 4.4. Potential effects of a domestic demand shock on the trade balance are discussed in Box 3.1.

3.1. IMBALANCES AND THEIR GRAVITY

The very high and persistent current account surplus points to an imbalance in domestic savings and investments. In 2015, the three-year average of the current account surplus stood at 9.1 % of GDP, higher than in any other euro area country. Such a large external imbalance may point to underlying causes leading to a sub-optimal allocation of resources, leaving opportunities for increased growth and welfare. Domestic demand remains weak in the Netherlands. In particular, the household consumption-to-GDP ratio has been significantly below the euro area average, driven by low real income growth due to relatively slow wage growth and a high and increasing compulsory payment wedge, consisting of a combination of taxes, pensions and healthcare contributions (see section 4.1.1). At the same time, the current account surplus is to some extent driven by the high corporate saving rate, partially linked to the international interdependencies of the corporate sector and related capital flows. Specifically multinational enterprises headquartered in the Netherlands distribute relatively little of their profits given their

profitability abroad (see section 4.4.2). This has a statistical upward effect on the external net lending position. Moreover, the large pension savings are channelled abroad via sizeable pension funds, increasing the surplus further (see section 4.2.4). As such, the current account surplus is to a certain extent driven by financial and economic institutions, which do not reflect trade imbalances.

To a lesser extent, the surplus is influenced by cyclical factors. Following a severe recession, the recovery is now well on track. Nevertheless, the cyclical downturn had an upward effect on the current account in the aftermath of the recession. The fiscal consolidation, which was necessary to restore a sound budgetary position, acted as a temporary drag on domestic demand. In addition, the sharp fall in house prices had a negative effect on private consumption via household wealth effects, keeping demand low and increasing the surplus. Currently, cyclical conditions are estimated to have a broadly neutral effect on the current account balance.

Given the openness of the economy, the Netherlands is a potential source of spill-over effects to other euro area countries. The aforementioned imbalance primarily affects the domestic economy, but also other Member States in light of the strong trade and financial linkages. Simulations show that an increase in domestic demand would have moderate spill-over effects on the trade balance of the rest of the euro area (see Box 3.1).

Private sector indebtedness remains high, at 229 % of GDP in 2015. The high debt level is linked to both non-financial corporate sector debt (118 % of GDP) and household debt (111 % of GDP). Whereas corporate sector debt largely stems from big multinational enterprises with headquarters in the Netherlands, that pair liabilities with sufficiently large equity, gross household debt is high in terms of GDP, at almost twice the EU-28 average. The ratio of gross debt over disposable income is also extremely high: 219 % compared with 94 % for the euro area average. The regulatory framework and taxation incentives played a major role in the build-up of high mortgage debt. Fiscal incentives and the absence

of a well-functioning private rental market push households into homeownership.

Long balance sheets make households vulnerable to financial shocks. In addition to high mortgage debt, households accumulate notable pension wealth over their working life due to relatively high compulsory pension contributions. Thus, households in the Netherlands save a lot, but as these savings are not liquid, they cannot be used to reduce outstanding debt (see section 4.2). The resulting long balance sheets make households vulnerable to financial shocks.

3.2. EVOLUTION, PROSPECTS AND POLICY RESPONSES

The Netherlands has recorded surpluses in the current account for more than 30 years. However, the current account surplus has declined slightly in recent years and the expected increase in domestic demand is likely to lead to a further gradual decline in the surplus over the next years. The economy is growing on the back of robust domestic demand. Private consumption is picking up, supported by increasing employment and real wages, with an upward effect on imports. In combination with a more passive deleveraging of households, the current account surplus is expected to fall at a moderate pace. This is supported by the continuously declining balance of primary income, which reflects lower income from foreign subsidiaries. The factors that weigh on household disposable income limit the scope for private deleveraging and increasing domestic demand at the same time.

The government has taken measures that are expected to further increase domestic demand. In order to raise disposable income, the government lowered pension contributions in 2015 via a reduction in the fiscal maximum accrual rate. In 2016, a broad package of tax cuts reduced the tax wedge, with positive effects on employment, disposable income, and thus domestic spending. In addition, the government has announced its intention to abolish distortionary tax incentives for specific small and medium-sized enterprises (SMEs), which could lead to lower retained earnings and reduce the corporate savings (see section 4.1.1). Currently, an overhaul of the second pension pillar is being discussed (see section

4.2.2). Box 3.1 shows how such a reform could lead to lower pension contributions and higher domestic demand.

Private debt remains high. Since 2009, private debt has stayed flat at around 230 % of GDP. Household debt, which is largely the result of high mortgage debt, peaked at 118 % of GDP in 2010 but has decreased to 111 % of GDP in 2015. Given the high debt level, the deleveraging needs of private households remain. Nevertheless, the ongoing recovery of the housing market, reflected in increasing transactions and rising prices, has led to a slowdown in the private deleveraging process. Mortgage debt has started to increase again in nominal terms, but continues to decline in GDP terms. This passive deleveraging by households leads to a further decline in debt ratios.

The increase in mortgage debt is relatively low compared to the strong increase in house prices and transactions. This can be partially linked to macro-prudential measures in the housing market as well as an increase in, voluntary repayments. Households now face a declining ceiling for the loan-to-value ratio, which will be lowered to 100 % by 2018. Mortgage interest deductibility is being gradually reduced, and the eligibility criteria for the deduction have changed. Households now have a strong incentive to amortise their debt. However, the phasing-in of these measures is slow, especially in light of the overall economic situation, the continued recovery of housing markets and the low interest rate environment.

3.3. OVERALL ASSESSMENT

The Netherlands faces sources of imbalances in the form of a high and persistent current account surplus, and in the form of high household debt. The current account surplus driven by low domestic demand, in particular depressed disposable income for households, the presence of large capital funded pension funds, and by statistical effects related to multinational enterprises (see section 4.4.2). To the extent that the surplus reflects subdued domestic demand, unwinding these imbalances could foster growth and welfare in the Netherlands. There is room to further support investment and thus strengthen the growth potential of the economy, particularly through key areas such as R&D (see box 4.4.1).

Domestic demand has been hampered in the past by the private deleveraging process, specifically the rebalancing of household balance sheets in the aftermath of the housing market downturn. Moreover, the long household balance sheets make households vulnerable to financial shocks. Given the still high level of mortgage debt, private deleveraging needs persist.

Recent policy measures improve household balance sheets and support domestic demand.

Measures aimed at improving household balance sheets are promising, but are being phased in slowly, in particular taking into account the recovery of the housing market and low interest rates. Relatively generous mortgage interest deductibility continues to fuel household debt, negatively affecting the shock resilience of households and the economy. The government also implemented measures to support domestic demand. In 2016, the tax wedge on labour has been reduced, with positive employment effects, increasing disposable income and domestic demand. In addition, the announced abolishment of distortive tax incentives in 2017 could reduce non-financial corporate savings. Finally, as fiscal adjustment in the Netherlands has become less restrictive, the budgetary stance is now less of a drag on domestic demand than in the immediate aftermath of the crisis, with positive consequences on domestic demand and thus on rebalancing of the current account.

Table 3.1: MIP assessment matrix(*) – the Netherlands

	Gravity of the challenge	Evolution and prospects	Policy response
Imbalances (unsustainable trends, vulnerabilities and associated risk)			
Current Account balance	<p>The current account balances stood at 8.7 % of GDP in 2015. The high net lending to the rest of the world is mainly linked to the high savings by non-financial corporations. The household sector also contributes to the surplus as private deleveraging continues, albeit at a slower pace.</p> <p>The Netherlands has recorded surpluses on the current account for more than 30 years (see section 4.4.3). A persistent current account surplus points to an imbalance in domestic savings and investments, with possible adverse consequences for the allocation of resources and thus growth and welfare.</p>	<p>While robust domestic demand growth is likely to affect the current account balance to some extent, the surplus position is expected to persist.</p> <p>The statistical upward effect of large cross-border capital flows related to the presence of multinational enterprises persists (see section 4.1.1 and 4.4.1). In addition, the large pension savings compared to the size of the domestic economy are projected to continue as an upward effect on the lending position (see section 4.4.2). Cyclical effects are currently neutral to the current account balance.</p>	<p>Measures have been taken to reduce the tax wedge and thus support domestic demand via a package of tax cuts in 2016. In 2017, the government plans to abolish specific tax incentives for SMEs, which could lower retained earnings (see section 4.1.1). The fiscal stance, which acted as a drag on domestic growth in the past, has become less restrictive, with a positive effect on demand and thus on external rebalancing. Finally, the government has expressed the intention to reform the second pillar pension system, which could lead to lower compulsory pension savings.</p>
Private debt	<p>Private sector debt in terms of GDP stood at 229 % in 2015, which is mainly linked to the high stock of gross household debt, 111 % of GDP in 2015 and 231 % of disposable income). While household liabilities are large they go alongside large illiquid assets in the form of housing wealth and pension wealth (see section 4.2.3). The relatively long household balance sheets, driven by tax incentives and the regulatory framework, increase financial vulnerability.</p>	<p>Total private sector debt has only very gradually decreased in recent years. Household debt has declined 7 pps. of GDP since its peak in 2010, after having rapidly increased in the last three decades. In line with the ongoing recovery of the housing market driving up nominal mortgage debt levels, active deleveraging turned into passive deleveraging. Overall, private debt in terms of GDP is expected to remain high.</p>	<p>Some housing market regulations have been adjusted to reduce the high household debt level in 2013. Nevertheless, these measures are still insufficient and are being phased in only very slowly. By consequence, these measures improve only marginally the financial resilience of households, while the distortions in the housing market remain relevant, specifically the bias towards the owner-occupied and regulated rental market.</p>

(Continued on the next page)

Table (continued)

Conclusions from IDR analysis

- The Netherlands shows the largest three-year average current account surplus in terms of GDP among euro area countries. The surplus implies a suboptimal allocation of resources, leaving opportunities for increased growth and welfare. The disposable income of households is hampered by a high compulsory payment wedge. Private debt is high, specifically the stock of household mortgage debt. The long household balance sheets increase the vulnerability to financial shocks.
- The current account surplus decreased slightly from 10.3 % of GDP in 2013 to 8.7 % of GDP in 2015 due to a decline of the primary income balance, improved cyclical conditions and recovering domestic demand growth. In the same time, household debt has only gradually declined, as the ongoing recovery of the housing market is driving up nominal mortgage debt levels.
- Domestic demand is supported by recent policy measures aimed at reducing the tax wedge. Additional measures to unlock retained earnings could lead to a further rebalancing of the current account. Moreover, measures have been taken to support household deleveraging and to prevent excessive build-up of mortgage debt. Nevertheless, these measures appear insufficient and the phasing-in is too slow. Finally, the government has announced its intention to reform the second pension pillar in a letter to parliament with potential reform paths.

(*) 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.

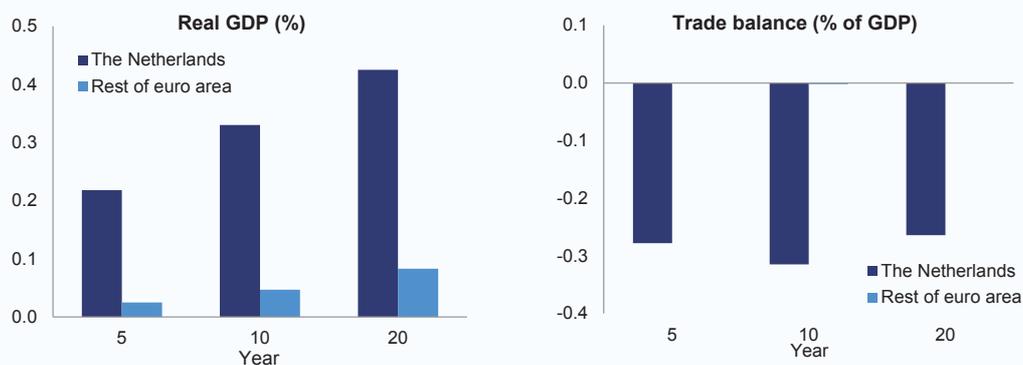
Source: European Commission

Box 3.1: Spillovers: trade balance impact of a shock to domestic demand

The large financial sector and the trade openness of the Dutch economy imply potential spillovers to other European Member States (see also European Commission, 2016a). To the extent that a persistent current account surplus might reflect subdued domestic demand, an increase in domestic demand could reduce the surplus on the trade balance, while increasing exports of its main trading partners. Policy settings have the potential to support domestic demand. In light of this, the government implemented a tax cut of 0.7% of GDP in 2016. Currently a pension reform is under discussion (see section 4.2). In a letter to parliament from July 2016⁽¹⁾, the government expressed its intention to reform the second pillar pension system. In particular, the letter proposes to substitute the current '*doorsneesystematiek*' (contributions are averaged over age groups and yield the same entitlement) for an actuarially fair system with a degressive (age-dependent) accrual of pension entitlements. Calculations by the Netherlands Bureau for Economic Policy Analysis (CPB, 2016) show that this could eventually lead to lower pension contributions and higher pension fund assets. This would lower the surplus on the trade balance via higher import demand and fuel investment by pension funds.

As an approximation of the reform, this box shows the impact of a permanent 1 % increase of private consumption and a temporary investment impulse on the Dutch economy and spillovers to other countries, using the Commission's QUEST⁽²⁾ model. The consumption shock could be associated with a permanent increase in disposable income, while the investment impulse is assumed to be phased in gradually. After five years, the impact of the reform would be 0.2 % on real GDP in the Netherlands and roughly one tenth of that on real GDP in the rest of the euro area. With the increase of the productive capital stock, the impact increases to 0.4 % after 20 years for the Netherlands and to 0.1 % for the euro area. The surplus on the trade balance declines by roughly 0.3 % of GDP. This reflects both increased imports of consumption and investment goods as well as a slight increase in exports following the increase in production capacity in the Netherlands and higher demand from the rest of the euro area. As both euro area import and export volumes increase, the impact on the rest of the euro area trade balance is negligible in terms of euro area GDP.

Graph 1: Stylised impact of a pension reform (Quest simulation)



Source: European Commission

- 1) This refers to the so-called "*perspectief nota*", see Ministry of Social Affairs (2016b).
- 2) QUEST is the global macroeconomic model DG ECFIN uses for macroeconomic policy analysis and research. For detailed information see: http://ec.europa.eu/economy_finance/research/macroecomic_models_en.htm.

4. REFORM PRIORITIES

4.1. PUBLIC FINANCES AND TAXATION

4.1.1. TAXATION* (7)

The combined tax and non-tax burden on labour is high in the Netherlands. While government revenues from personal income taxation in terms of GDP are below the EU average, the Netherlands ranks among the highest with regards to revenues from social contributions. Also compulsory contributions paid by households are the highest within the EU (as a percentage of GDP). In addition, non-tax compulsory payments on labour are substantial in the Netherlands, and have a largely similar effect to taxes. Graph 4.1.1 shows the average compulsory payment wedge for a single person earning the average wage (8). Including non-tax compulsory payments, which include pension and the obligatory healthcare insurance contributions (to privately-managed funds), the Netherlands has one of the highest burdens on labour in the EU. Similarly, the marginal compulsory payment wedge of 61 % in 2015 is substantially above that of other European countries.

In 2016, a sizeable package of tax cuts has been implemented, with a total budgetary impact of EUR 5 billion (0.7 % of GDP). The measures included an increase in the employment tax credit and a reduction in the tax rate applicable for middle incomes. To stimulate labour force participation, the childcare allowance was increased. In addition, as of 2017, a wage cost subsidy for low-income earners, aims at increasing employment among low-skilled workers. The government has implemented additional measures regarding the tax wedge in 2017, but their impact on employment is expected to be marginal (see European Commission, 2016b).

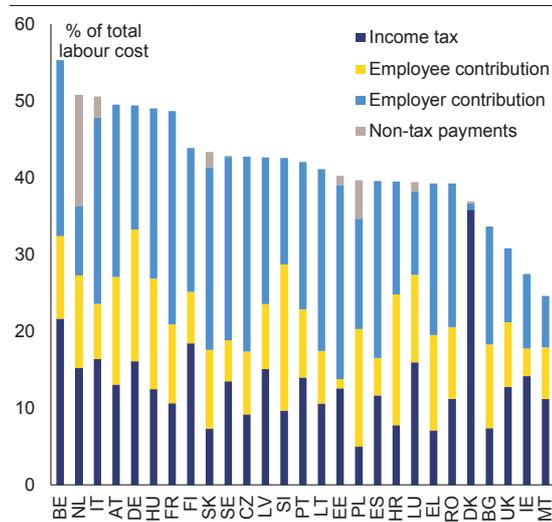
The tax system encourages households to take on housing debt through the generous mortgage

(7) 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)

(8) The tax wedge on labour represents the difference between the total labour cost of employing a worker and the worker's net earnings. It is defined as personal income tax and employer and employee social security contributions (net of family benefits) as a percentage of total labour costs (the wage and employer social security contributions).

interest deductibility. Tax incentives have played an important role in the build-up of excessive household debt and measures are being taken to partially reduce these incentives (see section 4.2 for a further discussion),

Graph 4.1.1: **Compulsory payment wedge of single person earning the average wage (2015)**



The OECD does not provide data on non-tax payments for non-members.

