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Results of in-depth reviews under Regulation (EU) No 1176/2011 on the prevention and correction of macroeconomic imbalances

The Netherlands is experiencing macroeconomic imbalances, which require policy action and monitoring. Risks stemming from the high level of private debt remain and deserve attention although recent measures support a recovery in the housing market and the curbing of mortgage growth. While the high current account surplus is partially traceable to structural features of the economy the structure of the pension and tax systems may potentially be a source of inefficient allocation of capital.

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The Netherlands is experiencing a gradual economic recovery mainly driven by domestic demand. Following the contraction in real GDP in 2012 and 2013, the Dutch economy returned to positive economic growth in 2014. Economic growth is expected to accelerate to 1.4 percent in 2015 and 1.7 percent in 2016. The economic recovery is increasingly being driven by domestic demand, based on real wage growth and better labour market conditions. Consumer confidence and households’ investment are also supported by the nascent recovery in the housing market. The Dutch labour market showed a moderate revival in 2014, which is expected to continue in the coming years. Inflation is expected to remain muted, supporting real wage growth in the short term but limiting deleveraging. Government finances are expected to improve in 2015 and 2016.

This Country Report assesses the Netherlands’ economy against the background of the Commission’s Annual Growth Survey which recommends three main pillars for the EU’s economic and social policy in 2015: investment, structural reforms, and fiscal responsibility. In line with the Investment Plan for Europe, it also explores ways to maximise the impact of public resources and unlock private investment. Finally, it assesses the Netherlands in the light of the findings of the 2015 Alert Mechanism Report, in which the Commission found it useful to further examine the persistence of imbalances or their unwinding. The main findings of the In-Depth Review contained in this Country Report are:

The Netherlands’ current account has been constantly in surplus for over three decades. The current account surplus is traceable to fundamental features of the Dutch economy, such as energy exports, goods re-exports and the international capital flows of multinationals. The surplus also reflects the ongoing and necessary deleveraging of households and the (still weak) cyclical position of the economy. Overall, underlying mismatches between savings and investment appear to be smaller than the headline figures suggest.

Investment activity in the Netherlands declined as a percentage of GDP since the turn of century, partly as a consequence of lower prices of investment goods (in particular of information and communication technology equipment) and, in particular since 2008, as a consequence of lower investment in construction and real estate. Public investment and private investment in productive equipment were relatively stable. For strengthening the economic growth of the Netherlands in the medium run, the declining public R&D-intensity and better use of the excellent knowledge base of the country warrant attention.

The pension and tax systems give households strong obligations and incentives to invest in housing and save in pension schemes, leading to potentially inefficient allocation of capital. People have the incentive to buy a dwelling early in their life by incurring high levels of mortgage debt. The obligation to save high amounts in the pension system early in the life cycle also reduces the financial room for manoeuvre of young people. Pension funds are somewhat risk-averse, which could lead to a suboptimal allocation of their investments. The statutory retirement age has been increased (and linked to life expectancy) but the distribution of costs and risks has not changed in the (funded) occupational pillar. This has an impact on the accumulation of savings and the allocation of capital in the pension system, possibly reducing the long-term growth prospects of the Dutch economy.

Driven by tax incentives, high household debt levels have built up over decades and are expected to decline slowly in the coming decades. Long-standing tax incentives and financial innovations have encouraged households to become highly indebted by taking up mortgages. Newly introduced policy and supervisory measures are curbing mortgage growth. Risks from the high level of household debt to the financial sector are contained by, for example, the high net asset position of households, prudent loan-to-income ratios and the recovering housing market.

The functioning of the housing market is still distorted by the substantial mortgage interest deductibility and a rental market that is not functioning properly. Mortgage interest deductibility is partially and very gradually being phased out but a substantial part of the subsidy will remain. Mortgage interest deductibility still gives households the incentive to invest in relatively unproductive assets. The emergence of a properly functioning rental market is constrained by a social
housing segment still facing allocation inefficiencies.

The Country Report also analyses macroeconomic issues and the main findings are:

**The labour market is holding up well and poverty remains low.** The Dutch labour market is in relatively good shape and unemployment is decreasing. Some groups of people at the margin of the labour market face difficulties to enter the labour market. Poverty has only increased marginally since 2008 and remains low.

**Some forms of growth-friendly expenditure are under pressure.** Whereas the education system delivers good results and public expenditure for education remains high, public support for research and innovation is set to decline over the coming years.

**Overall, the Netherlands has made some progress in addressing the country-specific recommendations issued by the Council in 2014.** The Netherlands has made some progress in protecting expenditure directly relevant to growth but has only made limited progress in further reforming the housing market. In particular, the partial phasing-out of the mortgage interest deductibility has not been stepped up despite the opportunity created by a recovery in the housing market and an improving economic environment. Some or even substantial progress has been made regarding the recommendations concerning the pension system, long-term care and the labour market.

The Country Report reveals the policy challenges stemming from the analysis of macro-economic imbalances:

**The Netherlands has to find the right balance between the necessary deleveraging, in particular of households, and giving sufficient support to domestic demand to sustain the economy recovery.** As long as households increase their savings to deleverage, the current account surplus will remain high and above the level justified by fundamentals.

**Raising the growth potential will depend on attracting sufficient labour and facilitating the most efficient allocation of capital.** Greater labour utilisation is needed to soften the effects of demographic changes. Reforms have been implemented to make work financially more attractive but disincentives to work from taxes and social security contributions remain high. The role of pension-regulation and the tax system in the allocation of capital will be increasingly important in fostering economic growth.

**With an ageing society, the Netherlands faces the challenge of maintaining its level of welfare in the future.** With an ageing population economy growth depends ever more on improvements in the efficiency and the resilience of the economy. In particular, a regulatory framework that supports growth and investing in research, innovation and education plays a key role.
1. SCENE SETTER: ECONOMIC SITUATION AND OUTLOOK

The macroeconomic situation and developments

The Netherlands is experiencing a gradual economic recovery. Following the contraction in real GDP in 2012 and 2013, the Dutch economy returned to growth of an estimated +0.7% in 2014 (Graph 1.1). The economic recovery is increasingly driven by domestic demand, based on real wage growth and better labour market conditions. The housing market is improving as well, with an increase in transactions in the final quarters of 2014. This is likely to give a further boost to economic sentiment and may result in an increase in housing investment. Recent monthly data and soft indicators suggest that the pickup in investment in the second half of 2014 is set to continue, supporting a gradual domestic demand-led recovery. The Commission winter forecast projects growth of 1.4% in 2015 and 1.7% in 2016.