Source: OECD

Revenues from environmental taxation are relatively high in the Netherlands.

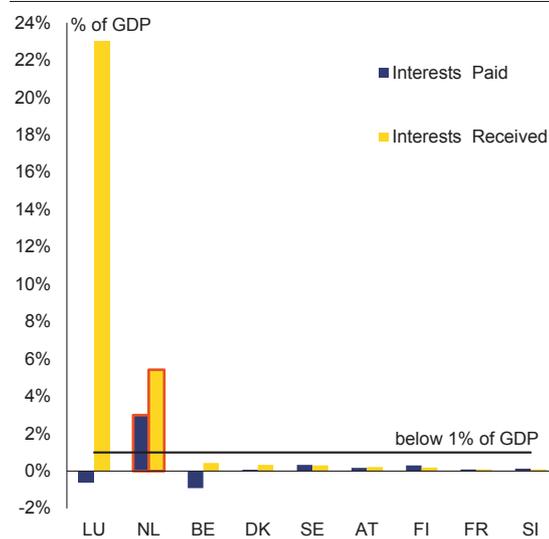
Environmental taxes are regarded as less detrimental to growth, compared to other type of taxes (European Commission, 2015a). In 2014, environmental taxes accounted for 9.0 % of total revenues from taxes and social security contributions (EU-28 average: 6.3 %). This places the Netherlands in the top 25 % of Member States as regards revenues from environmental taxation.

Some of the Netherlands' tax rules may be used in structures of aggressive tax planning (9). The

(9) Aggressive tax planning consists in taking advantage of the technicalities of a tax system or of mismatches between two or more tax systems for the purpose of reducing tax liability (source: Commission Recommendation of 6 December 2012 on aggressive tax planning (2012/772/EU)). For an overview of the most common structures of aggressive tax planning and the provisions (or lack thereof) necessary for these structures to work, see Ramboll Management Consulting and Corit Advisory (2016). It should be noted that country-specific information

absence of certain anti-abuse rules⁽¹⁰⁾ and the absence of withholding taxes on interest and royalties vis-à-vis third countries are features of the tax system which may facilitate aggressive tax planning. In that respect, the very high level of inward and outward foreign direct investments (FDI), the share of those FDI held by so-called ‘special purpose entities’⁽¹¹⁾ (SPE), but also the high level of dividend, royalty and interest payments (see Graph 4.1.2) as a percentage of GDP suggest that the country’s tax rules are used by companies that engage in aggressive tax planning⁽¹²⁾. Within this context, it is important to note that EU corporate tax initiatives (for example, the amendments to the Parent-Subsidiary Directive and the Anti-Tax Avoidance Directive) strengthen Member States’ anti-abuse frameworks and boost tax transparency, for example through the automatic exchange of information on tax rulings or on country-by-country reports.

Graph 4.1.2: Cross-border interest payments (2015)



Most of the EU member states have interest payments between 0 % and 0.5 % and are not included in the graph to increase readability.

Source: European Commission

provided in the study gives the state of play by May/June 2015.

⁽¹⁰⁾ For more details, see European Commission (2016a).

⁽¹¹⁾ A special purpose entity is a legal entity that has little or no employment, operations or physical presence in the jurisdiction where it is located. It is related to another corporation, often as its subsidiary, and is typically located in another jurisdiction.

⁽¹²⁾ In 2015, the level of inward and outward foreign direct investment amounted respectively to 535 % and 636 % of GDP. Around 80 % of in- and outward FDI are held by SPE. The dividends paid and received amounted to 14.8 % and 19.9 % of GDP whereas royalties paid and received in 2015 stood at to 5.6 % of GDP and 6.6 % of GDP

The Netherlands has taken steps to adjust some of its tax rules facilitating aggressive tax planning. The Netherlands amended the ‘innovation box’ regime, which grants a 5 % effective corporate tax rate, in order to bring it in line with Action 5 of the Base Erosion and Profit Shifting project (see OECD, 2015b), as endorsed by the Code of Conduct for Business Taxation. It also amended specific interest deduction limitations to address certain artificial corporate structures.

The Netherlands’ tax system offers incentives to retain earnings. An example is the case of director-major shareholders (*Directeur-Grootaandeelhouder*, DGA)⁽¹³⁾, who are both employees of and shareholders in their own company, thus facing corporate, labour and capital taxes. According to a CPB study (Bettendorf *et al.*, 2016), DGAs react strongly to fiscal incentives, optimising over different tax brackets and shifting income over time. Compared to companies without a director-major shareholder, DGAs distribute relatively little of their profits and thus contribute to the Netherlands’ savings surplus⁽¹⁴⁾. DGAs are

⁽¹³⁾ A DGA is self-employed and owns at least 5 % of the corporation. See Bettendorf *et al.*, 2015.

⁽¹⁴⁾ An in-depth analysis for 2010 reveals that while DGAs reported taxable profits of EUR 13.5 bln (2.1 % of GDP), only 27 % or EUR 3.7 bln (0.6 % of GDP) were distributed

not obliged to participate in the second pillar of the pension system and can instead build up pension savings within their corporations. The government plans to abolish this possibility in 2017, including a temporary tax abatement to incentivise the withdrawal of these savings. This might lead to somewhat lower corporate savings with potential positive effects on domestic demand. However, uncertainties around the exact implementation remain.

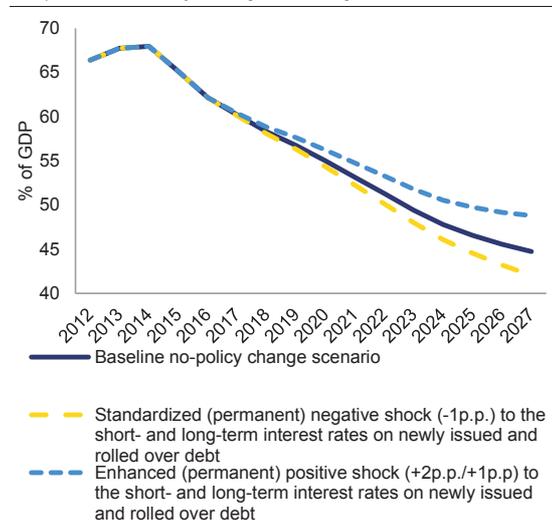
4.1.2. LONG-TERM SUSTAINABILITY OF PUBLIC FINANCES

The debt-to-GDP ratio continues to decline. Government debt in the Netherlands, which stood at 65.1 % of GDP in 2015, is expected to fall below the Stability and Growth Pact threshold of 60 % in 2018 (58.3 % of GDP). The Commission's debt sustainability analysis⁽¹⁵⁾ projects a further decrease to 44.7 % of GDP in 2027 (final projection year) under a no-policy-change assumption, driven by both nominal GDP growth and primary surpluses. This places the Netherlands in the low-risk category over the medium term according to an overall assessment. The low-risk assessment is confirmed by alternative debt scenarios, for example an enhanced positive interest rate shock (Graph 4.1.3), which implies a sufficient margin to the 60 % threshold at the end of the horizon.

as dividends. This is substantially lower than what is common among other NFCs. If DGA companies had the same pay-out ratio, their savings would be 0.5 % of GDP lower. See Commissie inkomstenbelasting en toeslagen (2013).

⁽¹⁵⁾ This is a mechanical projection based on the current primary balance and assumptions on nominal growth and interest rates. Subsequently an equilibrium debt level and equilibrium interest services can be calculated.

Graph 4.1.3: Debt profile (2012-2027)



Source: European Commission

In recent years, the Netherlands has adopted substantial first pillar pension and long-term care reforms. To address the sustainability risk stemming from an ageing society, the statutory retirement age is gradually being increased to 67 by 2021, and linked to life expectancy thereafter. According to this new law and the most recent population projections by Statistics Netherlands (CBS), the government announced in October 2016 that the retirement age will be increased to 67 years and 3 months by 2022. In addition, the long-term care system has undergone a major reform. Public expenditure on long-term care stands out as the highest in the EU with 4.1 % of GDP in 2013 (European Commission, 2015b). This is largely linked to the high share of institutional care (87 %) in the Netherlands, which is relatively costly. In order to counter the strong projected increase in the number of long-term care recipients over the next decades, substantial reforms were implemented. Large parts of the non-residential long-term care sector have been shifted to municipalities in 2015, and more emphasis is being put on informal care, leading to greater responsibilities by individuals and family members. While the transitional phase of the reform process has been completed successfully, including implementation at municipal level, it is too early to assess the full reform impact. Nevertheless, long-term care expenditure in terms of GDP is currently projected to increase by 3.0 pps between 2013 and 2060, compared to an EU average of 1.1 pps (European Commission,

2015b), pointing to a possible sustainability challenge in the medium and long term. A comprehensive evaluation of the reform by the Netherlands' authorities will be published in 2018.

4.1.3. FISCAL FRAMEWORK

The Netherlands has a well-established fiscal framework that serves as a good practice example (Ayuso i Casals, 2012; and European Commission, 2010). The framework builds on the principal of trend-based budgetary policy and automatic stabilisation. At the start of a government's term, based on the independent macroeconomic projection by the Netherlands Bureau for Economic Policy Analysis (CPB), the coalition agreement defines real annual expenditure ceilings for the main budgetary areas, aiming for a budgetary objective at the end of the term. While the government needs to adhere to these ceilings, as anchored in the *Wet Houdbare Overheidsfinanciën* (WetHOF), the revenue side of the budget is allowed to fluctuate within certain limits. Compliance with the numerical fiscal rule is monitored by the Advisory Division of the Council of State.

Despite its good track record, the Netherlands is exploring how its national fiscal framework could be further improved. A dedicated advisory group of high-level civil servants has reviewed the framework ahead of the 2017 elections. The advisory group, (which gives general advice on the budgetary guidelines for the upcoming government term) has identified possibilities to better align the system of ceilings with the European framework and to increase automatic stabilisation on the expenditure side. Specifically, the group recommended including interest expenditure and natural gas production under the ceilings, but excluding cyclical expenditure items such as unemployment benefit expenditure. Nevertheless, tax expenditures are not covered by the ceilings and therefore not subject to the same high level of oversight, although they account for a large part of the budget. Mortgage interest rate deductibility and the deductibility of pension contributions alone added up to more than EUR 21 billion in 2016, or roughly 3 % of GDP.

4.1.4. QUALITY OF PUBLIC FINANCES

Public expenditure in growth-enhancing areas is low compared to peer countries. Within the budgetary scope, it is important to use government resources efficiently, in order to promote long-term growth and employment. Some expenditure categories are regarded as growth-enhancing, such as public investment (gross fixed capital formation), which accounted for 3.5 % of GDP in 2015, above the EU average of 2.9 % (EA 2.7 % of GDP). Moreover, in 2014 the Netherlands spent 5.4 % of GDP on education, which is less than the top-performing peer countries such as Finland, Sweden or Denmark (see section 4.3.3). Similarly, public R&D intensity (0.9 % of GDP) remains lower than in most innovative European economies. Looking forward, direct public support for R&D is projected to decline between 2016 and 2020 (see section 4.5.1).

4.2. FINANCIAL SECTOR

4.2.1. BANKING SECTOR

In relative terms, banks are the most important financial intermediaries in the Netherlands.

Banks' assets in the Netherlands stood at 380 % of GDP in August 2016, about the same as in Denmark, Ireland, France and the UK. Market concentration is high; the combined market share of the top 5 players is among the highest in the EU. The five largest banks have a market share of 85 % in terms of total assets (ECB, 2016a).

The banking sector has improved its robustness since the crisis.

Capital ratios have doubled since the 2008 financial crisis collapse and the European Banking Authority's (EBA) stress test underlined that banks are able to withstand considerable adverse circumstances. Return on equity and return on assets have been positive and above euro area average since 2010 (ECB Consolidated Banking Data). In June 2016 the domestic loan/deposit ratio was 126 %, compared to a euro area average of 100 %. As fiscal incentives discourage repaying mortgage debt and saving too much with banks, the latter need to fill a sizeable funding gap by issuing residential mortgage-backed securities and chasing deposits abroad, notably in Germany. Consequently, banks' dependence on market funding remains high by international standards, due to comparatively low bank savings, since obligatory savings within pension funds are high (see Section 4.4 on household savings).

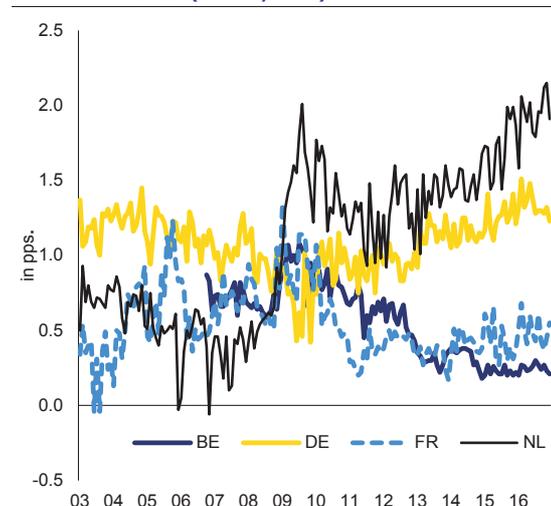
Despite the boom and bust cycle the real estate market has seen during the past 10 years, non-performing loans never exceeded 3 % and reached 2.3 % in June 2016, the EU's fifth lowest. A national mortgage guarantee scheme (NHG) for loans below EUR 245 000, a very creditor-friendly insolvency regime, but also loan-to-income caps at four times annual gross income (excluding mortgage interest deductibility) have prevented high default rates.

4.2.2. ACCESS TO FINANCE

The mark-up on small business loans is relatively high in the Netherlands. Loans below EUR 1 million are more expensive in the Netherlands than the euro area average, whereas loans beyond that threshold are cheaper than in peer countries. The mark-up for small loans

increased substantially during the financial crisis and has not reverted to pre-crisis levels since (as visible in Graph 4.2.1). This can be linked to the highly concentrated banking sector in the Netherlands and the behaviour of small and medium-sized enterprises (SMEs) that are particularly reluctant to switch banks (see ACM, 2015).

Graph 4.2.1: Interest rate spread between small and large loans (monthly data)



Interest rate spread in pps between loans up to EUR 1 million and above EUR 1 million at floating rate and up to 1 year initial rate fixation.

Source: European Central Bank

Loan demand, especially for small loans is recovering slowly after a prolonged period of decline. The bank lending survey (ECB, 2016b) indicates a declining demand for loans by SMEs between 2008 and mid-2015. Since then, demand has slowly picked up and, according to the survey, this trend is likely to be maintained into 2017 (DNB, 2016a).

Measures have been taken to facilitate access to finance for SMEs. These include better provision of general information on funding sources⁽¹⁶⁾, as well as the SME financing platform 'Financieringslink' (Fink). These initiatives also aim at reducing information asymmetry, which is recognised as a major problem in SME financing markets. Notably, the current non-standardised credit information sharing can cause adverse

⁽¹⁶⁾ Specifically, this includes the online platform 'Nationale Financieringswijzer' and the 'Financieringsdesk' hotline by the chamber of commerce.

selection and increases the cost of assessing loan applications from the lender's perspective (see IMF, 2014) The goal of the *Fink* initiative is to provide improved, standardised access to information on the creditworthiness of SMEs⁽¹⁷⁾. A related roadmap foresees the implementation of open standards and a public register of financiers complying with basic transparency requirements in the first half of 2017, with progress to be reported by mid-2017.

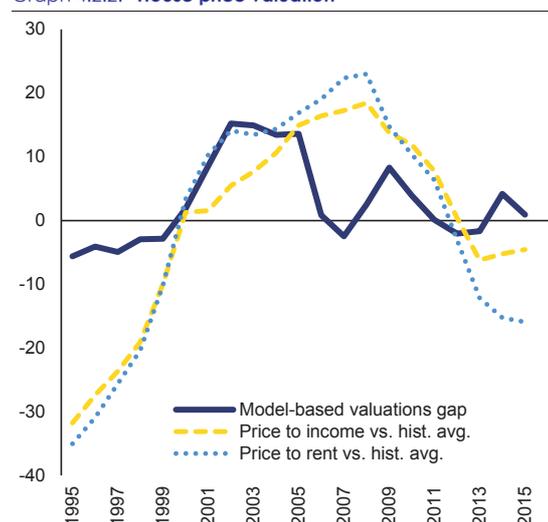
The Netherlands is further developing the financing landscape through a national fund-of-funds⁽¹⁸⁾ and by involving institutional investors, but alternative funding sources remain scarce. So far, pension funds and insurers have been largely inactive on the venture capital market and in SME financing. The *Nederlandse Investeringsinstelling* (NLII) aims to attract institutional investors by creating funds that bundle the financing needs of smaller companies. NLII focuses on financing solutions within various investment categories, including SME lending. The NLII has created a business loan fund (*Bedrijfsleningen Fonds*) and a subordinated loan fund (*Achtergestelde Leningen Fonds*). Other funding sources (crowd funding, FinTech) are still scarce, but could provide an alternative to traditional loans, specifically for high risk SMEs.

4.2.3. HOUSING MARKET DEVELOPMENTS AND HOUSEHOLD DEBT*

The recovery on the housing market continues but the speed varies across regions. The housing market in the Netherlands experienced a severe negative price shock during the financial crisis. Since 2013 prices have been recovering, but the speed varies substantially across regions (see European Commission, 2016a). The highest growth concentrates on large cities such as Amsterdam, where prices are already well above pre-crisis level. Economy-wide, model estimates suggest that house prices are roughly around

estimates of fundamental values, although price-to-income and price-to-rent ratios are still below long-term averages (Graph 4.2.2).

Graph 4.2.2: House price valuation



Valuation gap 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 1995-2015. 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

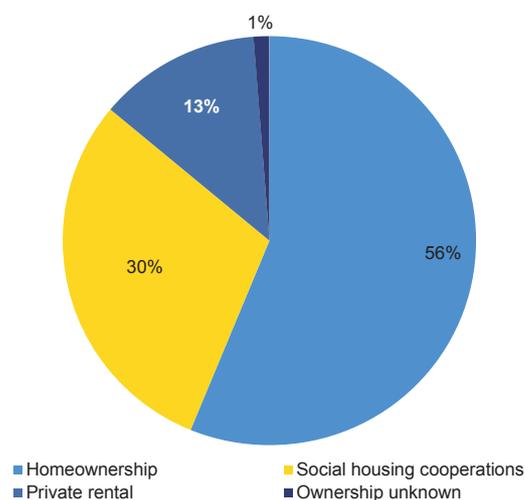
The private rental market remains underdeveloped. New dwellings are mostly constructed for subsidised segments of the housing market. The owner-occupied market profits from a relatively generous mortgage interest deductibility (MID), while rents in the social sector are indirectly subsidised. Only the private rental sector does not receive implicit or direct subsidies (including MID), which explains the underdeveloped private rental market. Although a large supply of social housing has advantages in affordability, the crowding out effects on other segments of the rental market have repercussions on the functioning of the housing market as a whole. The absence of a strong middle segment on the rental market pushes middle incomes into the owner-occupied market prematurely and increases financial vulnerability (see European Commission, 2016a). This concerns particularly young middle income families, leading to a relatively young average age of house ownership and relatively high debt-to-income ratios. Indeed, the percentage of homeowners facing higher debt than the current

⁽¹⁷⁾ This follows good practices in the UK (referral obligations on banks refusing a credit), Spain (specific legal information rights to SMEs) and France and Italy (SME financing platforms similar to Fink).

⁽¹⁸⁾ Dutch Venture Initiative (DVI-II), managed by the EIF and Participatiemaatschappij Oost Nederland (PPM Oost), supported by the Ministry of Economic Affairs

value of their house (*underwater mortgages*) stands at 17.6 % (2016 Q3, DNB data) and is heavily skewed towards the younger age groups. Other drawbacks relate to inefficient mechanisms for social housing allocation, which causes long waiting lists in cities, and the phenomenon of people with incomes above the relevant thresholds living in social sector dwellings (the '*scheefhuurders*'). On the positive side, according to the authorities, the number of '*scheefhuurders*' fell between 2009 and 2015 from 28 % to 18 % (Ministry of the Interior and Kingdom Relations, 2016, p. 58 f.).

Graph 4.2.3: Housing market in the Netherlands (2015)



Source: Statistics Netherlands

Starting in 2013, a number of policies to improve the functioning of the owner-occupied housing market have been put into practice. The current government has taken a number of measures to reduce household debt and improve the functioning of the housing market. Loan-to-value and loan-to-income requirements have been tightened and the tax subsidy in the owner-occupied market is gradually being reduced⁽¹⁹⁾. The impact of policy seems to be fairly limited, given the rather slow speed of the mortgage interest deductibility tapering (See European Commission, 2016a). The non-partisan study group on sustainable growth (*studiegroep*

⁽¹⁹⁾ Households are obliged to repay on the principal in order to qualify for mortgage interest deductibility and the maximum rate of mortgage interest deductibility is being gradually reduced (with 0.5 pps per year, from 52 % to 38 % by 2041)

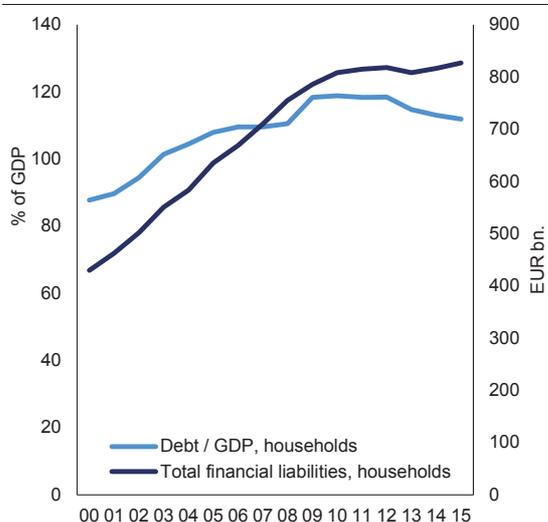
duurzame groei) proposed acceleration for the next government term (see Rijksoverheid, 2016a, p.32).

The impact of recent policy measures on the overall functioning of the rental market is not yet clear. Recent measures aimed at improving the functioning of the rental market include (i) higher rent increases for *scheefhuurders*; (ii) simplification of the method for determining the monthly rent; (iii) a (legal or accounting) split of social housing corporations into services of general economic interest and other services; and (iv) (legal) measures allowing for more short-term rental contracts. Although some measures, such as higher rent increases for *scheefhuurders*, are promising, the impact of the overall policy package is largely unknown as it is being implemented in the current period, e.g. the formal split of the housing corporations between services of general economic interest and other services has to be implemented by 1 January 2017.

As discussed in the MIP matrix, both private non-financial corporate sector debt and household debt are substantially above EU-28 averages and the scoreboard benchmark. In 2015, the (consolidated) private sector debt-to-GDP ratio stood at 229 % of GDP, with 118 % of GDP corporate non-financial sector debt and 111 % of GDP household debt. Corporate sector debt in the Netherlands is relatively small compared to corporate assets and corporate income streams (see European Commission, 2015c, p.22-23). Although the ratio gross household debt-to-household assets does not stand out compared to other peer countries, it is high in terms of GDP (almost twice as high as the EU-28 average) as well as in terms of disposable income (232 %). Also, the European Systemic Risk board issued a warning to the Netherlands, in view of increasing house prices and debt levels (ESRB, 2016).

Active deleveraging of households turned into passive deleveraging. Although between 2012 and 2014 nominal debt levels declined, by the end of 2014 mortgage debt has started to grow again in nominal terms, albeit at a moderate pace. However, as nominal GDP increases faster, the mortgage debt in terms of GDP continued to decline in terms of GDP (passive deleveraging)

Graph 4.2.4: Household debt

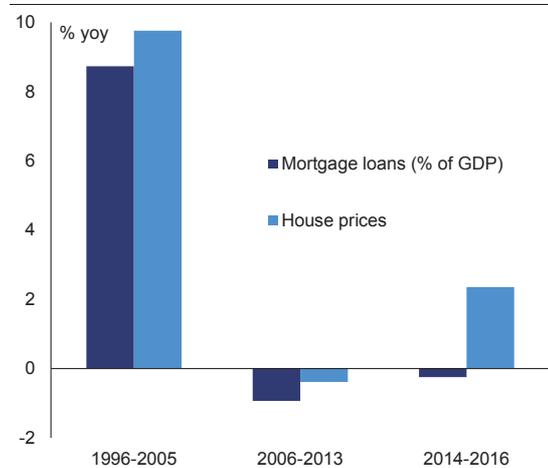


Source: European Commission (Eurostat)

New regulations and voluntary repayments may weaken the link between housing market developments and debt developments, but the housing market recovery and the low interest rate environment provide an opportunity to further reduce policy distortions. In recent years growth in household debt has stayed well below the sharp rise in housing market prices and transactions. Also, continued voluntary repayments are reducing the growth of mortgage debt. According to surveys and data from the central bank, households are increasingly paying back their outstanding mortgages to make use of interest arbitrage possibilities (see DNB, 2015b). The continuing recovery of the economy and housing market could be used to further increase the shock resilience of households. Measures discussed in the Netherlands include an accelerated tapering of mortgage interest tax relief introduced in January 2014 and further lowering of the maximum loan-to-value ratio after 2018 ⁽²⁰⁾.

⁽²⁰⁾ See the respective advice of the non-partisan studygroup on sustainable growth (Rijksoverheid, 2016a), and the financial stability committee (Financial Stability Committee, 2015)

Graph 4.2.5: Change in mortgage debt and house prices



Source: Statistics Netherlands

4.2.4. PENSIONS*

Although effective in terms of fiscal sustainability and adequacy, the three-pillar pension system has drawbacks in terms of coverage, transparency and flexibility over the life cycle. The high pension contributions to the second pillar of the pension system weigh on disposable income. Moreover, the financing of the system limits the possibility for consumption smoothening over a person's lifetime. The pressure on disposable income for those in the early years of working life comes from two sides: the housing market where households are pushed into buying a house, taking up a large mortgage and repaying on the principal, and from high pension contributions. This contrasts with the perspective at old age, where households on average have large pension incomes and little or no housing or child-related expenses.

The past few years have exposed the vulnerabilities of the existing pension system. At present, challenges continue to be related to the second pillar, where defined-benefit contracts still dominate (>90 % of all participants in the pension system). These challenges stem mainly from the low interest rate environment, and population ageing. The low interest rate combined with defined benefits raise future liabilities leading to a situation of under-coverage for many pension funds.

Ad hoc adjustments lead to pro-cyclical macroeconomic shocks and entail the risk of an unintended intergenerational transfer at the expense of current younger generations. The pension system has a pro-cyclical character: in times of crisis, contributions have to be increased in order to deliver on the defined benefits. As lower pension pay-outs are a last resort, the balance of risks is geared towards active and young generations. Arguably, trust in the system has declined in recent years, not only because of actual measures, but also because of potential new measures which may be needed to improve the coverage ratios.

Some capital funded occupational pension funds have moved from a defined benefit to a defined contribution scheme in recent years. Fully-funded schemes tend naturally to be defined-contribution: money is contributed, earns a yield, and the corresponding pension is calculated afterwards. Many occupational pension schemes in the Netherlands, however, are defined-benefit. This combination is at the origin of the discretionary adjustments of the contributions, indexations or – as last resort – a reduction of the benefit. These ad hoc adjustments imply that the pension system is in practice not a ‘defined-benefit’ in the strict sense. The younger age groups may see their contributions raised today but with no increased benefit guaranteed tomorrow. While rendering the pension system less foreseeable for contributors compared to defined-benefit schemes, defined-contribution systems imply greater transparency, while limiting the risk of significant transfers between generations. In addition, defined-contribution schemes are usually actuarially fair. This means that contributions earn the same pension rights whatever the moment in the life of the worker. The central bank called for a major overhaul of the pension system, including reforming the average contribution system, introducing more individually tailored pension accumulation and age-dependent investment policies (see DNB, 2016b).

On 8 July 2016 the government proposed a roadmap which should lead to an overhaul of the second pillar of the pension system by 2020. The reform effort is concentrated on four themes:

1. *coverage*: an adequate pension for all working people including self-employed;

2. *actuarial fairness*: a shift to a more actuarially fair system of accruing pension rights;

3. *transparency*: moving towards a more transparent and simple pension;

4. *flexibility*: more space for customised solutions and options (including more focus on aligning compulsory pension savings to one's life situation).

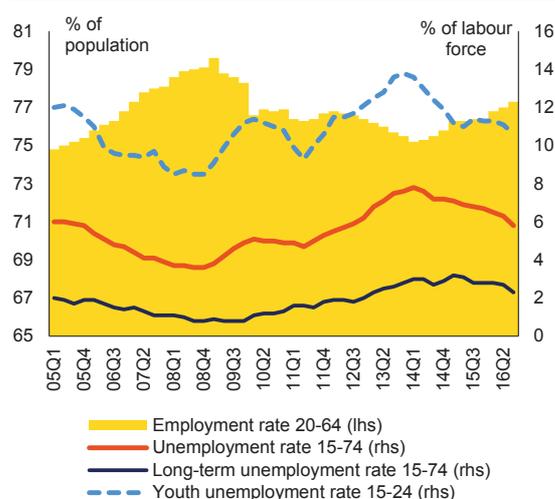
These reform 'directions' have promising potential as they could lead to lower and more stable pension contributions, while respecting pension adequacy. In particular, it could lead to more stable developments in domestic demand through a more generationally fair distribution of the balance of risks in the second pension pillar. However with the upcoming elections in spring 2017, substantial reforms are left to a future government.

4.3. LABOUR MARKET, EDUCATION AND SOCIAL POLICIES

4.3.1. RECENT DEVELOPMENTS ON THE LABOUR MARKET

The labour market situation continues to improve. The unemployment rate declined to 5.4 % in December 2016 and labour market participation (81.7 % in 2016Q3) and employment (77.4 % in 2016Q2) continued to increase (Graph 4.3.1). Nominal wages grew a modest 0.4% in 2015, which is below the level that could be predicted based on economic fundamentals, such as developments in prices, unemployment and productivity⁽²¹⁾. Wage growth was outpaced by moderate productivity gains, resulting in a decline in the nominal unit labour cost of 0.6 % in 2015 (Graph 4.3.2). However, starting in 2016 nominal wage growth is expected to push unit labour costs up to almost 2 % (see also Graph 4.4.13).

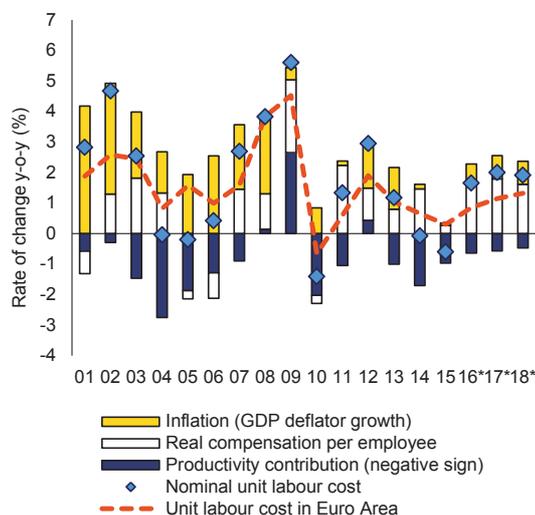
Graph 4.3.1: Main labour market developments



Source: European Commission (Eurostat)

⁽²¹⁾ Based on the methodology of Arpaia and Kiss (2015)

Graph 4.3.2: Trends in labour costs and components



Source: European Commission

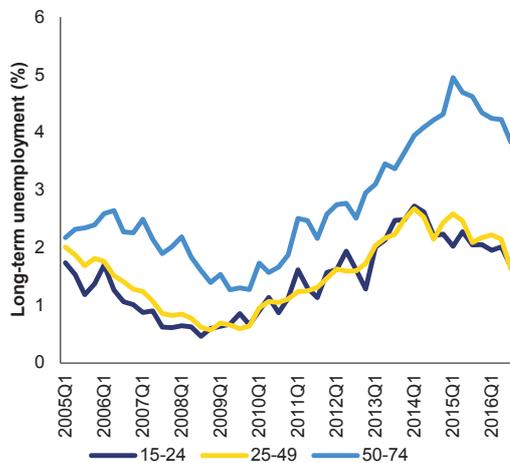
While the overall participation rate is very high, some groups are lagging behind in employment; in particular the situation of those born outside the EU remains an important challenge. The employment rate for non-EU born migrants stood at 58.5 % in 2015 and is 20 pps lower than for people born in the Netherlands. The gap is particularly high for non-EU born women (25 pps lower than women born in the Netherlands). In addition, non-EU-born migrants face a higher unemployment rate (13.3 %) than those born in the Netherlands (6.2 %). In particular among young people (15-25) the unemployment rate stood at 23.4 % in 2015 or 12.8 pps higher than for young people born in the Netherlands. The differences in labour market outcomes for non-EU-born migrants can be partially explained by differences in age and educational achievement, but even after controlling for these elements more than 83% of the employment gap remains unexplained⁽²²⁾. This suggests that other factors such as the formal or informal recognition of qualifications, language skills or discrimination may play a role. In addition, the labour market outcomes of second-generation immigrants are also precarious. Young people (aged 15-24) with a migrant background experience a higher unemployment rate, in

⁽²²⁾ Commission calculations based the 2014 EU-Labour force survey microdata. The analysis makes a breakdown of the employment gap using a Blinder-Oaxaca decomposition, controlling for differences in age, gender and educational level between non-EU-born citizens and natives. OECD (2015a) also finds a substantial adjusted employment gap between foreign born and natives.

particularly when both parents are foreign-born (26 % in 2013 compared to 7.6 % for young people with both parents born in the Netherlands).