Graph 1.1: Real GDP growth and contributions

The on-going deleveraging by households is likely to put a limit on the speed of economic recovery. As a legacy of the credit-led housing boom that started in the 1990s, Dutch households remain highly indebted. Large liabilities, in particular mortgage debt, go alongside large illiquid assets in the form of housing wealth and pension wealth. The ratio of total debt to disposable income stood at 250% in 2012, one of the highest in the euro area. (1) Servicing this debt and paying high health and second pillar pension contributions reduce the capacity of households to accumulate liquid assets. For this reason, although real household disposable income is expected to increase in the coming years, deleveraging pressures are expected to restrain a fast recovery in consumption, as additional household income is likely to be used for paying down debt. The household saving rate is expected to increase to 16.4 percent of disposable income in 2016, about two percentage points higher than the long term average of 14.4 per cent. (2)

The moderate revival of the Dutch labour market in 2014 is expected to continue. Well after the start of the financial crisis, the Dutch labour market performed relatively well (Graph 1.2). In the period 2009-12, the Netherlands had one of the lowest rates of unemployment in the EU, as employers engaged in labour hoarding on a large scale. After 2012, however, the unemployment rate increased significantly, peaking at 7.3 percent of the labour force in February 2014. Over the course of 2014, the number of new vacancies increased and employment growth picked up. In December 2014, the unemployment rate stood at 6.7%, more than 0.5 percentage points lower than at the beginning of the year. These trends are expected to continue, in line with the broader recovery of the Dutch economy. Employment growth (in full-time equivalent) is expected to increase by about ½pp in the coming years and the unemployment rate is estimated to decline gradually to 6.6% in 2015 and 6.4% in 2016, respectively.

(1) Source: Eurostat, gross debt-to-income ratio of households is defined as loans and liabilities divided by gross disposable income with the latter being adjusted for the change in the net equity of households in pension funds reserves.

(2) The long term average saving rate of households is calculated over the period 1995-2013. For a quantitative analysis of deleveraging pressures, see Cuerpo et al (2013). 'Indebtedness, Deleveraging Dynamics and Macroeconomic Adjustment' European Economy. Economic Papers. 477.
Inflationary pressures are expected to remain muted. Harmonized Index of Consumer Prices (HICP) inflation is forecast at 0.4% in 2015 and rising to 0.7% in 2016. In particular, energy prices provide a negative contribution to the overall index in 2015. Positive price pressure is expected to come from the services sector. With the unemployment rate standing well above pre-crisis levels and utilisation rates in the industry only at around 80%, the excess capacity in the economy is likely to prevent inflation from picking up again in the coming years.

The current account surplus is expected to remain elevated. The current account surplus of the Netherlands is for a substantial part driven by structural features of the economy, such as the main-port function, re-exports and exports of natural gas. Part of the current account surplus can also be explained by the still weak cyclical position of the economy. As previous analysis has shown, wage moderation was not a decisive factor driving the trade surplus.\(^\text{(*)}\) Falling import prices and the deleveraging of households will not support a quick adjustment in the current account. However, in the medium term the current account surplus will decline as domestic demand recovers and deleveraging pressures ease.

The headline deficit of the government is set to decline further. For 2014, the general government deficit is estimated to have reached 2.8% of GDP. In 2015 and 2016, it is expected to improve to 2.2% and 1.8% of GDP, respectively. In 2015, the most important policy measures affecting the budget are the reduction of the maximum accrual rate of pensions (via its positive effect on tax revenues) and savings from the decentralisation of long term-care. For 2016, the forecast takes into account the measures detailed in the multi-annual budget agreement ('Regeerakkoord') and subsequent policy packages. The improvement in the budget balance also stems from the recovery of domestic demand, which should lead to a more tax-rich growth. The structural deficit is estimated at 0.7% of GDP in 2014, and is expected to deteriorate slightly in both 2015 and 2016. The gross government debt ratio is forecast to increase slightly and remain at 70.5% of GDP in both 2015 and 2016.

Productivity and labour utilisation

Productivity has been declining, possibly also on account of declining domestic investment activity on the part of non-financial corporations. A world-class educational system, improvements in human capital, and public and private investment in innovation are fundamental ingredients for future productivity growth. Productivity in the Netherlands used to be higher than in many other European countries and comparable to the US level. However, since 2008, the country has gradually lost this advantage (Graph 1.3). This might be related to under-investment in Europe.\(^\text{(*)}\) While a gradual recovery of economic growth and higher investment activity may yield higher productivity growth in the coming years, it is unlikely that a recovery in the economic cycle will close the gap with the US.

\(^\text{(*)}\) For a further analysis, see the in-depth review of the Netherlands (2014). Since the turn of the century, real unit labour costs rose by around 3% in the Netherlands, which is comparable with the increase in France and Belgium, but markedly above Germany where real unit labour costs declined in the same period (2000-2013).
Graph 1.3: Productivity gap with the US: NL, DE and EA-12

Labour utilisation is low in terms of hours worked both at the extensive and at the intensive margins. Although overall participation rates in the Netherlands are high, still one out of four persons in the active age-group does not participate. Moreover, the annual average of hours worked per worker is among the lowest in the EU. This is largely the result of the higher incidence of part-time working arrangements, particularly among women. Due to the current incentive structure, increased labour participation often only gives rise to a limited increase in disposable income as the marginal tax and non-tax burden on labour income is high.

**Developments in the housing market**

Mortgage interest deductibility remains substantial and the rental market is not functioning properly. Although measures have been taken in recent years to partially phase out mortgage interest deductibility, a substantial part of the subsidy will still remain. Mortgage interest deductibility continues to encourage to take on large mortgages and to drive domestic savings and investment towards relatively unproductive (real estate) assets. Because of the different tax treatment of owner-occupied and rental housing supply of rental properties remains low and rental fees high.

The private rental market is still not functioning fully and there are still inefficiencies concerning the allocation of social housing to dwellers in need. The rental market is dominated by a large social housing segment which in effect crowds out the private rental market. Even though a third of all dwellings are owned by social housing corporations, long waiting lists still exist due to allocation inefficiencies. Labour mobility is restrained by the way social housing is allocated. This negatively impacts employment prospects, especially of the lower-skilled.

**The Dutch economy in perspective**

The growth outlook of the Netherlands is dependent on policies to mitigate the impact of deleveraging on consumption and growth. In order to lower the saving rate and boost the consumption of the active population, the Netherlands have reduced tax allowance for pension contributions. In addition, to support deleveraging the government in 2014 temporarily exempted gifts from tax when used by the beneficiary for a home (acquisition, renovation, or mortgage reduction). In recent years the government has also taken measures to prevent unsustainable growth of mortgage loans, notably through a partial and gradual limitation of mortgage interest deductibility, a gradual lowering of maximum loan-to-value ratios and an (implicit) obligation to amortise mortgage debt. However, total mortgage debt will only decline slowly. About one third of all homeowners will continue to have negative net housing equity and thus may be discouraged from engaging in housing market transactions.