A high activity rate of older workers is accompanied by a relatively high level of long-term unemployment. Long-term unemployment among older workers (aged 50-74) increased between 2009 and 2015 and remains high, despite recent improvements (Graph 4.3.3). While this difference can be partially explained by the high activity rate of older workers in the Netherlands (52.4 %) as compared to other EU countries (on average 47.5 %), it may also be related to the high financial costs employers face when hiring older workers (see European Commission, 2016a, p. 47). The government, in cooperation with the social partners, presented a comprehensive action plan to increase the labour market position of older workers (50+) to be implemented in 2017 and 2018 (see Ministry of Social Affairs 2016a).

Graph 4.3.3: Long-term unemployment by age (2005-2016Q3)

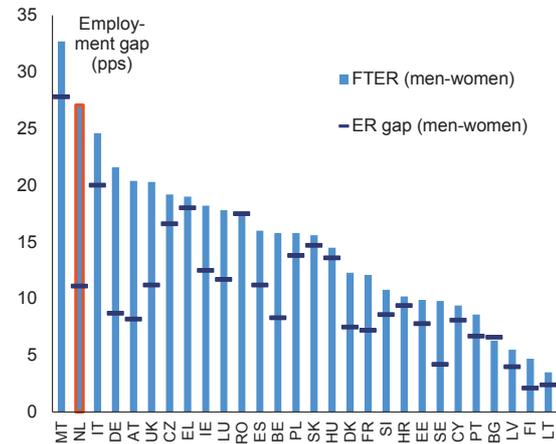


Source: European Commission (Eurostat). Non-seasonally adjusted data.

While women are actively participating in the labour market, two thirds are working part-time. The gap between the employment rate for men and women continued to narrow in the last six years and is in line with the EU average (11 pps in 2015). However, in full-time equivalents, the employment gap between men and women is one of the highest in the EU (27 pps in 2015, Graph 4.3.4). This is explained by fewer working hours, which is to a large extent the result of voluntary

choices regarding the work/life balance, but may also be incentivised by institutions and policies.

Graph 4.3.4: Employment gap (2015)



FTER is the difference in the employment rate of men and women in full-time equivalents. ER gap is the difference in the employment rate of men and women.

Source: European Commission (Eurostat)

The responsibility for labour market integration was decentralised to the municipalities in 2015. With the Participation Act in force as of 2015, the responsibility for groups at the margin of the labour market lies primarily with the municipalities. Municipalities offer broad support to remove barriers to entering the labour market, such as language courses, childcare and adequate housing facilities. Only preliminary assessments are available as to the effectiveness of the implemented active labour market policies. In 2016, two reports by the Ministry of Social Affairs and Employment show only a limited impact of the Participation Act. The rise in social assistance beneficiaries is partly due to new groups, namely young disabled people and the increased inflow of refugees. In October 2016 the Ministry of Social Affairs and Employment announced that municipalities would be able to experiment with the Participation Act: municipalities will have a two-year period within which to implement the social assistance rules in a different manner, adapted to the respective local situations.

Poverty figures remain low despite a recent increase. The at-risk-of-poverty rate rose from 10.4 % in 2013 (EU-28 16.7 %) to 11.6 % in 2015 (EU-28 17.3 %). The number of households with a low income increased slightly from 10.3 % in 2013 to 10.4 % in 2014 (see CBS, 2015b). The number

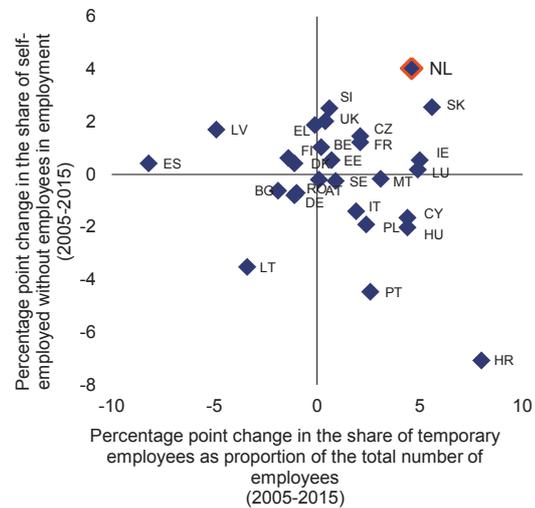
of households living at risk of long-term poverty increased from 2.9 % in 2013 to 3.3 % in 2014⁽²³⁾. The share of people living in low work intensity households (age group 0-59) shows an increase from 9.3 % (2013) to 10.2 % (2015). Based on estimates by the Netherlands Institute for Social Research poverty is expected to decrease in the coming years among all groups. Social policies in the Netherlands emphasise work as the primary remedy against poverty. In 2016, the government decided to invest an additional structural EUR 100 million as of 2017 on a yearly basis to tackle child poverty. This budget is solely meant for children living in households with a low income. To ensure that this extra budget reaches the children, it will be provided in kind for goods or services.

4.3.2. LABOUR MARKET SEGMENTATION

Flexible employment constitutes a relative large and increasing share of the labour market. Both temporary employment as well as self-employment without employees increased substantially in the past 10 years in the Netherlands (Graph 4.3.6). This can be explained by macroeconomic and institutional factors, including favourable tax treatment (for self-employed without employees) and large differences in employment protection legislation between permanent and temporary contracts (see European Commission, 2016a, p. 46-49).

⁽²³⁾ Long-term is defined as a period of at least four years successively.

Graph 4.3.5: Flexibility increase on the labour market

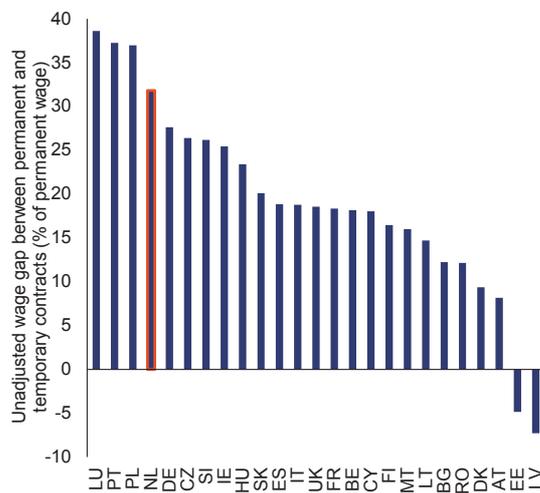


Source: European Commission (Eurostat).

Labour market indicators point to risks of segmentation. The recent increase in employment can be largely attributed to temporary employment. In addition, the share of temporary employment (already among the highest in the EU) continues to rise in the Netherlands and transitions between temporary and permanent contracts have remained rather constant over the last years. There is a substantial difference between the average wage of an employee with a permanent contract and an employee with a temporary contract. In 2014, the unadjusted wage gap was 32 %, one of the highest in the EU. (Graph 4.3.6) This difference can be partially explained by differences in individual and job characteristics, but even after controlling for these elements, the wage gap remains 16 %⁽²⁴⁾. Furthermore, the share of involuntary temporary employment increased from 33.9 % in 2010 to 54.6 % in 2015. These developments point to a risk of labour market segmentation and increasing job insecurity.

⁽²⁴⁾ Based on the average difference in the hourly wages between permanent and temporary employees with similar characteristics in terms of age, gender, occupation, educational level, sector and type of employment (full-time vs. part-time).

Graph 4.3.6: **Unadjusted wage gap between employees with permanent and temporary contracts (2014)**



Source: European Commission (Eurostat)

A major reform aimed at reducing differences between temporary and permanent contracts took place in 2015⁽²⁵⁾, but given that the reform will be implemented gradually, it is too early to evaluate it. For permanent contracts dismissal rules and procedures were simplified and severance payments were decreased. In addition, with the objective of reducing the differences between permanent and temporary contracts, the rights of flexible workers were enhanced: the number of temporary contracts was limited to three, with a maximum total duration of two years. The waiting time for renewal of a temporary contract after three contracts or two years of employment in total was raised from three to six months. Some preliminary evaluation studies (see Bennaars et al., 2016; Houweling et al., 2016) indicate that the reforms appear to have had mixed results. While severance payments decreased as was intended by the legislator, employers claim that they have to follow longer and more difficult procedures with higher uncertainties when laying off employees. There is no reliable evidence on whether transitions from temporary to permanent contracts are increasing as a result of the adoption of the Work Security Act.

⁽²⁵⁾ Work Security Act (*Wet Werk en Zekerheid*) which follows upon the Social Agreement struck with social partners on 11 April 2013.

The number of self-employed, in particular those without employees, increased further in 2015, but seems to have stabilised in 2016. Self-employment without employees accounted for 11.5 % of total employment in 2015, up by more than 4 pps since 2005 (see European Commission, 2016a, p. 47, Graph 3.2.7). The group of self-employed is very heterogeneous. Changes in industrial production with employment shifting towards those sectors that are more prone to self-employment have only played a small role in explaining the recent shift towards more self-employment without employees. On the contrary, particular institutional factors related to a different tax and social security treatment as well as applicable labour regulations and labour protection rules appear to be at the origin of the rapid rise in self-employment without employees. A government study (Ministry of Finance, 2015) suggests that the tax incentives for the self-employed do not lead to substantial additional job creation and that most self-employed are not, or only partly, insured against the risks of sickness, labour disability, unemployment and old age⁽²⁶⁾. The study also finds no correlation between self-employment and innovation. The latter factors point to rigidities in the formal employment sector. In addition, the favourable tax treatment for self-employed without employees and the possibility of paying lower social security contributions (if any) creates additional risks and challenges in particular for those with low incomes (see European Commission, 2016a, p.47-48). With the Employment Relationships Deregulation Act (*Wet DBA*) the government proposed a mechanism that should reduce the incentives for employers to replace employees with bogus self-employed. However, the enforcement of this law has recently been suspended until at least the beginning of 2018.

4.3.3. EDUCATION

Despite an overall good performance, there has been a decline in basic skills and an increase in educational inequality. 2015 average PISA scores in science, mathematics and reading were lower than in the previous 2012 round. The share of top performers decreased slightly in mathematics and

⁽²⁶⁾ For example in 2013 only 33.2 % of the self-employed without employees were insured against disability

science, but increased in reading. The proportion of low achievers in PISA 2015 is lower in the Netherlands than the EU average, but has increased in all fields. The impact of socioeconomic background on performance is relatively high. Also the Inspectorate of Education signalled an increase in educational inequality. In a sample of students with average cognitive performance, 55 % of students with highly educated parents completed higher education, compared to 26 % of students with low-educated parents (Inspectorate of Education, 2016).

residence permits to enter education before they have completed the integration process. The ministry is furthermore working on improving communication, accelerating the asylum procedure and the matching education to employment.

General government expenditure on education as a proportion of GDP is above EU average, but below that of top performers. In 2014 the Netherlands spent 5.4 % of GDP on education, which is lower than Finland, Sweden and Denmark, with respectively 6.4 %, 6.6 % and 7.2 % of GDP. Evidence shows a strong correlation between teacher quality and education outcomes (European Commission, 2012; OECD, 2016f). In line with the 2013-2020 Teachers Agenda, the Ministry of Education has implemented measures to improve the quality of teaching, teacher training and career prospects (European Commission, 2015e). Measures to improve the quality of teacher training and better career prospects have not yet led to more enrolments in teacher training (Ministry of Education, 2016a).

The inflow of asylum seekers in 2015, including minors, posed several challenges to the education system. Until 2013, asylum seekers made up an average of approximately 2 400 new pupils per year in compulsory education. The intake significantly increased to 4 900 in 2014 and 12 700 in 2015 (Ministry of Education, Culture and Science, 2016b). Municipalities are responsible for the education provided to asylum seekers, and work with schools to deliver on this. A challenge linked to people with a migrant background, including refugees, wishing to enrol in vocational education and training or in higher education has been the recognition of their qualifications. It can take up to two years to pass the National Diploma/State Exam II, the entry requirement to higher education. The Ministry of Education is currently working on combined trajectories where asylum seekers can combine vocational and educational training and the integration process. This should allow holders of

4.4. INVESTMENT

Box 4.4.1: Investment challenges and reforms in the Netherlands

Section 1. Macroeconomic perspective

Investment activity in the Netherlands declined relatively sharply during the crisis years. This was mostly driven by a drop of construction investment related to the housing market slump. Since 2014, total investment is growing again and has taken over as the main driver of GDP growth in 2015 (see section 1). Looking ahead, private investment is expected to continue to grow, albeit at somewhat lower rates. The housing market recovery supports construction investment, whereas industrial production and positive readings of business confidence indicators signal growing investment in equipment. However, external risks stemming from lower growth in export markets remain. Public investment peaked at 4.3 % of GDP in 2009 and declined to 3.5 % in 2016 and is expected to further decline to 3.3% of GDP in 2018, according to the European Commission 2017 winter forecast.

Section 2. Assessment of barriers to investment and ongoing reforms

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

Legend:

	No barriers to investment identified
CSR	Investment barriers that are also subject to a CSR
	No progress
	Limited progress
	Some progress
	Substantial progress
	Fully addressed

Overall, the Netherlands faces relatively few regulatory barriers to investment, as confirmed by the European Commission assessment (see European Commission, 2015d). Nevertheless, in particular compared to corporate savings, investment is relatively low. As discussed in section 4.4 retained earnings from foreign investment activities by large multinational enterprises explain a substantial part of the savings surplus.

Main barriers to investment and priority actions underway

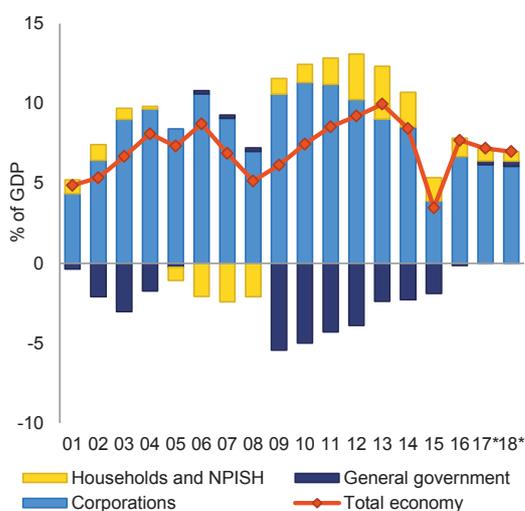
1. Public and private expenditure on research and development remains low compared to top performers. Moreover, public R&D support is set to decline over the coming years (see section 4.5.1). As R&D expenditure is closely related to the innovative capacity of a country, investment in R&D has the potential to increase productivity growth. In 2016, the government merged two policy instruments, the WBSO tax credit and the R&D allowance, which potentially increases the accessibility of public R&D support.

2. Some specific sectoral regulations may create obstacles to investment. Procedures to obtain building permits are relatively lengthy. The World Bank Doing Business indicators point to a worsening situation concerning dealing with construction permits, as the Netherlands fell 6 places and is now in position 87 in dealing with construction permits. In addition, conditions for mobilising investment in renewable energy sources by the private sector have potential for improvement, specifically regarding regulatory and policy clarity and planning perspective. The costs of equity and debt are higher for onshore wind projects than for offshore projects. The Netherlands' Energy Outlook (ECN, 2016, p. 77) indicates that the duration of project preparation remains a barrier to timely onshore wind deployment. For offshore wind projects, however, recent tenders have seen far lower prices than expected, suggesting that the government has successfully addressed planning certainty in the offshore wind sector (see also Box 4.5.1).

4.4.1. THE SAVING AND INVESTMENT IMBALANCE*

The Netherlands continues to be a net lender to the rest of the world, which is reflected in its large current account surplus. Five-year average of net lending stood at 7.9 % of GDP in 2015. As visible in Graph 4.4.1, the high net lending position since 2001 is largely accounted for by the corporate sector, specifically non-financial corporations (NFCs). In the period 2010-2013, the decline in net lending by NFCs was more than offset by the deleveraging of households and the fiscal consolidation by the government. However, as household deleveraging has slowed down and net lending by the corporate sector continues to fall, total net lending to the rest of the world is now projected to decrease very gradually over the coming years⁽²⁷⁾.