In the context of an ageing population and declining productivity growth trends, the Netherlands faces a risk of a long-term decline in its potential rate of economic growth. On account of its high degree of openness, and its position as important gate-way to Europe and headquarters to a number of multinational enterprises, much of the income of the Netherlands is generated abroad. However, the Dutch welfare system, with high pensions and high quality healthcare, depends to a large extent on the domestic economy's capacity to generate income, to reverse the recent declining trend in productivity and to increase labour utilisation.
Systemic incentives may not be fostering an efficient allocation of resources for long-term growth. The Dutch institutional setup affects significantly the households' savings and investments decisions over their entire lifespan. Ageing population, falling long-term interest rates and health care expenditure increases have driven up the non-tax burden on labour such as pension contributions and healthcare premiums. Together with labour taxes, these compulsory non-tax payments significantly reduce disposable income of households, in particular in their active years. Through the pension and health care sector, income is being transferred within and across generations. Moreover, the tax system creates incentives to households to invest in low-productive capital goods such as real estate that cannot to be used to foster long run growth. Finally, although pension funds have been successful in managing their members' assets, the regulatory framework could lead to a suboptimal allocation of resources both from the perspective of households and, more generally, from a macroeconomic perspective.

**Box 1.1: Economic surveillance process**

The Commission’s Annual Growth Survey, adopted in November 2014, started the 2015 European Semester, proposing that the EU pursue an integrated approach to economic policy built around three main pillars: boosting investment, accelerating structural reforms and pursuing responsible growth-friendly fiscal consolidation. The Annual Growth Survey also presented the process of streamlining the European Semester to increase the effectiveness of economic policy coordination at the EU level through greater accountability and by encouraging greater ownership by all actors.

In line with streamlining efforts this Country Report includes an In-Depth Review — as per Article 5 of Regulation no. 1176/2011 — to determine whether macroeconomic imbalances still exist, as announced in the Commission’s Alert Mechanism Report published on November 2014.

Based on the 2014 IDR for the Netherlands published in March 2014, the Commission concluded that the Netherlands was experiencing macroeconomic imbalances requiring monitoring and policy action, in particular regarding developments in the areas of household debt and the current account surplus. This Country Report includes an assessment of progress towards the implementation of the 2014 Country-Specific Recommendations adopted by the Council in July 2014. The Country-Specific Recommendations for the Netherlands concerned public finances, the housing market, the pension system and the labour market.
Table 1.1: Key economic, financial and social indicators - Netherlands

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<tbody>
<tr>
<td>Real GDP (y-o-y)</td>
<td>2.1</td>
<td>-3.3</td>
<td>1.1</td>
<td>1.7</td>
<td>-1.6</td>
<td>-0.7</td>
<td>0.7</td>
<td>1.4</td>
<td>1.7</td>
<td></td>
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<tr>
<td>Private consumption (y-o-y)</td>
<td>1.0</td>
<td>-1.8</td>
<td>-0.1</td>
<td>0.2</td>
<td>-1.4</td>
<td>-1.6</td>
<td>-0.1</td>
<td>1.2</td>
<td>1.6</td>
<td></td>
</tr>
<tr>
<td>Public consumption (y-o-y)</td>
<td>4.1</td>
<td>4.0</td>
<td>1.1</td>
<td>-0.2</td>
<td>-1.6</td>
<td>-0.3</td>
<td>0.0</td>
<td>0.2</td>
<td>0.0</td>
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<tr>
<td>Gross fixed capital formation (y-o-y)</td>
<td>4.8</td>
<td>-9.2</td>
<td>-5.6</td>
<td>5.6</td>
<td>-6.0</td>
<td>-4.0</td>
<td>1.7</td>
<td>3.0</td>
<td>4.0</td>
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<tr>
<td>Exports of goods and services (y-o-y)</td>
<td>1.5</td>
<td>-8.0</td>
<td>8.9</td>
<td>4.4</td>
<td>3.3</td>
<td>2.0</td>
<td>4.1</td>
<td>4.4</td>
<td>4.8</td>
<td></td>
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<tr>
<td>Imports of goods and services (y-o-y)</td>
<td>1.8</td>
<td>-7.5</td>
<td>8.3</td>
<td>3.5</td>
<td>2.8</td>
<td>0.8</td>
<td>4.1</td>
<td>4.5</td>
<td>5.1</td>
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<tr>
<td>Output gap</td>
<td>2.5</td>
<td>-2.1</td>
<td>-1.7</td>
<td>-0.8</td>
<td>-2.6</td>
<td>-3.5</td>
<td>-3.0</td>
<td>-2.0</td>
<td>-1.0</td>
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**Contribution to GDP growth:**

- **Domestic demand (y-o-y):**
  - 2.4 -1.9 -0.9 1.1 -2.3 -1.5 0.3 1.0 1.5

- **Inventories (y-o-y):**
  - -0.3 -0.4 1.0 -0.4 0.1 -0.3 0.0 0.0 0.0

- **Net exports (y-o-y):**
  - -0.1 -1.0 1.0 0.9 0.6 1.1 0.4 0.4 0.2

**Current account balance (% of GDP), balance of payments**

- 4.0 5.5 7.5 8.8 10.1 10.3 . . .

**Trade balance (% of GDP), balance of payments**

- 8.3 7.5 8.4 8.5 9.1 10.3 . . .

**Net international investment position (% of GDP)**

- -7.8 0.8 9.2 17.4 25.7 31.2 . . .

**Net external debt (% of GDP)**

- 29.2* 24.4* 37.2* 38.4* 32.9* 20.4* . . .

**Gross external debt (% of GDP)**

- 471.7 480.46 500.33 515.2 525.8 500.4 . . .

**Export performance vs advanced countries (% change over 5 years)**

- 2.4* 2.4* -0.1* 0.0* -3.0* -3.1 . . .

**Savings rate of households (net saving as percentage of net disposable income)**

- 5.4 8.7 5.1 6.0 6.5 7.8 . . .

**Private credit flow, consolidated, (% of GDP)**

- 9.7 8.5 2.8 3.5 1.8 2.2 . . .

**Private sector debt, consolidated (% of GDP)**

- 217.2 231.3 229.4 228.0 230.3 229.8 . . .

**Deflated house price index (y-o-y)**

- 1.0 -3.9 -3.2 -4.3 -8.8 -8.0 . . .

**Residential investment (% of GDP)**

- 6.1 5.5 4.7 4.2 3.7 3.3 3.3 . . .

**Total financial sector liabilities, non-consolidated (y-o-y)**

- 2.4 4.5 7.1 8.7 1.3 -2.1 . . .

**Tie ratio**

- . . . . . . . . .

**Overall solvency ratio**

- . . . . . . . . .

**Gross total doubtful and non-performing loans (% of total debt instruments and total loans and advances)**

- . . . . . . . . .

**Change in employment (number of people, y-o-y)**

- 1.4 -0.8 -0.7 0.8 -0.5 -1.3 -0.6 0.5 0.6

**Unemployment rate**

- 3.1 3.7 4.5 4.4 5.3 6.7 6.9 6.6 6.4

**Long-term unemployment rate (% of active population)**

- 1.1 0.9 1.2 1.5 1.8 2.4 . . .