Graph 4.4.1: Net lending/borrowing by sector

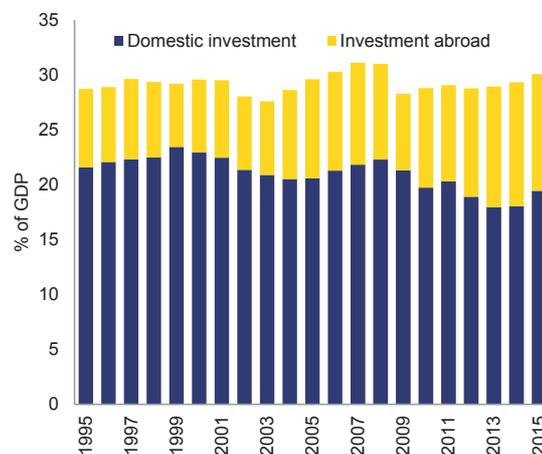


Source: European Commission (Eurostat)

The high level of net lending reflects an excess of domestic savings which are not absorbed by domestic investments. Total domestic saving, which is the sum of domestic and foreign investment, is relatively stable in GDP terms (see Graph 4.4.2), but the share of domestic investment relative to total savings has declined (Rojas-Romagosa and van der Horst, 2015).

⁽²⁷⁾ The sharp decline in corporate net lending in 2015 is linked to a one-time inflow of intellectual property rights into the Netherlands of EUR 32 billion, accompanied by inward foreign direct investment flows (DNB, 2015d).

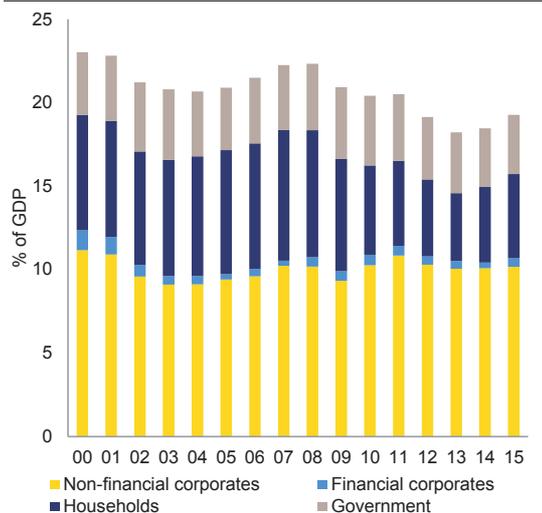
Graph 4.4.2: Domestic and foreign investment



Source: European Commission (Eurostat)

Recent investment dynamics have been driven by residential investments. In line with the ongoing housing market recovery, household investment has now been increasing for two consecutive years as a proportion of GDP (see Graph 4.4.3). The resilience of corporate investment may be partly explained by somewhat more favourable credit conditions for corporate borrowers, particularly for larger corporations and multinational enterprises

Graph 4.4.3: Gross fixed capital formation by sector

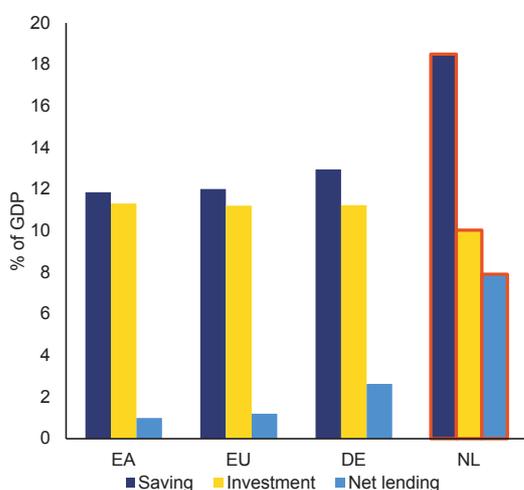


Source: European Commission (Eurostat)

Non-financial corporations (NFCs) have a persistently high saving rate and a comparably low investment rate. On average, NFC savings stood at 18 % of GDP between 2010 and 2015,

while investment averaged 10 % of GDP. When compared to the EU average (12 % of GDP), NFC savings stand out as exceptionally large (see Graph 4.4.4). The same is true when compared to the euro area average or specifically Germany as another surplus country. By contrast, the investment-to-GDP ratio is only slightly below the EU average (11 % of GDP). As a consequence, net lending by NFCs as a share of GDP is six times as high as the EU average and three times as high as in Germany.

Graph 4.4.4: **NFC net lending compared to other countries (average 2010-2015)**



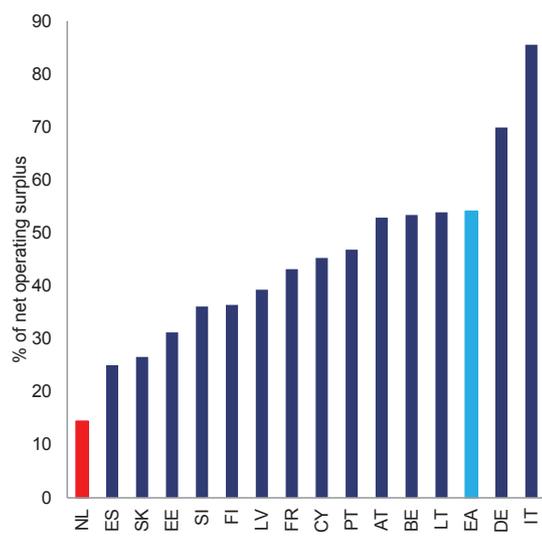
Source: European Commission (Eurostat)

Compared with other European Member States, NFCs in the Netherlands distribute a relatively low share of profits. The net distributed income by NFCs as a percentage of gross value added is below the EU average, and substantially lower than the German average (See Graph 4.4.5). A detailed look at the income statement by NFCs reveals that the difference in net lending between NFCs in Germany and the Netherlands is fully accounted for by the differences in the net distributed income, principally dividend payments (see European Commission 2016a, p. 16). Corporate net lending in 2015 would have been 5.7 pps of GDP lower if NFCs distributed net income at the euro area weighted average of 52 % of net operating surplus. The corresponding effect on the current account would have been smaller (almost 3 % of GDP), but still substantial⁽²⁸⁾. A Dutch

⁽²⁸⁾ This is based on the assumption that MNEs account for two thirds of net operating surplus, and that three quarters of their dividends end up with foreign shareholders.

central bank study came to a similar conclusion (see Eggelte et al., 2014). To a certain extent, low profit distribution is linked to tax incentives for director-major shareholders to retain earnings (see Section 4.1), and more importantly to the relatively high number of multinational enterprises with headquarters in the Netherlands.

Graph 4.4.5: **Net distributed income ratios (average 2012-2015)**



Source: European Commission (Eurostat)

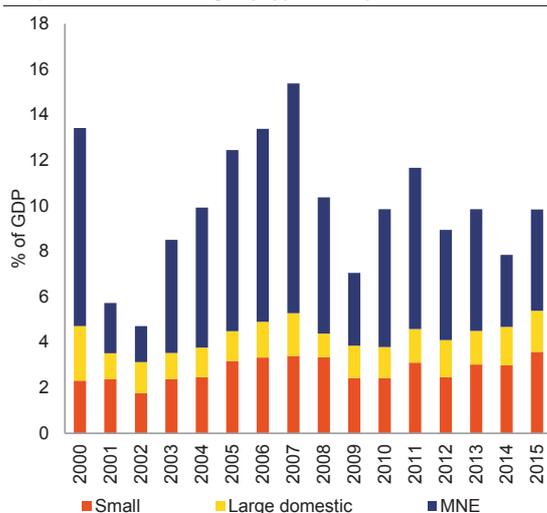
Multinational enterprises (MNEs) and related capital flows are the main determinants of the savings surplus. Multinational enterprises feature prominently in the corporate landscape. While only about 2 % of all companies active in the Netherlands are classified as multinationals, they account for 40 % of private sector employment and around two thirds of private sector turnover (CBS, 2015a). An analysis of NFCs by size and cross-border activity reveals the importance of MNEs for the economy. Graph 4.4.6 plots corporate savings in terms of GDP for three types of NFCs: Large MNEs, large domestic corporations, and small corporations⁽²⁹⁾. NFC savings are largely determined by multinationals. In 2015, the ten-year average savings of MNEs stood at 5.9 % of GDP, accounting for more than half of total NFC

According to a DNB study, 75 % of the shares of Dutch MNEs are held by foreigners; see Eggelte et al. (2014).

⁽²⁹⁾ MNEs and large domestic NFCs are defined to have a balance sheet of minimum EUR 40 million, and MNEs also have foreign subsidiaries. Small corporations are all companies with a balance sheet below EUR 40 million.

savings. Thus, MNE savings in the Netherlands roughly account for the difference in NFCs savings with the EU average (see Graph 4.4.5) ⁽³⁰⁾. The average savings by large domestic (1.5 % of GDP) and small corporations (3.0 % of GDP) are comparably low and much more stable.

Graph 4.4.6: Net savings by type of corporation



Source: Statistics Netherlands, based on Jansen and Ligthart (2014)

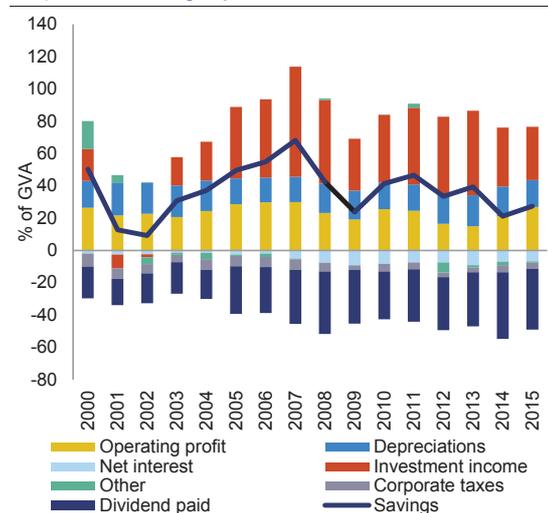
Profits from foreign subsidiaries influence net lending in the Netherlands. Looking at corporate income sheets by type of corporation reveals major differences between MNEs and domestic enterprises. High savings by MNEs in terms of gross value added (GVA) are mostly explained by the high share of profit from foreign subsidiaries (see Graph 4.4.7). This also includes retained earnings abroad. If profits are retained within a subsidiary, these retained earnings are assigned to the parent company, i.e. to the multinational headquarters in the Netherlands ⁽³¹⁾. While this also applies to European headquarters in the Netherlands that are ultimately controlled by foreign entities, the net effect on net lending is positive and substantial. In contrast to earnings from abroad, operating profit from domestic activities by MNEs is relatively stable and even

⁽³⁰⁾ It should be noted that the underlying data in Graph 4.4.6 stem from corporate financial accounts, and do not fully match national accounts definitions.

⁽³¹⁾ This only applies to the case of FDI equivalent to more than 10 % of the subsidiaries shares. Otherwise, it is considered portfolio investment and retained earnings are not assigned to the shareholder.

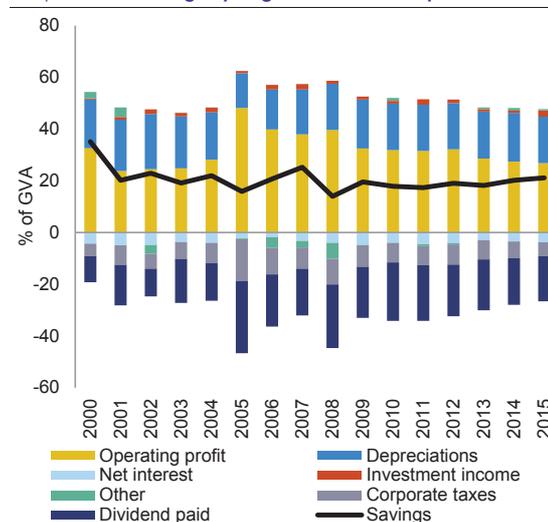
slightly below the profit of large domestic firms in terms of gross value added.

Graph 4.4.7: Savings by MNEs



Source: Statistics Netherlands, based on Jansen and Ligthart (2014)

Graph 4.4.8: Savings by large domestic enterprises



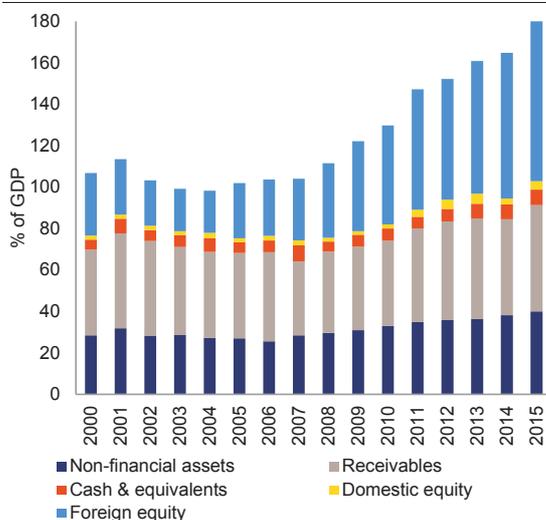
Source: Statistics Netherlands, based on Jansen and Ligthart (2014)

The corporate tax burden can be lower for MNEs compared to domestic companies. While the top statutory corporate income tax rate of 25 % is average compared to the euro area, the effective tax rate paid by multinationals can be lower due to a rather generous application of the participation exemption (European Commission, 2016e), which allows dividends and capital gains from foreign

subsidiaries to be exempted from corporate taxation.

Multinationals use savings mostly to increase their participations abroad. Compared to the relatively volatile income from subsidiaries, distributed income by MNEs to shareholders is more stable, albeit at a lower level. This is in line with a steady dividend policy followed by many MNEs that dominate the corporate sector. In recent years, excess savings have been channelled into share buybacks and the acquisition of equity assets (see also European Commission, 2016a). This is visible in Graph 4.4.9, which plots trends in balance sheet assets by MNEs since 2000. Between 2005 and 2015, MNEs increased their equity holdings abroad by around 50 pps of GDP. This is equivalent to an increase from 26 % to 43% of total assets. MNEs' tendency to retain rather than distribute earnings is a significant explanation for the high corporate net lending in the Netherlands

Graph 4.4.9: Assets held by MNEs



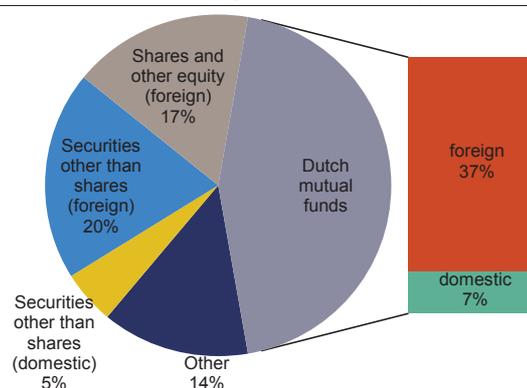
Source: Statistics Netherlands

4.4.2. INVESTMENT BY PENSION FUNDS*

Pension funds hold the largest share of household savings, and invest mainly in securities and mostly abroad. Total assets held by pension funds have increased substantially over the last 10 years, from 117 % of GDP in 2005 to 185 % of GDP in 2015. Most of the pension savings are invested in shares, and equity and

securities other than shares. A breakdown of pension fund assets is given in Graph 4.4.10. Direct investment in domestic investment funds makes up the largest part of total assets (45%). When taking into account these mutual funds' investment portfolios (i.e. adopting a 'look-through' approach), it becomes clear that a substantially larger share of pension savings is ultimately channelled abroad (79 %).

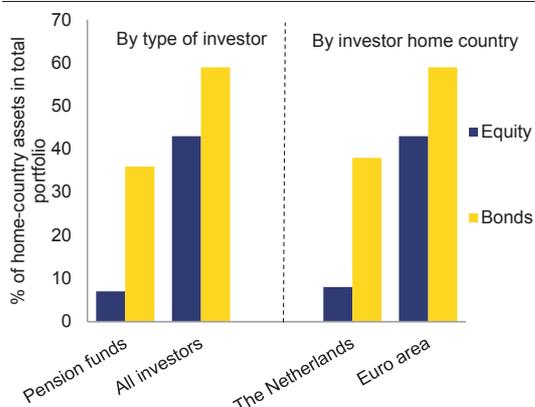
Graph 4.4.10: Asset holdings by pension funds (2016Q2)



Source: DNB, European Commission

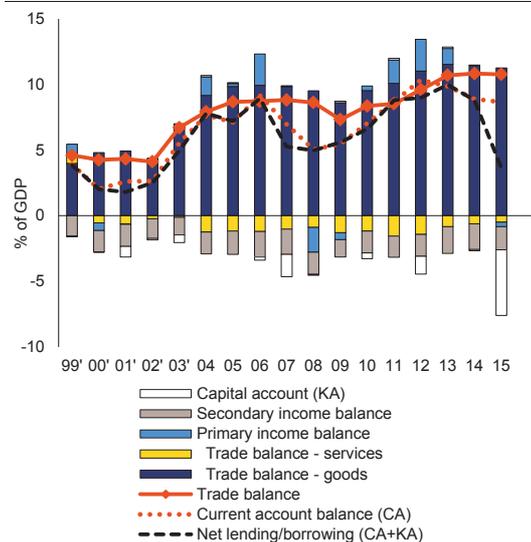
The strong international diversification in the pension savings portfolio is a key factor in explaining the high savings surplus. Compared to other euro area investors, investors from the Netherlands hold a relatively low share of domestic asset (Boermans and Vermeulen, 2016). Only 38 % of their bond portfolios are invested domestically. In the euro area, the average share of home country bonds is 59 %. For equity investment, the difference is even greater (8 % for investors from the Netherlands, compared to 43 % in euro area). In addition, pension funds show a higher domestic share than other types of investors in the euro area over both asset classes. As such, the savings surplus is also an outcome of less diversified portfolios by foreign investors, who invest relatively little in the Netherlands, while domestic investors show a high degree of international risk diversification. Overall, pension funds shift relatively large amounts of capital to other countries, which entails both opportunities and risks for the creditor and debtor countries and lowers the domestic investment base. A recent government initiative is aimed at increasing investment opportunities by pension funds and insurers in the domestic economy (see section 4.2 on access to finance).