**Youth unemployment rate (% of active population in the same age group)**

- 6.3 7.7 8.7 7.6 9.5 11.0 10.5 . . .

**Activity rate (15-64 year-olds)**

- 79.3 79.7 78.2 78.4 79.3 79.7 . . .

**Young people not in employment, education or training (%)**

- 3.4 4.1 4.3 3.8 4.3 5.1 . . .

**People at risk of poverty or social exclusion (% of total population)**

- 14.9 15.1 15.1 15.7 15.0 15.9 . . .

**At-risk-of-poverty rate (% of total population)**

- 10.5 11.1 10.3 11.0 10.1 10.4 . . .

**Severe material deprivation rate (% of total population)**

- 1.5 1.4 2.2 2.5 2.3 2.5 . . .

**Number of people living in households with very low work-intensity (% of total population aged below 60)**

- 8.2 8.5 8.4 8.9 8.9 9.3 . . .

**GDP deflator (y-o-y)**

- 2.3 0.5 1.2 0.1 1.3 1.1 0.5 0.5 1.3

**Harmonised index of consumer prices (HICP) (y-o-y)**

- 2.2 1.0 0.9 2.5 2.8 2.6 0.3 0.4 0.7

**Nominal compensation per employee (y-o-y)**

- 3.7 2.8 0.6 2.4 2.6 2.3 1.6 0.8 2.1

**Labour productivity (real, person employed, y-o-y)**

- 0.4 -2.5 1.8 0.8 -1.1 0.6 1.0 . . .

**Unit labour costs (ULC) (whole economy, y-o-y)**

- 3.4 5.1 -1.1 1.3 3.6 1.6 0.4 0.0 1.1

**Real unit labour costs (y-o-y)**

- -1.1 4.6 2.2 1.2 2.3 0.5 -0.1 -0.6 -0.1

**REER(U) (ULC, y-o-y)**

- 1.8 2.4 -3.1 0.7 -0.4 2.1 -0.5 -2.7 0.3

**REER(2) (HICP, y-o-y)**

- -1.3 1.0 -4.0 0.6 -1.3 2.4 0.7 -1.1 -1.1

**General government balance (% of GDP)**

- 0.2 -5.5 -5.0 -4.3 -4.0 -2.3 -2.8 -2.2 -1.8

**Structural budget balance (% of GDP)**

- . . . . . . . . .

**General government gross debt (% of GDP)**

- 54.8 56.5 59.0 61.3 66.5 68.6 69.5 70.5 70.5

1. Scene setter: economic situation and outlook
### Table 1.2: MIP Scoreboard Indicators

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<tr>
<td><strong>Current Account Balance (% of GDP)</strong></td>
<td>3 year average</td>
<td>-4%</td>
<td>6.8</td>
<td>5.4</td>
<td>5.6</td>
<td>7.2</td>
<td>8.7</td>
</tr>
<tr>
<td></td>
<td>p.m.: level year</td>
<td>-</td>
<td>4.3</td>
<td>5.2</td>
<td>7.4</td>
<td>9.1</td>
<td>9.5</td>
</tr>
<tr>
<td><strong>Net international investment position (% of GDP)</strong></td>
<td>-35%</td>
<td>4.2</td>
<td>16.7</td>
<td>24.5</td>
<td>34.1</td>
<td>45.8</td>
<td>31.3</td>
</tr>
<tr>
<td><strong>Real effective exchange rate (REER)</strong></td>
<td>% change (3 years)</td>
<td>±5%</td>
<td>0.1</td>
<td>2.6</td>
<td>-1.5</td>
<td>-2.4</td>
<td>-6.0</td>
</tr>
<tr>
<td></td>
<td>p.m.: % y-o-y change</td>
<td>-</td>
<td>0.5</td>
<td>1.9</td>
<td>-3.9</td>
<td>-0.4</td>
<td>-1.8</td>
</tr>
<tr>
<td><strong>Export Market shares</strong></td>
<td>% change (3 years)</td>
<td>-6%</td>
<td>-9.4</td>
<td>-6.3</td>
<td>-8.5</td>
<td>-8.7</td>
<td>-12.2</td>
</tr>
<tr>
<td></td>
<td>p.m.: % y-o-y change</td>
<td>-</td>
<td>-1.3</td>
<td>0.8</td>
<td>-5.8</td>
<td>-3.2</td>
<td>-3.2</td>
</tr>
<tr>
<td><strong>Nominal unit labour costs (ULC)</strong></td>
<td>% change (3 years)</td>
<td>9%</td>
<td>5.4</td>
<td>10.6</td>
<td>7.1</td>
<td>4.6</td>
<td>3.2p</td>
</tr>
<tr>
<td></td>
<td>p.m.: % y-o-y change</td>
<td>-</td>
<td>3.3</td>
<td>5.0</td>
<td>-1.3</td>
<td>1.0</td>
<td>3.6p</td>
</tr>
<tr>
<td><strong>Deflated House Prices (% y-o-y change)</strong></td>
<td>6%</td>
<td>0.1</td>
<td>-3.4</td>
<td>-2.6</td>
<td>-4.0</td>
<td>-8.0</td>
<td>-7.8</td>
</tr>
<tr>
<td><strong>Private Sector Credit Flow as % of GDP, consolidated</strong></td>
<td>14%</td>
<td>9.7</td>
<td>8.6</td>
<td>2.8</td>
<td>3.6</td>
<td>1.8p</td>
<td>2.1p</td>
</tr>
<tr>
<td><strong>Private Sector Debt as % of GDP, consolidated</strong></td>
<td>133%</td>
<td>217.3</td>
<td>231.4</td>
<td>229.4</td>
<td>228.0</td>
<td>230.2p</td>
<td>229.7p</td>
</tr>
<tr>
<td><strong>General Government Sector Debt as % of GDP</strong></td>
<td>60%</td>
<td>54.8</td>
<td>56.5</td>
<td>59.0</td>
<td>61.3</td>
<td>66.5</td>
<td>68.6</td>
</tr>
<tr>
<td><strong>Unemployment Rate</strong></td>
<td>3-year average</td>
<td>10%</td>
<td>3.7</td>
<td>3.5</td>
<td>3.8</td>
<td>4.2</td>
<td>4.7</td>
</tr>
<tr>
<td></td>
<td>p.m.: level year</td>
<td>-</td>
<td>3.1</td>
<td>3.7</td>
<td>4.5</td>
<td>4.4</td>
<td>5.3</td>
</tr>
<tr>
<td><strong>Total Financial Sector Liabilities (% y-o-y change)</strong></td>
<td>16.5%</td>
<td>3.8</td>
<td>7.9</td>
<td>5.8</td>
<td>9.3</td>
<td>2.3</td>
<td>-3.2</td>
</tr>
</tbody>
</table>

**Source:** European Commission, Eurostat and DG ECFIN (for the indicators on the REER)
2. IMBALANCES, RISKS AND ADJUSTMENT
The Netherlands has been recording persistent current account surpluses for over three decades. A current account surplus indicates that resources produced (or income received) in the country exceed the resources used (for consumption or fixed investment) in that same country (Graph 2.1.1). According to the MIP (Macroeconomic Imbalance Procedure) scoreboard headline indicators, the three-year average of current account balances from 2011 to 2013 was 9.8% for the Netherlands. This section looks at the evolution of the current account surplus and its components.

The Netherlands is producing substantially below full capacity, putting upward pressure on the current account surplus. The Netherlands is cyclically in a worse economic situation than its main trading partners. This implies that imports are smaller and the current account surplus is larger than in a situation where the Netherlands and its trading partners were producing at full capacity. This effect is estimated to account for 1.7 percentage points of the current account surplus of around 10% of GDP observed in 2013.

Structural factors contribute importantly to the Dutch current account surplus. Re-exports of foreign-produced goods and natural gas production have an impact on the trade in goods, while the behaviour of multinational companies and the investment decisions of the funded pension system influence the income accounts. Given the intrinsic nature of these economic features, the current account surplus can largely be regarded as structural. As previous analysis of standard indicators has shown, the price and costs competitiveness of the Netherlands have neither improved nor deteriorated significantly in the recent past. Consequently, wage moderation does not seem to play a major role in generating the trade surplus. Despite sizeable current account surpluses over the last years, the net international investment position of the Netherlands only amounted to 31.1% of GDP in 2013, indicating that the flow of surpluses does not fully translate into a build-up of liabilities in other countries.

Trading goods is a major strength of the Dutch economy

Underlying the high current account surplus are large gross trade flows in goods and services, making the Netherlands one of the most open economies in the EU. The continuously positive trade balance is strongly influenced by the geographical position of the Netherlands that is exploited through a large harbour and high-quality infrastructure and the production and export of natural gas. The Netherlands’ most important trading partners are Germany, Belgium and the United Kingdom, with China gaining a substantial market share in the more recent past. While Germany and Belgium have been major import and export markets for a long time, imports from emerging markets have increased recently, especially from China. Machines and transport equipment constitute the bulk of Chinese imports. Exports to China have also been growing substantially; but, overall, the Netherlands has a large trade deficit with China as many goods that

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(1) In depth review for the Netherlands (2014)
(2) In the following section, current account data are reported according to BPM5 standards (the 5th edition of the IMF’s Balance of Payments Manual). In 2014, Statistics Netherlands switched to new BPM6 reporting standard for international trade statistics, which caused several breaks in time series, especially for trade in services. For consistency reasons and in order to include longer time series, this section includes data according to BPM5.
(3) According to the American Association of Port Authorities, Rotterdam harbour was the 4th busiest port in total cargo volume and the 11th busiest harbour in container traffic in 2012.
are imported from China are re-exported to other EU Member States. Trade with Russia is very different. Over 90% of all imports from Russia are crude oil and related products, so imports from Russia are not as diversified as Chinese imports. Less than 2% of all exports go to Russia, of which only a small fraction is currently subject to sanctions. EU Member States which acceded in 2004 have an import share of 4.5% and the combined import share of southern euro area countries (Spain, Italy, Portugal and Greece) is also around 4.5% (8). Due to the low trading volumes vis-à-vis the southern Member States, potential spillover effects from the Dutch economy to those countries are limited; this means that an increase in Dutch consumption would not necessarily translate into higher demand for goods from the southern countries (9).

The positive trade balance in goods is partly explained by the contribution of re-exports. Statistics Netherlands (CBS) defines re-exports as 'Goods transported via the Netherlands, which are temporarily owned by a resident of the Netherlands, without any significant industrial processing.' In practice, this means that goods are counted as re-exports if the six-digit code that customs assigns to goods every time they enter or leave the country does not change. The share of re-exports in total exports increased from 42.2% in 2002 to 46.1% in 2013. Regarding machinery and transport equipment, re-exports have been high since the early 2000s, representing 60-70% of total machinery exports. The four sectors presented in Graph 2.1.2 account for 75% of total exports in 2013.

The value added to re-exported goods is estimated to add approximately 2.3 percentage points of GDP to the trade in goods surplus. Goods sent from China to Germany are often unloaded in the port of Rotterdam. The strong growth of exports and re-exports reflects the increasing importance of international trade for the Dutch economy and the difference in the product mix of re-exports (mainly computers and electronic equipment) and domestically produced export goods. Whereas domestically produced exports have a value added of around 59 cent per euro export value, the value added of re-exports is 7.5 cent per euro export value (10). This amount of value added is remarkable, given that re-exports are by definition only subject to very limited changes after they have been imported. Using these figures, the value added to re-exported goods can be estimated at around EUR 15 billion in 2013 (2.3% of GDP).

Natural resources also sustain the surplus

Net exports of natural gas constitute another structural factor adding about 1% to 2.5% of GDP to the trade surplus. This contribution mainly reflects the combined net exports of


(2) The size of the Dutch economy allows for only moderate outward spillovers for most other Member States via the trade channel. In particular spillovers to southern countries are marginal. The high degree of economic and financial openness of the economy exposes the Netherlands to potentially significant inward spillovers from the USA and from neighbouring Member States (Belgium and Germany) along the trade, financial and banking channels.

domestically produced gas and the associated reduced need for energy imports. Additionally, the Netherlands has become an important node in the intra-European gas trade. Looking ahead, with the depletion of domestic reserves, the importance of natural gas production for the Dutch economy is expected to gradually fade. In 2014, and again in February 2015, lower production ceilings were put in place in order to mitigate the sensitivity to gas production-related earthquakes in the northern province of Groningen. These developments, combined with falling oil and gas prices, will significantly reduce the contribution of this factor to the trade surplus in both the short run.

Trade in services is growing

In past years, the Dutch trade in services has increased considerably. From 2009 to 2013, service imports increased by 21% (to EUR 94 billion, 15% of GDP) and service exports grew by 34% (to EUR 110 billion, 17% of GDP). On the import side, the main trading partners were the US, Bermuda, Germany and the UK (Table 2.1.1) (11). The leading partners in export of services are Ireland, Germany, the UK and the US. The most important Dutch service export to Ireland is ‘royalties & license fees’ (12). A number of international companies have subsidiaries in the Netherlands and Ireland for reasons of tax optimisation. In 2014, the Irish government decided to change the corporate tax system, thereby making such arrangements less attractive.

The surplus in the trade in services is mainly driven by transport services and royalties & license fees (Graph 2.1.3). The net export of transport services accounts for 1.4 percentage points of the current surplus and is related to the extensive trade and transiting of goods and thus the geographical location of the country. Another 1 percentage point of the surplus is driven by the net export of services related to royalties & license fees. This is mainly due to the service exports to Ireland, which account for 79% of the positive Dutch trade balance in services. At the same time, Dutch people use more traveling services abroad than foreigners use in the Netherlands, which reduces the surplus in the services account by almost 0.6 pp.