Graph 4.4.11: Investment home bias (2014)



Source: Based on Boermans and Vermeulen (2016), ESCB Security Holdings Statistics

Graph 4.4.12: Current account breakdown



Source: European Commission (Eurostat)

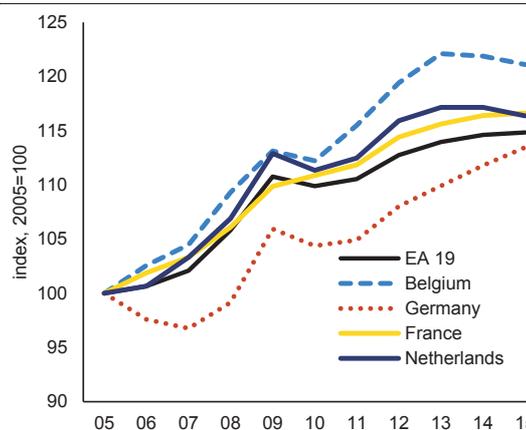
4.4.3. TRADE PERSPECTIVE ON THE CURRENT ACCOUNT*

The large and positive trade surplus in goods is the main driver behind the current account surplus from a net trade perspective. The sizeable trade flows into and out of the Netherlands are linked to the favourable geographical location and the large port of Rotterdam. About half of all incoming goods are either transit trade or re-exports. The latter account for roughly 45 % of total goods exports. Large contributions to the positive trade balance come from chemicals and manufactured goods where exports have doubled since 2000. The lower production and therefore export of gas led to a slowdown in trade balance growth, but not to a change in the overall trend.

Net services exports are negative. This is driven by a net deficit in services trade outside the euro area. Within the euro area, the net service trade balance is positive.

The export market share continues its declining trend, in line with other European peer countries. In 2015, the Netherlands lost market share in the intra-EU trade, while remaining constant in non-EU markets. From an industry perspective, the decline in export market share is driven by a loss in goods trade, while the contribution of services has been positive but small since 2013.

Graph 4.4.13: Nominal unit labour cost (per hour worked)



Source: European Commission (Eurostat)

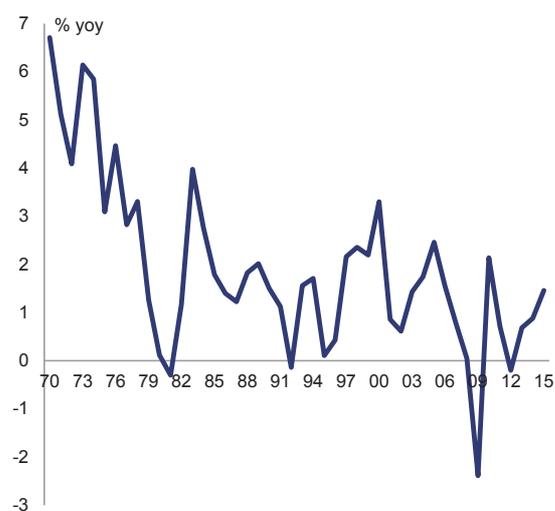
Cost competitiveness continues to improve. Since 2013 unit labour costs in open sectors have been declining, supporting the price competitiveness of exports. The real effective exchange rate remained well above the average of the EU, indicating a comparative advantage in prices over other EU Member states.

4.5. SECTORAL POLICIES

4.5.1. PRODUCTIVITY DEVELOPMENTS AND ITS KEY DRIVERS

Productivity in the Netherlands is generally high, but productivity growth remains below pre-crisis averages. In 2015, aggregate labour productivity in the Netherlands was almost 27 % above the EU average but the declining trend in growth rates remains. Despite small fluctuations annual growth of GDP per hour worked remained relatively low at 1.5 % in 2015 (see Graph 4.5.1). There are several potential explanations for the slow growth, such as a low investment in R&D or low levels of knowledge diffusion. As the contribution of labour supply to output growth is limited, labour productivity and skills will be increasingly important for overall economic growth.

Graph 4.5.1: **GDP per hour worked (constant prices, year-on-year growth)**



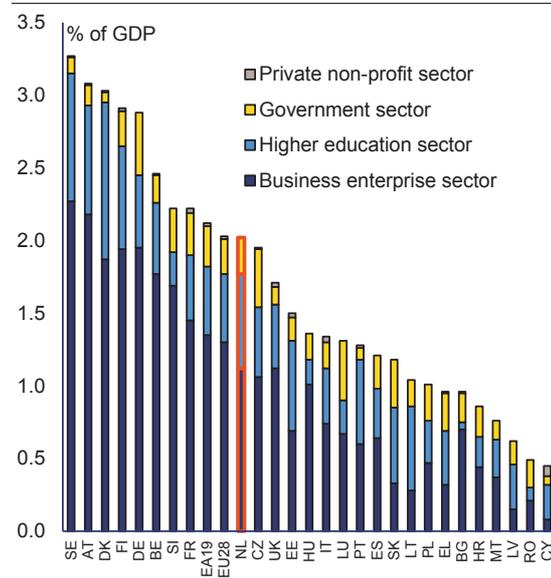
Source: European Commission (Ameco)

Public and private R&D spending is relatively low in the Netherlands, limiting the growth potential of the economy. Although the Netherlands is currently an 'innovation leader' (European Commission 2016c), the total R&D intensity of 2.01 % of GDP in 2015 is still significantly below the Europe 2020 target of 2.5 %. Private R&D intensity (1.12 % of GDP) remains low compared to other innovation leaders⁽³²⁾. Similarly, the public R&D intensity of

⁽³²⁾ These include Denmark (1.87 % of GDP), Germany (1.95 % of GDP), Finland (2.94 % of GDP) and Sweden (2.27 % of GDP).

0.90 % in 2015 is lower than in the most innovative European economies. Moreover, total public R&D support, including both direct and indirect fiscal instruments, is projected to decline from 0.94 % of GDP in 2016 to 0.82 % of GDP in 2021 (Vennekens and van Steen, 2017). Applied research institutes are required to compensate for this decrease in public funding by obtaining more private funding. Nevertheless, while closer links between public research and industry are important, a generally high quality of public research is a precondition for public-private cooperation.

Graph 4.5.2: **R&D expenditure by sector (2015)**



Source: European Commission (Eurostat)

There is scope to transform the Netherlands' world-class science base into a more innovation-intensive economy, including more investment in knowledge-based capital. The science base is one of the best in the world, with 14.5 % of scientific publications among the 10 % most-cited worldwide, which is the best performance in the EU. The openness and attractiveness of the science system in the Netherlands is notably reflected in the high proportion of international scientific publications, strong public-private collaborations and a high share of foreign doctoral students (European Commission, 2016c).

Also, labour market institutions have potential negative implications for productivity growth and innovation performance. Framework

conditions, such as a high-quality educational system and well-functioning product and labour markets, are vital for productivity growth. The relatively stringent employment protection for permanent contracts may hinder productivity growth via its impact on labour turnover rates. According to Andrews, Criscuolo and Gal (2015), potential labour productivity in the Netherlands could be increased substantially by reducing the stringency of employment protection.

The Netherlands has a strong and highly educated workforce for innovation, but has faced challenges responding to emerging labour market needs. The population with a tertiary level of education is high, in comparison to the EU average. However, the share of graduates in science, technology, engineering and mathematics (STEM) fields is low, at only 14.7 %⁽³³⁾, notably because STEM fields attract a low share of women. The share of women graduating in these fields is only 25 %, one of the lowest shares in the EU. The Technology Pact 2020, which targets all levels of education, was recently updated for the 2016-2020 period, and the human capital agendas for the top sectors, are designed to increase the number of skilled workers⁽³⁴⁾.

Moreover, the Netherlands continues to develop effective policies to attract highly-skilled workers from abroad. The knowledge immigration scheme in place since 2014 has become the largest channel of non-EU labour migration to the Netherlands and is popular with employers (OECD, 2016a). It facilitates the recruitment of some 12 000 highly-skilled migrants per year. As of October 2015, the administrative procedure for obtaining a residence permit has been streamlined for researchers, students and skilled migrants (Ministry of Education, Culture and Science, 2016).

⁽³³⁾ Based on Eurostat data, tertiary education levels for science, mathematics and computing, and engineering, manufacturing and construction.

⁽³⁴⁾ The focus of the *Techniekpact* broadly covers all 'technical' professions. See Ministry of Economics (2016), for comprehensive data.

4.5.2. COMPETITION IN PRODUCT AND SERVICES MARKETS

Regulatory barriers in services markets, retail and regulated professions in the Netherlands remain among the lowest in the EU, with the exception of the construction sector. This holds especially true for the legal, accounting, engineering and architectural professions (European Commission, 2017). These low levels of regulatory barriers notwithstanding, the government identified further necessary action in its national regulated professions action plan which it submitted to the European Commission in December 2015 (Rijksoverheid, 2015). It proposes in particular the development of a new instrument for the proportionality assessment of every new legal act aiming at additional occupational regulation.

4.5.3. ENERGY AND SUSTAINABILITY

The Netherlands missed its interim target for the share of renewable energy and is not on track to meet its 2020 target for energy from renewable sources, although positive developments have recently emerged. The Netherlands achieved a renewable energy share of 5.5 % in 2014 and therefore did not meet its interim target. Furthermore, the Netherlands is expected to miss its target of 14 % by 2020, with the National Energy Outlook 2016 estimating a renewable energy share by 2020 of only 12.5 %. However, there are also a number of positive signs for renewable energy. The Netherlands organised a successful tender for offshore wind (see Box 4.6.1), which is likely to contribute to the share of renewable energy production. In addition, it has strengthened its main support scheme, 'SDE+', for renewable energy deployment; it has opened a new support scheme for renewable heat projects and it has published a long-term energy vision to provide continuity. Furthermore, the Netherlands has evaluated its national energy agreement and is proposing a number of additional instruments to accelerate renewable energy deployment in the coming years. In June 2016, the Netherlands signed the political declaration on energy cooperation between the North Sea countries, which aims at facilitating the cost-effective deployment of offshore renewable energy as well

as further market integration through better interconnection.

Good progress has also been made with regard to national greenhouse gas reduction and energy efficiency targets. Under the EU 2020 strategy, the Netherlands committed to a non-emission trading system greenhouse gas emission target of a 16 % reduction in emissions by 2020 compared to 2005 levels. According to national projections, the Netherlands expects that it will reduce its non-emission trading system emissions by 25 % by 2020 compared to 2005, implying that it is on track to meet its greenhouse gas targets. The Netherlands is also on track to meet its 2020 energy efficiency target. Final energy consumption is estimated to be 47.4 million tonnes of oil equivalent (Mtoe) in 2020, below the target of 52.2 Mtoe (Energieonderzoek Centrum Nederland, 2016). Nevertheless, in the context of the national 'Energy Agreement for sustainable growth' the Netherlands has taken additional measures to further improve energy efficiency. While some of the agreed measures have been translated into legislation, others are non-binding meaning that their contribution to meeting the targets is not guaranteed.

Although currently comparatively low, energy import dependency is expected to increase. With net imports amounting to 33.8 % of domestic demand, the Netherlands has a low overall energy import dependency. Nevertheless the Netherlands is highly dependent on imports of crude oil, natural gas liquids and coal that it receives from a decreasing number of suppliers. Gas production has started to decrease and will continue to do so in the coming years as a result of production ceilings set for the Groningen field (due to earthquakes) and lower production levels at other small gas fields. According to the International Energy Agency, the Netherlands is expected to become a net importer of gas by 2025.

The Netherlands is one of the first European countries to present a long-term strategy for a more circular economy. It was one of the first EU countries to produce a circular economy programme (2014), followed in 2016 by a long-term strategy to 2050 (Rijksoverheid, 2016b). The leading role of the Netherlands is illustrated by the fact that it is one of the best performers in the EU in terms of resource productivity (how efficient the

economy uses material resources to produce wealth), with 3.44 EUR/kg in 2015 (EU average 2.0).

4.6. PUBLIC ADMINISTRATION

The quality and effectiveness of the public administration is high and the business environment largely favourable, both by EU and international standards (European Commission, 2016a). Satisfaction rates with the quality of transport infrastructure are the highest in the EU (OECD, 2016c) According to the World Economic Forum (2016), the Netherlands has moved up to become the most competitive economy in the EU, and the fourth most competitive economy in the world. According to the same source, it is among the top 10 countries in the world for competitiveness in infrastructure, health and primary education, higher education and training, goods market efficiency, technological readiness, business sophistication, and innovation. For scientific research and cooperation between universities and the private sector the Netherlands is among the top five.

As regards public procurement, the number of tenders published under EU rules has continued to improve for the third year in a row, in contrast to an overall EU trend of decreasing publication rates. While remaining relatively low in comparison with other Member States, the publication rate increased to 10.4 % of total public procurement expenditure in 2015 (2.0 % of GDP), up from 8.8 % (1.8 % of GDP), the previous year. The share of procurement contracts published at EU level, including utilities and defence contracts, increased even more significantly, to reach 20 % in 2015. However, despite these improvements, the publication rate remains particularly low for public procurement in certain sectors such as healthcare (at just 0.5 % of the total public expenditure).

Strategic public procurement aims to facilitate SME access to procurement markets, but SME participation in public procurement remains comparatively weak (European Commission, 2016c). First evaluations of the new Procurement Act of 2013 indicate large satisfaction of SMEs with the measures designed to improve access of SMEs to public procurement markets. In addition, the evaluation studies find that small businesses have an equal chance of being awarded a government contract, though at much lower value on average. However, the share of SMEs participating in public tenders dropped further to 17 %, down from 21 % the previous year.

Box 4.6.1: Selected highlight: Offshore wind farms in the Netherlands

With a net installed capacity of 691 MW of offshore wind turbines in 2016, the Netherlands has now a total installed capacity of 1118 MW. In 2016, the Dutch government also held two tenders for offshore wind farms in the Borssele Wind Farm Zone. This resulted in additional capacity-building of 1380 MW (for a price of 72.7 EURO/MWh and 54.5 EURO/MWh for about each half of the capacity). The prices resulting from these auctions are significantly lower than those achieved elsewhere recently, reducing the overall cost of achieving the 2030 objectives and Dutch contributions thereto. Even though this will likely not prevent missing the EU 2020 renewable energy target for the Netherlands, the capacity development of renewable energy combined with significant and sustainable price reductions for renewable energy merit an assessment as good practice.

These tenders followed the 'one stop shop' model pioneered by Denmark, whereby a single entity - The Netherlands Enterprise Agency - provides all permits to the winning bidder. Each tender had a maximum auction price, a guaranteed price for 15 years, and a 30-year permit to build and operate the wind farm and then decommission it. The Dutch government took on the cost of site investigations. The offshore grid, the grid connections and two offshore substations to connect the farms are paid through a levy on all electricity consumers.

The tenders are part of a long-term plan agreed with both energy and social stakeholders in the 2013 Energy Agreement for Sustainable Growth to deploy 4450 MW of offshore wind by 2023 (of which 2498 MW have now been achieved including installed capacity and the recent tenders). This plan foresees yearly tenders up to 2019 to ensure that all farms are operational by 2023. As part of this long-term plan, the Dutch government designated offshore wind farm zones in its National Structural Vision in 2014. Within each of the zones, the Dutch government identified wind farm sites, commissioned environmental impact assessments for the sites, measured site data on the soil-wind and water condition, and made this data publically available. For the time beyond 2023, the Dutch government published in December 2016 its energy vision for 2030 in which it proposes to develop two roadmaps for offshore wind over the period 2023-2030 and over the period 2030-2050. Their long term energy vision also includes a soft commitment to a steady growth of installed offshore wind capacity of 1000 MW per year post-2023.