Dutch exposure to Russia through foreign direct investment (FDI) is limited. In 2013, Dutch direct investment in Russia amounted to

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(11) No breakdown of service imports is available for Bermuda. The service flows are most likely due to royalty & license fees. See box 5 "Tricks of the Trade" of the IMF’s Fiscal Monitor: www.imf.org/external/pubs/ft/fm/2013/02/fmindex.htm

(12) Statistics Netherlands does not report the breakdown for the item "royalties & license fees". Since the other items add up to 11%, it can be concluded that royalties & license fees represent 89% of Dutch service exports to Ireland.
nearly EUR 51 billion (7.9 % of GDP). However, this figure can largely be attributed to special financial institutions (SFIs) that channel funds through the Netherlands. The outflows of direct investment to Russia excluding SFIs totalled EUR 766 million (0.1 % of GDP) in 2013.(13) The exposure of the Dutch banking sector to Russia is limited as well, standing at EUR 11.4 billion (1.1 % of total international bank exposure or 1.9 % of GDP) in September 2014.(14)

Primary income

Income generated by foreign investments is the main driver of the primary income account. The primary income account gives an overview of the income transactions between Dutch residents and non-residents. As in 2013, in previous years the primary income account was mainly driven by investment income, which is by far the largest item in absolute volume (standing at 32.6 % (revenue) and 29.5 % (expenditure) of GDP, respectively). Both revenue and expenditure originate mainly from direct investment abroad and portfolio investment. Other primary income components are much smaller in their absolute volume and balance, both accounting for less than 1 % of GDP. As illustrated in Graph 2.1.4, the balance of direct investment has more than doubled since 2008. This increase resulted in a positive primary income balance in 2010 and has continuously driven the positive balance since 2010.

When considering primary income, the transactions of SFIs (Special Financial Institutions) are disregarded. (15) When including SFIs in the calculation, the volume of investment income is much higher. In fact, in 2013 SFI transactions accounted for 60 % of inflows and 65 % of outflows of primary income. However, their effect on primary income is minor, after balancing primary income inflows and outflows (see Graphs 2.1.6 and 2.1.5).

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(13) Data on FDI stocks excluding SFIs is not available.
(14) Source: BIS. https://www.bis.org/statistics/consstats.htm
(15) SFIs are special purpose entities owned by non-residents that mainly deal with channelling funds through the Netherlands, from non-residents to non-residents.
2.1. Current Account

The secondary income balance remains negative. Secondary income captures further redistribution of income through current transfers by governments, charitable organisations and other sectors. In 2013 the Dutch secondary income account ran a deficit of 2.2% of GDP. These transfers to abroad were roughly equally provided by the general government sector and ‘other sectors’, similarly to previous years.
2.2. SAVING AND INVESTMENT

For decades, the Dutch economy has been a net lender to the rest of the world. In 2013, net lending\(^{(16)}\) of the economy amounted to 7.9% of GDP, of which 6.3 percentage points originated from non-financial corporations, 3.4 percentage points from households and 0.5 percentage points from the financial sector. The only sector borrowing was general government, which ran a deficit of 2.3% of GDP in 2013 (Graph 2.2.1). This section first discusses some general patterns of saving and investment before it looks deeper into the household and non-financial corporation sectors. Household saving and investment decisions are highly influenced by institutional features (e.g. of the pension system). Household savings have been relatively stable while investment experienced a sharp drop in 2009 (Graphs 2.2.2 and 2.2.3). Saving and investment decisions of non-financial corporations (Graphs 2.2.2 and 2.2.3) seem to be driven by the increasing importance of foreign investment. As a result, savings of corporations have increased substantially since the turn of the century while their domestic investment has decreased slightly.

\(^{(16)}\) In national accounting, cross-border transactions in goods and services, together with incomes earned abroad and paid to foreigners make up the current account balance. This together with the capital account balance, the in- and outflow of capital, determine whether the economy as whole has been a net provider of finance (net lender) or the opposite (net borrower).

Households

Institutional features affect the saving pattern of Dutch households. The ECB’s household budget survey shows that persons aged 35 to 64 in the Netherlands have a much lower ability to save than older households. \(^{(17)}\) This seems to be at odds with economic theory. Another aspect of this

finding is the unusual income pattern across different generations of households (Graph 2.2.5). Contrary to the more common, hump-shaped profile, earnings in the Netherlands are smoothed out over the life cycle due to high transfers from the working population to the older generations through the pension system, leaving little room for additional, precautionary savings.

Graph 2.2.4: Annual household income

S
Source: The Eurosystem Household Finance and Consumption Survey

The savings of Dutch households compared to their disposable income have been increasing since the mid-2000s and are now relatively high. The household sector in the Netherlands saved 15.7% of its disposable income in 2013, more than in any other Member State except Germany (Graph 2.2.6). However, only since 2011 has the Dutch saving ratio (18) started to steadily outperform the euro area average (19) and exceed Belgian and French ratios.

The high saving rate relative to income does not translate into high gross savings as a percentage of GDP. Even though wages and salaries (in proportion to GDP) have been about 2 percentage points higher than in Germany and on par with Belgian and French wages, disposable income is relatively low, largely due to income taxes and high social security contributions. As a result, gross savings have for several years fallen short of the euro area average (Graph 2.2.7) and amounted to only 7.7% of GDP in 2013.

Graph 2.2.5: Gross saving ratio (% of disposable income)

Source: European Commission (Eurostat)

Graph 2.2.6: Gross saving (in % of GDP)

Source: European Commission (Eurostat)

Liquid assets of the working population, that could be used when negative shocks to income occur, are relatively low. Saving for old age takes the form of social security contributions and life insurance premiums. Pension contributions for employed workers are substantial and are not included in the saving rate. When pension

(18) Here, the saving rate is calculated as gross savings divided by disposable income, with data from national accounts.

(19) Only 12 Member States, for which data are available, are accounted for in the euro area average.
2.2. Saving and Investment

Contributions are taken into account as savings, the resulting Dutch savings rate is above the average of the same indicator for the euro area by a considerable margin. Housing investments are often financed through mortgage loans that put monthly payment obligations on households. Most of these outlays increase the saving rate of Dutch households; however, they do not constitute liquid financial assets that could be tapped when negative shocks hit income or wealth. Indeed, according to the ECB’s household budget survey, fewer Dutch households (33.1%) report that they can set money aside than in the euro area (41.1%) or in Germany (53.1%), where this ratio is the highest. In sum, the working population saves more in total than in any other country (accounting for pension contributions as savings), yet liquid savings are quite low (see Graph 2.2.8).