ANNEX A

Overview table

Commitments

Summary assessment ⁽³⁵⁾

2016 Country-specific recommendations (CSRs)	
<p>CSR 1:</p> <p>Limit the deviation from the medium-term budgetary objective in 2016 and achieve an annual fiscal adjustment of 0.6 % of GDP in 2017.</p> <p>Prioritise public expenditure towards supporting more investment in research and development.</p>	<p>The Netherlands has made no progress in addressing the fiscal-structural part of CSR 1⁽³⁶⁾</p> <p>No progress has been made in prioritising public expenditure towards supporting more investment in research and development.</p>

⁽³⁵⁾ The following categories are used to assess progress in implementing the 2016 country-specific recommendations: **No progress:** The Member State has not credibly announced nor adopted any measures to address the CSR. Below a number of non-exhaustive typical situations that could be covered under this, to be interpreted on a case by case basis taking into account country-specific conditions:

- no legal, administrative, or budgetary measures have been announced in the National Reform Programme or in other official communication to the national Parliament / relevant parliamentary committees, the European Commission, or announced in public (e.g. in a press statement, information on government's website);
- no non-legislative acts have been presented by the governing or legislator 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 that would need to be taken (unless the CSR explicitly asks for orientations or exploratory actions), while clearly-specified measure(s) to address the CSR has not been proposed.

Limited progress: The Member State has:

- announced certain measures but these only address the CSR to a limited extent; and/or
- presented legislative acts in the governing or legislator body but these have not been adopted yet and substantial non-legislative further work is needed before the CSR will be implemented;
- presented non-legislative acts, yet with no further follow-up in terms of implementation which is needed to address the CSR.

Some progress: The Member State has adopted measures that partly address the CSR

and/or the Member State has adopted measures that address the CSR, but a fair amount of work is still needed to fully address the CSR as only a few of the adopted measures have been implemented. For instance: adopted by national parliament; by ministerial decision; but no implementing decisions are in place.

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

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

⁽³⁶⁾ This overall assessment of CSR1 does not include an assessment of compliance with the Stability and Growth Pact

<p><i>CSR 2:</i></p> <p>Tackle remaining barriers to hiring staff on permanent contracts and facilitate the transition from temporary to permanent contracts.</p> <p>Address the high increase in self-employed without employees, including by reducing tax distortions favouring self-employment, without compromising entrepreneurship, and by promoting access of the self-employed to affordable social protection.</p>	<p>The Netherlands has made limited progress in addressing CSR 2:</p> <p>No (further) progress has been made in tackling remaining barriers to hiring staff or in facilitating transition from temporary to permanent contracts.</p> <p>No progress has been made in reducing tax distortions favouring self-employment or increasing the social protection coverage of self-employed.</p> <p>Limited progress has been made in addressing the increase in using self-employed without employees. With the Employment Relationships Deregulation Act (Wet DBA) the Netherlands have implemented a mechanism that reduces the incentives for employers to replace employees by bogus self-employed. But the enforcement of this law has recently been postponed until at least the beginning of 2018.</p> <p>In the Perspectives Memorandum the government developed a vision for a possible reform of the pension system that may also include the coverage of self-employed under the second pillar of the pension system on a voluntary basis.</p>
<p><i>CSR 3:</i></p> <p>Take measures to make the second pillar of the pension system more transparent, inter-generationally fairer and more resilient to shocks.</p> <p>Take measures to reduce the remaining distortions in the housing market and the debt bias for households, in particular by decreasing mortgage interest tax deductibility.</p>	<p>The Netherlands has made limited progress in addressing CSR 3:</p> <p>Limited progress: With the Perspectives Memorandum, the government announced its ambition to reform the second pillar of the pensions system, but the development and the implementation of a reform is left to the next government. This points to limited progress.</p> <p>No progress has been made regarding the distortions in the housing market, since no additional reforms have been implemented and the mortgage interest tax deductibility has not been reduced further.</p>
<p>Europe 2020 (national targets and progress)</p>	

<p>Employment rate target set in the 2016 NRP: 80 %.</p>	<p>Labour market participation stood at 81.7 % in 2016Q2 and employment at 77 % in 2016Q2. The target is in reach.</p>
<p>R&D target set in the 2016 NRP: 2.5 % of GDP</p>	<p>In 2015, total R&D expenditure amounted to 2.01% of GDP. The average yearly growth rate of 1.4% since 2011 would need to increase substantially to reach the target by 2020.</p> <p>Public expenditure on R&D stood at 0.9 % of GDP in 2015, which is lower than in the most innovative European economies.</p>
<p>Greenhouse gas emissions, national target:</p> <ul style="list-style-type: none"> • -16 % in 2020 compared to 2005 (in sectors not covered by the EU emission trading scheme). • Non-ETS 2015 target: -7 %. 	<p>2020 target: According to the latest national projections and taking into account existing measures, non-ETS emissions will decrease by 20.5 % between 2005 and 2020. The target is consequently expected to be met with a margin of 4.5 pps.</p> <p>Non-ETS 2015 target: Based on proxy data, the non-ETS greenhouse gas emissions between 2005 and 2015 decreased by 20%; which means 13 pps below the 2015 target set by the Effort Sharing Decision.</p>
<p>2020 Renewable energy target:</p> <ul style="list-style-type: none"> • Energy from renewable sources is 14 % of gross final energy consumption by 2020. • 2013-2014 Interim target is 5.9% 	<p>With reaching 5.5 % of energy consumption from renewable sources, the Netherlands missed its interim target and is not on track to meet its 2020 target (National Energy Outlook 2016 estimating a renewable energy share by 2020 of only 12.5 %). Positive developments have however emerged recently.</p>
<p>Energy efficiency target:</p> <ul style="list-style-type: none"> • 60.7 Mtoe in primary energy consumption • 52.2 Mtoe in final energy consumption 	<p>The Netherlands increased its primary energy consumption by 2.7 % from 62.66 Mtoe in 2014 to 64.33 Mtoe in 2015. Final energy consumption increased by 3 % from 47.28 Mtoe in 2014 to 48.49 Mtoe in 2015.</p> <p>The Netherlands has to increase its effort to decrease its primary energy consumption further in order to achieve its indicative primary energy consumption 2020 target (60.7 Mtoe) and to keep its current final energy consumption below its final energy 2020 target (52.2 Mtoe).</p>

Early school leaving (ESL) target: <8.0 %.	ESL has been on a downward trend for years and with 8.2 % in 2015 the Netherlands is very close to the national target.
Tertiary education target: >40 %.	The rate has increased to 46.3 % in 2015, which is well above the target
Target for reducing the number of people living in households with very low work intensity in number of people: - 100 000 (aged 0-64)	Starting in 2010 with 1 595 000 people belonging to this group the number has increased to 1 653 000 in 2015, and remained stable in 2016. Thus, the target is not in reach.

ANNEX B

MIP Scoreboard

Table B.1: The MIP Scoreboard for the Netherlands

		Thresholds	2010	2011	2012	2013	2014	2015
External imbalances and competitiveness	Current account balance, (% of GDP) 3 year average	-4%/6%	5.9	7.1	8.7	9.6	9.7	9.1
	Net international investment position (% of GDP)	-35%	11.2	20.4	27.0	31.0	57.8	63.9
	Real effective exchange rate - 42 trading partners, HICP deflator 3 years % change	±5% & ±11%	-1.5	-2.4	-6.0	0.4	0.7	-0.6
	Export market share - % of world exports 5 years % change	-6%	-7.9	-7.9	-12.2	-10.7	-10.8	-8.3
	Nominal unit labour cost index (2010=100) 3 years % change	9% & 12%	7.6	4.8	2.3	5.2	4.1p	0.2p
Deflated house prices (% y-o-y change)		6%	-2.7	-4.0	-8.0	-8.2	0.0	3.6
Private sector credit flow as % of GDP, consolidated		14%	2.8	3.6	2.1	2.1	-1.7	-1.6p
Internal imbalances	Private sector debt as % of GDP, consolidated	133%	229.5	228.1	229.1	226.9	229.6	228.8p
	General government sector debt as % of GDP	60%	59.3	61.6	66.4	67.7	67.9	65.1
	Unemployment rate 3 year average	10%	4.4	4.8	5.3	6.0	6.8	7.2
Total financial sector liabilities (% y-o-y change)		16.5%	5.9	9.1	5.4	-2.4	8.7	3.2p
New employment indicators	Activity rate - % of total population aged 15-64 (3 years change in p.p)	-0.2%	-0.3b	-1.2b	-0.7	1.2	0.9	0.6
	Long-term unemployment rate - % of active population aged 15-74 (3 years change in p.p)	0.5%	0.0	0.7	1.1	1.3	1.3	1.1
	Youth unemployment rate - % of active population aged 15-24 (3 years change in p.p)	2%	1.7	1.4	1.5	2.1	2.7	-0.4

Flags: b: break in time series. p: provisional.

Source: European Commission, Eurostat and Directorate General for Economic and Financial Affairs (for Real Effective Exchange Rate), and International Monetary Fund

ANNEX C

Standard tables

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

	2011	2012	2013	2014	2015	2016
Total assets of the banking sector (% of GDP)	372.1	379.9	336.6	364.0	359.3	369.0
Share of assets of the five largest banks (% of total assets)	83.6	82.1	83.8	85.0	84.6	-
Foreign ownership of banking system (% of total assets)	13.3	11.2	8.3	7.0	7.5	-
Financial soundness indicators: ¹⁾						
- non-performing loans (% of total loans)	2.4	2.7	2.7	3.0	2.4	2.3
- capital adequacy ratio (%)	13.7	14.5	15.3	18.4	20.6	21.2
- return on equity (%) ²⁾	6.0	4.1	5.0	3.3	7.0	3.8
Bank loans to the private sector (year-on-year % change)	4.1	4.0	-1.1	1.1	-2.0	1.0
Lending for house purchase (year-on-year % change)	3.3	4.3	-0.1	1.3	5.4	3.6
Loan to deposit ratio	119.5	119.2	117.8	113.9	113.2	112.5
Central Bank liquidity as % of liabilities	0.8	1.5	0.7	0.6	0.7	0.6
Private debt (% of GDP)	228.1	229.1	226.9	229.6	228.8	-
Gross external debt (% of GDP) ¹⁾ - public	35.7	36.3	38.4	41.2	36.1	34.7
- private	295.3	304.5	320.5	329.3	329.2	339.3
Long-term interest rate spread versus Bund (basis points)*	38.1	43.8	39.2	29.0	19.5	20.4
Credit default swap spreads for sovereign securities (5-year)*	66.0	86.4	49.0	28.2	16.1	23.4

1) Latest data Q2 2016.

2) 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: Labour market and social indicators

	2011	2012	2013	2014	2015	2016 ⁴
Employment rate (% of population aged 20-64)	76.4	76.6	75.9	75.4	76.4	76.9
Employment growth (% change from previous year)	0.9	-0.2	-1.2	-0.2	0.9	1.0
Employment rate of women (% of female population aged 20-64)	70.4	71.0	70.6	69.7	70.8	71.4
Employment rate of men (% of male population aged 20-64)	82.4	82.3	81.1	81.1	81.9	82.5
Employment rate of older workers (% of population aged 55-64)	55.2	57.6	59.2	59.9	61.7	63.2
Part-time employment (% of total employment, aged 15-64)	48.3	49.0	49.8	49.6	50.0	49.8
Fixed-term employment (% of employees with a fixed term contract, aged 15-64)	18.1	19.2	20.2	21.1	20.0	20.4
Transitions from temporary to permanent employment	20.8	16.5	12.3	19.9	35.2	:
Unemployment rate ¹ (% active population, age group 15-74)	5.0	5.8	7.3	7.4	6.9	6.0
Long-term unemployment rate ² (% of labour force)	1.6	1.9	2.5	2.9	3.0	2.6
Youth unemployment rate (% active population aged 15-24)	10.0	11.7	13.2	12.7	11.3	10.8
Youth NEET ³ rate (% of population aged 15-24)	4.3	4.9	5.6	5.5	4.7	:
Early leavers from education and training (% of pop. aged 18- 24 with at most lower sec. educ. and not in further education or training)	9.2	8.9	9.3	8.7	8.2	:
Tertiary educational attainment (% of population aged 30-34 having successfully completed tertiary education)	41.2	42.2	43.2	44.8	46.3	:
Formal childcare (30 hours or over; % of population aged less than 3 years)	6.0	7.0	6.0	6.0	:	:

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

2 Long-term unemployed are those who have been unemployed for at least 12 months.

3 Not in education employment or training.

4 Average of first three quarters of 2016. Data for total unemployment and youth unemployment rates are seasonally adjusted.

Source: European Commission (EU Labour Force Survey)

Table C.3: Labour market and social indicators (continued)

Expenditure on social protection benefits (% of GDP)	2010	2011	2012	2013	2014	2015
Sickness/healthcare	10.0	10.1	10.4	10.2	10.0	:
Disability	2.4	2.3	2.3	2.3	2.2	:
Old age and survivors	11.2	11.6	12.0	12.2	12.3	:
Family/children	1.2	1.1	1.0	1.0	0.9	:
Unemployment	1.3	1.3	1.4	1.6	1.6	:
Housing	0.4	0.4	0.4	0.4	0.4	:
Social exclusion n.e.c.	1.3	1.4	1.4	1.5	1.4	:
Total	27.7	28.2	28.9	29.2	28.9	:
of which: means-tested benefits	3.6	3.7	3.8	3.9	3.8	:
Social inclusion indicators	2010	2011	2012	2013	2014	2015
People at risk of poverty or social exclusion ¹ (% of total population)	15.1	15.7	15.0	15.9	16.5	16.4
Children at risk of poverty or social exclusion (% of people aged 0-17)	16.9	18.0	16.9	17.0	17.1	16.8
At-risk-of-poverty rate ² (% of total population)	10.3	11.0	10.1	10.4	11.6	11.6
Severe material deprivation rate ³ (% of total population)	2.2	2.5	2.3	2.5	3.2	2.6
Proportion of people living in low work intensity households ⁴ (% of people aged 0-59)	8.4	8.9	8.9	9.3	10.2	10.2
In-work at-risk-of-poverty rate (% of persons employed)	5.1	5.4	4.6	4.5	5.3	5.0
Impact of social transfers (excluding pensions) on reducing poverty	51.2	47.4	51.0	50.0	45.5	48.0
Poverty thresholds, expressed in national currency at constant prices ⁵	11613	11516	11378	11215	10962	11136
Gross disposable income (households; growth %)	0.5	2.3	0.4	1.0	0.2	3.2
Inequality of income distribution (S80/S20 income quintile share ratio)	3.7	3.8	3.6	3.6	3.8	3.8
GINI coefficient before taxes and transfers	45.8	46.6	46.5	46.4	48.0	48.6
GINI coefficient after taxes and transfers	25.6	25.8	25.4	25.1	26.2	26.4

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

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

3 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.

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 For EE, CY, MT, SI and SK, thresholds in nominal values in euros; harmonised index of consumer prices = 100 in 2006 (2007 survey refers to 2006 incomes)

Source: For expenditure for social protection benefits ESSPROS; for social inclusion EU-SILC.

Table C.4: Product market performance and policy indicators

Performance indicators	2010	2011	2012	2013	2014	2015
Labour productivity (real, per person employed, year-on-year % change)						
Labour productivity in industry	6.95	1.23	0.43	1.50	-1.73	-1.76
Labour productivity in construction	-5.77	-0.04	-4.78	-0.16	5.70	9.29
Labour productivity in market services	2.27	1.33	0.55	0.78	1.47	1.25
Unit labour costs (ULC) (whole economy, year-on-year % change)						
ULC in industry	-10.89	1.61	2.63	0.07	4.20	2.54
ULC in construction	9.67	-0.82	7.82	-2.36	-7.98	-10.81
ULC in market services	-2.69	0.27	1.78	1.05	-1.39	-0.92
Business environment	2010	2011	2012	2013	2014	2015
Time needed to enforce contracts ¹ (days)	514.0	514.0	514.0	514.0	514.0	514.0
Time needed to start a business ¹ (days)	8.0	8.0	5.0	4.0	4.0	4.0
Outcome of applications by SMEs for bank loans ²	1.43	1.25	1.80	1.58	1.64	1.30
Research and innovation	2010	2011	2012	2013	2014	2015
R&D intensity	1.72	1.90	1.94	1.95	2.00	2.01
Total public expenditure on education as % of GDP, for all levels of education combined	5.98	5.93	5.89	6.06	na	na
Number of science & technology people employed as % of total employment	45	45	46	47	47	48
Population having completed tertiary education ³	28	28	29	29	30	31
Young people with upper secondary education ⁴	78	78	79	78	79	80
Trade balance of high technology products as % of GDP	1.71	1.98	2.86	2.26	2.75	1.54
Product and service markets and competition				2003	2008	2013
OECD product market regulation (PMR) ⁵ , overall				na	0.96	0.92
OECD PMR ⁵ , retail				1.47	0.91	0.91
OECD PMR ⁵ , professional services				1.57	1.28	1.23
OECD PMR ⁵ , network industries ⁶				2.06	1.71	1.57

¹ The methodologies, including the assumptions, for this indicator are shown in detail at:

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

² 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 scored as follows: zero if received everything, one if received most of it, two if only received a limited part of it, three if refused or rejected and treated as missing values if the application is still pending or if the outcome is not known.