The pension funds have accumulated substantial assets but liabilities have grown even more strongly during the crisis. Pension contributions are in most cases around 16-20% of gross income. Pension funds have accumulated assets amounting to over 150% of GDP in 2013, which makes the second pillar the largest (by assets) in the EU. The ratio between assets and liabilities (the coverage ratio) has worsened during the crisis partly due to the low interest rates that have decreased the rates the pension funds have to use to discount their liabilities. As a result, many pension funds had to restore their coverage ratios by increasing contributions. This has led to lower disposable income, amplifying the procyclicality inherent in the pension system.

The Dutch pension system frontloads savings to the early years of the working life. The pension system credits the same amount of old-age entitlement for each euro of contribution paid by the member, irrespective of the worker's age. This implies an intergenerational transfer from young people to the old. The regulatory framework reduces the financial margin for younger households to engage in voluntary savings to smooth out income shocks, to accumulate a downpayment for a dwelling or to amortise a mortgage.

The regulatory features of the pension system could lead to a suboptimal allocation of capital. Given the incentives that are created by the regulatory framework pension funds are free in their investment decision but members cannot freely choose their preferred allocation of pension assets, potentially leading to a suboptimal allocation of assets from a household's point of view. Investment decision could also be suboptimal from a macroeconomic perspective. Pension funds invest around 17% domestically. They target an equity allocation of around 40%, whereas the rest is for a large part invested in bonds. The share invested in Dutch mortgages is far lower than the share invested in the Dutch sovereign despite interest rates being much higher for the former. The age profile of their members and the still dominant presence of defined-benefit contracts could be factors influencing this allocation of capital.

Investment decisions of households have also been influenced by economic policy. Households
mainly invest in dwellings, which many governments have supported by targeted policy measures. The most important of such measures in the Netherlands is the tax-deductibility of mortgage interests. From the mid-1990s, this triggered a credit-led boom in the housing market that regained momentum in the early years of the 2000s (Graph 2.2.10). The continuous rise in house prices was reversed in 2009 by the financial crisis and led to a considerable decline in investment in dwellings and other buildings. The medium-term outlook for the housing market is more benign; prices and the number of transactions are increasing again (see Section 2.3) and can be expected to result in families investing more in their housing.

Graph 2.2.8: Investment by type

The design of the institutional framework of the pension system has implications on economy-wide saving and investment patterns. Aligning pension contributions with entitlements by reducing premiums for the younger generations could impact on the deleveraging of households or support domestic demand. Positive effects can be expected from the current gradual changeover from a defined-benefit to a defined-contribution system that makes it more attractive for pension funds to invest in (domestic) equity, potentially stimulating domestic demand.

Banks and insurance companies

The Dutch banking sector is large, with total assets of almost five times GDP. Although the sector is smaller than that of the UK, it is much larger than that of Germany and has a high degree of concentration. Dutch banks hold relatively large mortgage portfolios, amounting to around 90% of GDP, double the average of the euro area. As domestic deposits do not match the mortgage portfolio, Dutch banks have a sizeable funding gap. As new mortgages take the form of linear or annuity mortgages and the maximum loan-to-value ratio is being reduced stepwise, the funding gap should gradually decrease in the coming years.

Non-financial corporations

Savings of non-financial corporations (NFCs) have constantly been higher than their investments. The excess of gross corporate saving over domestic investment has widened since the late 1990s and is the result of the decline in their investments and, more importantly, a sharp increase in their savings (Graph 2.2.11). The difference between savings and investments is the funding that corporations provide to other sectors. In the case of multinational companies this can also mean subsidiaries abroad. Profits that subsidiaries make and keep for their use, the so-called reinvested earnings, also constitute such intercompany lending. Therefore, when looking at the net lending capacity of NFCs in the Netherlands, income that is transferred or earned abroad in conjunction with inflows and outflows of direct investments has to be taken into account.
2.2. Saving and Investment

NFCs in the Netherlands distribute only a small share of their profits, which largely explains the high savings of the sector. Table 2.2.1 shows how the net operating surplus and net lending of NFCs are determined in the Netherlands and compares these figures, as an example, with Germany (which also has a sizeable current account surplus but of a very different nature). The difference in net lending of NFCs is mainly driven by the fact that Dutch companies pay out a much smaller share of profits to their shareholders. The phenomenon of earnings retention is largely concentrated in multinationals. The effect is particularly significant for the Netherlands because shares of Dutch companies that are foreign-owned amounted to 55% of GDP in 2011 compared to only 22% in Belgium and 20% in Germany. Higher dividend payments could imply a lower current account surplus.

Savings from domestic operations and investment of non-financial corporations have been relatively stable and more balanced than net lending suggests (Graph 2.2.12). Gross capital formation of Dutch corporations has been relatively stable since 1995 at around 10% of GDP. The (relatively small) volatility seems to follow the economic cycle. Graph 2.2.12 depicts how domestic savings (defined as gross savings excluding net foreign income) compare to domestic investments by Dutch NFCs. There is still a saving surplus but it is much smaller than when foreign operations are also considered. One important reason is that international investments and profits have become more significant over the years.
2.2. Saving and Investment

Graph 2.2.10: Domestic savings and investment of non-financial corporations

Source: Statistics Netherlands and European Commission
Calculation

Graph 2.2.11: Net FDI outflow and net foreign saving of non-financial corporations

Source: Statistics Netherlands, International direct investment database (OECD) and European Commission
Calculation
Box 2.2.1: Balance Sheets of Non-Financial Corporations

The increasing savings of non-financial corporations also reflect a continuous improvement in their balance sheets. Negative shocks, such as the burst of the dot.com bubble and the Great Recession, have prompted companies to strengthen their equity position. Indeed, since 2002 the Dutch non-financial corporations (NFC) have embarked on a deleveraging process in which large corporations\(^{(1)}\) have increased their equity share from around 37% of their balance sheet in 2002 to around 45% in 2013. In the same time, small and medium-sized enterprises (SMEs) have raised their equity ratio from under 34% to 41%. The composition of resources has not changed much: larger companies hold 5% of their assets in cash or in other highly liquid form, whereas smaller companies keep around 15% in liquid assets. Over the longer term, however, large companies have gradually replaced their fixed capital and stocks with shares in other companies (domestic or abroad), effectively moving parts of their activities abroad. As a consequence, the capital and stock-intensity of Dutch corporations has decreased, and acquisitions consolidated the sector. In their attempt to strengthen their balance sheets, Dutch non-financial corporations have also decreased their pay-outs to shareholders. Both developments (reducing liabilities and limiting dividend payments) contribute to the increasing savings of Dutch NFCs.

Graph 1: Aggregate balance sheets of large NFCs, in % of total balance sheets

Due to a revision of accounting standards no data available for 2008-2011
Source: Statistics Netherlands

\(^{(1)}\) Non financial corporations are defined as "large" if they have a balance sheet (at the end of the year) of at least EUR 40 million. The dataset excludes companies in real estate.