³ Percentage population aged 15-64 having completed tertiary education.

⁴ Percentage population aged 20-24 having attained at least upper secondary education.

⁵ Index: 0 = not regulated; 6 = most regulated. The methodologies of the OECD product market regulation indicators are shown in detail at : <http://www.oecd.org/competition/reform/indicatorsofproductmarketregulationhomepage.htm>

⁶ Aggregate OECD indicators of regulation in energy, transport and communications.

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.5: **Green growth**

Green growth performance		2010	2011	2012	2013	2014	2015
Macroeconomic							
Energy intensity	kgoe / €	0.14	0.13	0.13	0.13	0.12	0.12
Carbon intensity	kg / €	0.37	0.34	0.33	0.33	0.32	-
Resource intensity (reciprocal of resource productivity)	kg / €	0.33	0.32	0.31	0.29	0.29	0.32
Waste intensity	kg / €	0.21	-	0.21	-	0.23	-
Energy balance of trade	% GDP	-2.7	-3.5	-5.0	-4.0	-3.4	-
Weighting of energy in HICP	%	10.30	11.32	11.28	11.66	11.69	9.77
Difference between energy price change and inflation	%	-8.8	3.4	3.6	0.0	-1.5	-2.9
Real unit of energy cost	% of value added	11.2	13.0	13.6	11.6	11.1	-
Ratio of environmental taxes to labour taxes	ratio	0.18	0.17	0.16	0.16	0.16	-
Environmental taxes	% GDP	3.5	3.5	3.3	3.3	3.4	-
Sectoral							
Industry energy intensity	kgoe / €	0.17	0.17	0.16	0.16	0.16	0.16
Real unit energy cost for manufacturing industry excl. refining	% of value added	20.4	23.1	23.5	18.0	17.2	-
Share of energy-intensive industries in the economy	% GDP	9.71	9.52	9.50	9.45	8.93	8.53
Electricity prices for medium-sized industrial users	€ / kWh	0.10	0.10	0.10	0.09	0.09	0.09
Gas prices for medium-sized industrial users	€ / kWh	0.03	0.03	0.04	0.04	0.04	0.04
Public R&D for energy	% GDP	0.02	0.01	0.02	0.02	0.01	0.02
Public R&D for environmental protection	% GDP	0.00	0.01	0.01	0.01	0.00	0.00
Municipal waste recycling rate	%	49.2	49.1	49.4	49.8	50.9	51.7
Share of GHG emissions covered by ETS*	%	40.4	40.8	39.9	44.6	47.6	48.0
Transport energy intensity	kgoe / €	0.56	0.55	0.52	0.52	0.49	0.49
Transport carbon intensity	kg / €	1.30	1.26	1.19	1.17	1.06	-
Security of energy supply							
Energy import dependency	%	30.3	30.1	30.6	26.1	33.8	51.9
Aggregated supplier concentration index	HHI	11.7	14.6	15.8	15.3	17.0	-
Diversification of energy mix	HHI	0.37	0.36	0.34	0.35	0.33	-

All macro intensity indicators are expressed as a ratio of a physical quantity to GDP (in 2005 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 a percentage of total value added for the economy

Environmental taxes over labour taxes and GDP: from European Commission's database, 'Taxation trends in the European Union'

Industry energy intensity: final energy consumption of industry (in kgoe) divided by gross value added of industry (in 2005 EUR)

Real unit energy costs for manufacturing industry excluding refining: real costs as a percentage 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 greenhouse gas 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 2005 EUR)

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

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 over natural gas, total petrol products, nuclear heat, renewable energies and solid fuels

* European Commission and European Environment Agency

Source: European Commission (Eurostat) unless indicated otherwise

REFERENCES

- Andrews, D., C. Criscuolo and P. Gal (2015). 'Frontier firms, technology diffusion and public policy: micro evidence from OECD countries', *OECD future of productivity main background papers* No. 2, OECD Publishing, Paris.
- Arpaia, A. and A. Kiss (2015). 'Benchmarks for the assessment of wage developments' *Short Analytical Webnote 2/2015*, European Commission, Publications Office of the European Union, Luxembourg, 2015. <http://publications.europa.eu/s/b4YC>.
- ACM (2015). *Competition in Dutch SME loan market*. The Netherlands Authority for Consumers & Markets, Monitor Financial Sector, the Hague.
- Ayuso i Casals, J. (2012). 'National Expenditure Rules: Why, How and When', *European Economy Economic Papers* 473. European Commission, Directorate-General for Economic and Financial Affairs, Publications Office of the European Union, Luxembourg.
- Bennaars, J.H., M. Diepenbach, R. Knegt and E. Verhulp (2016). *Evaluatie ontslaggronden WWZ - Rapport*, Hugo Sinzheimer Instituut, Amsterdam.
- Bettendorf, L., A. Lejour and M. van't Riet (2015). 'Beschrijvende statistiek DGA's', *CPB Achtergronddocument*, CPB Netherlands Bureau for Economic Policy Analysis, the Hague.
- Bettendorf, L., A. Lejour and M. van't Riet (2016). 'Tax bunching by owners of small corporations' *CPB Discussion Paper No. 326*. CPB Netherlands Bureau for Economic Policy Analysis, the Hague.
- Boermans, M. and R. Vermeulen (2016). 'International investment positions revisited: Investor heterogeneity and individual security characteristics', *De Nedederlandsche Bank Working Paper No. 531*. Central Bank of the Netherlands, Research Department, Amsterdam.
- Carroll, C. D., J. Slacalek and K. Tokunaka (2014). 'The Distribution of Wealth and the MPC: Implications of New European Data'. *American Economic Review*, 104(5), 107-11.
- CBS (2015a). *Internationaliseringsmonitor 2015, derde kwartaal*. Statistics Netherlands, the Hague.
- CBS (2015b). *Poverty and social exclusion*, Statistics Netherlands, the Hague.
- CPB (2016). 'Afschaffing doorsneesystematiek. Mogelijke transitiepaden', *CPB Notitie 15 July 2016*, CPB Netherlands Bureau for Economic Policy Analysis, the Hague.
- Commissie inkomstenbelasting en toeslagen (2013). *Naar een activerender belastingstelsels*, Eindrapport Commissie inkomstenbelasting en toeslagen, the Hague.
- Corak, M. (2006). 'Do poor children become poor adults? Lessons from a cross-country comparison of generational earnings mobility'. *IZA Discussion paper No.1993*, Institute for the Study of Labor, Bonn.
- Eggelte, J., R. Hillebrand, T. Kooiman and G. Schotten (2014). 'Getting to the bottom of the Dutch savings surplus', *DNB Occasional Studies*, Vol.12, No 6. Central Bank of the Netherlands, Amsterdam.
- DNB (2013). 'Minder geld in de huishoudportemonnee', *DNBulletin 23 July 2013*, Central Bank of the Netherlands, Amsterdam, 2013, <https://www.dnb.nl/nieuws/nieuwsoverzicht-en-archief/dnbulletin-2013/dnb294300.jsp>.

- DNB (2014). ‘Het verborgen inkomen van huishoudens’, *DNBulletin 30 October 2014*, Central Bank of the Netherlands, Amsterdam, 2014. <https://www.dnb.nl/nieuws/nieuwsoverzicht-en-archief/dnbulletin-2014/dnb314277.jsp>.
- DNB (2015a). *Perspective on the structure of the Dutch banking sector*, Central Bank of the Netherlands, Amsterdam.
- DNB (2015b). ‘Dutch mortgages in the DNB loan level data’, *DNB Occasional Studies*, Vol. 13 No 4, Central Bank of the Netherlands, Amsterdam.
- DNB (2015c). Parlevliet, J. and T. Kooiman. ‘De vermogensopbouw van huishoudens: is het beleid in balans?’ *DNB Occasional Studies*, Vol. 13, No 1, Central Bank of the Netherlands, Amsterdam.
- DNB (2015d). ‘The Netherlands’ net international investment position down’, *Statistical News Release 23.September 2015*, Central Bank of the Netherlands, Amsterdam, 2015, <https://www.dnb.nl/en/news/news-and-archive/statistisch-nieuws-2015/dnb326498.jsp>.
- DNB (2016a). *Domestic MFI-statistics (monetary)*, Central Bank of the Netherlands, Amsterdam, 2016, <http://www.dnb.nl/en/statistics/statistics-dnb/financial-institutions/banks/domestic-mfi-statistics-monetary/index.jsp> (accessed on 04.01.2017).
- DNB (2016b). ‘Dutch pension system needs major overhaul’, *DNBulletin 21 June 2016*, Central Bank of the Netherlands, Amsterdam, 2016. <https://www.dnb.nl/en/news/news-and-archive/dnbulletin-2016/dnb342808.jsp> (accessed on 04.01.2017).
- Energieonderzoek Centrum Nederland (2016). *Nationale Energieverkenning 2016*, ECN, Amsterdam.
- European Central Bank (2016a). *Report on financial structures*, Frankfurt.
- European Central Bank (2016b). *The euro area bank lending survey: Third quarter of 2016*, Frankfurt.
- European Commission (2010). ‘Public finances in EMU – 2010’, *Part II, Chapter 3, National Fiscal Framework*, European Commission, Directorate-General for Economic and Financial Affairs, Publications Office of the European Union, Luxembourg.
- European Commission (2012). ‘Rethinking Education: Investing in skills for better socio-economic outcomes’, *COM(2012) 669/final*, Publications Office of the European Union, Luxembourg.
- European Commission (2015a). ‘Tax Reforms in EU Member States 2015. Tax policy challenges for economic growth and fiscal sustainability’, *Institutional Paper 008*, Publications Office of the European Union, Luxembourg.
- European Commission (2015b). ‘The 2015 Ageing Report. Economic and budgetary projections for the 28 EU Member States (2013-2060)’, *European Economy 3/201*, Publications Office of the European Union, Luxembourg.
- European Commission (2015c). ‘Country Report Netherlands’, *Commission Staff Working Document COM(2015) 85 final*, Publications Office of the European Union, Luxembourg.
- European Commission (2015d). ‘Challenges to Member States’ Investment Environments’, *Commission Staff Working Document COM(2015) 400 final*, Publications Office of the European Union, Luxembourg.

- European Commission (2015e). *Education and Training Monitor 2015: Netherlands*, Publications Office of the European Union, Luxembourg. http://ec.europa.eu/education/tools/et-monitor_en.htm.
- European Commission (2016a). ‘Country Report Netherlands’, *Commission Staff Working Document SWD(2016) 87 final*, Publications Office of the European Union, Luxembourg.
- European Commission (2016b). ‘Analysis of the draft budgetary plans of the Netherlands’, *Staff Working Document SWD(2016) 514 final*, Publications Office of the European Union, Luxembourg.
- European Commission (2016c). *European Innovation Scoreboard 2016*, Publications Office of the European Union, Luxembourg.
- European Commission (2016d). ‘European Economic Forecast - Autumn 2016’, *Institutional Paper 038*, Publications Office of the European Union, Luxembourg.
- European Commission (2017). *Communication on reform recommendations for regulation in professional services, COM(2016)820*. Publications Office of the European Union, Luxembourg.
- European Systemic Risk Board (ESRB) (2016). *Vulnerabilities in the EU residential real estate sector / November 2016*, ESRB Frankfurt.
- Financial Stability Committee (2015). *Aanbeveling van het Financieel Stabiliteitscomité over de LTV-limiet na 2018*, Rijksoverheid, the Hague. http://www.financieelstabiliteitscomite.nl/media/58/29/272341/29/aanbeveling_van_het_financieel_stabiliteitscomit_over_de_ltv-limiet_na_2018.pdf (accessed on 12.01.2017).
- Houweling, A., M. Keulaerds and P. Kruit (2016). *VAAN-VvA Evaluatie Onderzoek WWZ*, Boom juridisch, the Hague.
- IMF (2014). ‘IMF Country Report No. 14/328’, *selected issues paper December 2014*, International Monetary Fund, Washington, D.C.
- Inspectorate of Education (2016). *De Staat van het Onderwijs 2014/2015*, Onderwijsverslag, Inspectie van het Onderwijs, Utrecht.
- Jansen, C. and M. Ligthart (2014). ‘Spaaroverschot nietfinanciële bedrijven: ontwikkeling, oorzaken en gevolgen’, *CPB Achtergronddocument*, Netherlands Bureau for Economic Policy Analysis, the Hague.
- Kooiman, T. and A. Lejour (2016). ‘Vermogensongelijkheid in Nederland, 2006-2013’, *CPB Achtergronddocument*, CPB Netherlands Bureau for Economic Policy Analysis, the Hague.
- Lukkezen, J. and A. Elbourne (2015). ‘De Nederlandse consumptie. Goede tijden, slechte tijden’, *CPB Policy Brief, 2015/3*, CPB Netherlands Bureau for Economic Policy Analysis, the Hague.
- Ministry of Economics (2016). *Techniekpakt monitor 2016*, Rijksoverheid, the Hague.
- Ministry of Education, Culture and Science (2016a). *Onderwijs in Cijfers 2016, Lerarenopleidingen*, the Hague. <http://www.onderwijsincijfers.nl/kengetallen/sectoroverstijgend/personeel/lerarenopleiding>.
- Ministry of Education, Culture and Science (2016b). *Nadere informatie over asielzoekerskinderen in het onderwijs*, Rijksoverheid, the Hague. <https://www.rijksoverheid.nl/documenten/kamerstukken/2016/05/20/kamerbrief-met-nadere-informatie-over-asielzoekerskinderen-in-het-onderwijs>.

- Ministry of Finance (2015). *IBO Zelfstandigen zonder personeel*, Rijksoverheid, the Hague.
- Ministry of Social Affairs (2016a). *Kamerbrief "Perspectief voor vijftigplussers" - Een actieplan om de arbeidsmarkt van vijftigplussers te verbeteren*, Rijksoverheid, the Hague.
- Ministry of Social Affairs (2016b). *Kamerbrief "Perspectiefnota Toekomst pensioenstelsel"*, the Hague.
- Ministry of the Interior and Kingdom Relations (2016). *Wonen in beweging-De resultaten van het WoonOnderzoek Nederland 2015*, Rijksoverheid, the Hague.
- OECD (2015a). *International Migration Outlook 2015*, OECD Publishing, Paris.
- OECD (2015b). *Countering Harmful Tax Practices More Effectively, Taking into Account Transparency and Substance, Action 5 - 2015 Final Report*, OECD Publishing, Paris.
- OECD (2016a). 'Recruiting Immigrant Workers: The Netherlands 2016', *Recruiting Immigrant Workers* OECD Publishing, Paris.
- OECD (2016b). *Infrastructure investment indicator*, OECD Publishing, Paris.
- OECD (2016c). 'Productive Regions for Inclusive Societies- Country Notes: Netherlands' *OECD Regional Outlook 2016*, OECD Publishing, Paris.
- OECD (2016d). Ribarsky, J., C. Kang and E. Bolton. 'The drivers of differences between growth in GDP and household adjusted disposable income in OECD countries', *OECD Statistics Working Papers*, 2016/06 OECD Publishing, Paris.
- OECD (2016e). 'PISA 2015 Results (Volume I)', *Excellence and Equity in Education*, PISA, OECD Publishing, Paris. <http://dx.doi.org/10.1787/9789264266490-en>.
- OECD (2016f). *Education at a glance 2016: OECD Indicators*, OECD Publishing, Paris. <http://dx.doi.org/10.1787/eag-2016-en>.
- Ramboll Management Consulting and Corit Advisory (2016). 'Study on Structures of Aggressive Tax Planning and Indicators', *European Commission Taxation Paper Nr. 61*. Publications Office of the European Union, Luxembourg.
- Rijksoverheid (2015). *National regulated professions action plan*, the Hague.
- Rijksoverheid (2016a). 'Kiezen voor duurzame groei', *Rapport Studiegroep Duurzame Groei*, the Hague.
- Rijksoverheid (2016b). *A Circular Economy in the Netherlands by 2050*, the Hague.
- Rojas-Romagosa, H. and A. van der Horst (2015). 'Oorzaken en beleidsgevolgen van het overschot op de Nederlandse lopende rekening'. *CPB Policy Brief 2015/05*, CPB Netherlands Bureau for Economic Policy Analysis, the Hague.
- Vennekens, A. and J. van Steen (2017). 'Voorpublicatie Totale Investerings in Wetenschap en Innovatie (TWIN) 2015-2021'; Rathenau Instituut, the Hague. <https://www.rathenau.nl/nl/page/voorpublicatie-totale-investerings-wetenschap-en-innovatie-twin-2015%E2%80%932021>
- World Economic Forum (2016). *Global Competitiveness Report 2016-2017*, Geneva.