(Continued on the next page)
Part of the high share of retained earnings by SMEs could be caused by the specific tax treatment of director-major shareholders. The Dutch tax system entails a specific tax treatment of director-major shareholders (a person that holds a significant position in a company and owns a large part of the shares). The Netherlands has seen a strong increase in entrepreneurship headed by a director-major shareholder. Whereas there were 126,000 director-major shareholders in 2001, this number increased to 193,000 in 2012.(2) This change could be partly explained by tax motivations. An entrepreneur pays income taxes to a maximum rate of 52%. However, the profits distributed as dividends are taxed at a lower rate (3). There is thus a tax incentive for an entrepreneur to set himself up as a director-major shareholder and to pay himself the lowest wage allowed. At the same time, a director-major shareholder has a tax motivation to retain earnings in the company, instead of paying dividends, as the former are not subject to wealth taxation while the latter are. Consequently, companies with a director-major shareholder pay only a quarter of their net earnings in dividends.(4) If director-major shareholder companies had the same pay-out ratio as companies without a director/majority shareholder, their annual savings would be lower by approximately 0.5% of GDP.(5) A director-major shareholder may also reduce corporate income tax obligations by dedicating part of the company's cash reserve for his future pensions. These pension savings show up as corporate savings in the national accounts even though they are earmarked as pension savings for the entrepreneur.

(2) CBS, Achtergrondkenmerken en ontwikkelingen van zzp’ers in Nederland, 2014.
(3) Dividends are first taxed under the corporate income tax regime (20% up to 200,000 euros and 25% above) and subsequently as income from material interest under the personal income tax regime (22% up to 250,000 euros and 25% above).
(4) Van Dijkhuizen, Naar een activerender belastingstelsels, Eindrapport Commissie inkomstenbelasting, June 2013.
(5) Ibid.
The saving surplus of the Dutch NFC sector is increasingly driven by the foreign investments of multinationals. Foreign direct investments generate income that accrues to the Dutch mother company irrespective of whether or not this profit is effectively repatriated. These foreign investments have been sizeable and the profits they generated by these investments have increased substantially (Graph 2.2.13). The large outflow of capital is mainly caused by a few very large multinationals. The Netherlands hosts a number of multinationals that are active in capital-intensive industries and, due to the nature of their businesses, have limited investment opportunities in the Netherlands. These companies invest large amounts abroad and are the recipients of almost all foreign income (around two thirds of the income account can be attributed to 10 multinationals).\(^{(20)}\)

Since the turn of the century, the Netherlands has experienced two remarkable decreases in gross fixed capital formation: after 2000 and after the start of the crisis in 2008. As can be seen in Graph 2.2.14, investment has declined since 2008. The drop in the investment rate was caused by a decline in corporate investment in the early 2000s and a decline in households' investments since the onset of the crisis (Graph 2.2.3). Several factors might have contributed to the first fall in the fixed investment-to-GDP ratio after 2000. Almost half of the drop in nominal investment can be explained by price effects; but technology also shifted towards using cheaper investment goods, raising their share in investments.\(^{(21)}\) The fall in housing investment after the crisis is related to the declining housing market and construction sector (low investment in dwellings).

Overall, saving and investment decisions lead to a strong net lending position of the Dutch economy. The net lending position stems from the regulatory framework and the tax system that drive household saving and investment decisions and the internationalisation of multinationals that increases their financial interdependence with other countries.


Developments in household indebtedness

Private sector debt as a percentage of GDP peaked in Q2 2010 at 234.1% of GDP and has since been decreasing very gradually, to 227.9% in Q3 2014. In the two decades prior to 2012, regulatory settings and taxation incentives led to the build-up of a very high level of household gross debt, as well as strong increases in house prices and mortgage lending. However, since 2012 leverage ratios (debt-to-GDP ratios) have slightly decreased (Graph 2.3.1), partly as a result of voluntary repayments becoming more common. Overall, no significant negative repercussions from the high household debt level have emerged. As long as household debt has not reached a steady level, i.e. as long as deleveraging continues, the household saving rate will remain high, consequently restraining domestic demand. As a result of policy actions, household gross debt is expected to decrease gradually but ultimately substantially.

Several factors contributed to the build-up of household debt in past decades. In particular, the taxation system encouraged households to take out higher loans in order to take full advantage of uncapped mortgage interest deductibility. As a consequence, mortgage lending increased rapidly, especially in the 1990s. At the same time, lending standards were relaxed and loan-to-value (LTV) ratios surpassed 100% (Graph 2.3.2). Rigidities in housing supply pushed up house prices that, in turn, increased the average loan amount. The National Mortgage Guarantee (NHG) provided further incentives for banks and households to maintain high mortgage debt levels, as the risk of default was partly transferred to the guarantee scheme. Changing patterns of household behaviour such as increased participation rates in the labour market and changes in financing conditions (in particular, lower interest rates), maintained the upward trends in house prices and mortgage lending. As a result, almost 45% of Dutch households held debt in 2008/2009, one of the highest shares in the euro area.(23)

Declining house prices in the aftermath of the global crisis have led to a rapid deterioration in the net wealth position of Dutch households. In particular first-time buyers, concentrated in the 25-35 age group, often face a situation of negative housing equity, meaning that the market value of their home is below the outstanding balance on the loan (Graph 2.3.3). It is estimated that around 35% of all homeowners have negative housing equity.}

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(22) The National Mortgage Guarantee (NHG) scheme is run by the Homeownership Guarantee Fund (WSW), which is guaranteed by the government. Getting an NHG is financially interesting for borrowers as the costs attached to it do not cover the risks the government is taking. See box 4.1 in Macroeconomic Imbalances Netherlands 2014, European Economy, Occasional Paper 185, March 2014

(23) See In Depth Review for the Netherlands (2014) for a detailed discussion of the institutional features leading to the build-up of the high level of household debt.
2.3. Household Debt and Housing Market Developments

The high loan-to-value ratios (above 100% at inception) explain how falling house prices have led to widespread negative housing equity. Potential negative effects on the banking sector are however smaller than these numbers suggest, as about half of the mortgage sum of 'underwater loans' (outstanding loans that exceed the current value of the house) is covered by the NHG.

Low interest rates provide households an incentive to advance the repayment of their mortgages. Many households not only have the legal and contractual possibility to accelerate mortgage repayment, but they also have a strong fiscal incentive. Deposits on savings account are (above a threshold of around EUR 20 000) taxed at a fixed rate of 1.2%, regardless of the interest payments actually received. In a low interest rate environment, many households have a strong incentive to amortise their mortgage, as the reduction of the tax burden on their savings outweighs the reduced benefit from the lower mortgage interest deductibility. Moreover, reducing the outstanding mortgage loan below the value of the home enables the owner to transfer the mortgage to a new home, reducing obstacles to mobility (many banks are reluctant to refinance realised losses on home sales).

'Underwater mortgages' are more common among high-income households. The highest average LTV ratio can be found in the highest income quartile (Graph 2.3.6) and the lowest income quartile has the lowest share of 'underwater mortgages' (Graph 2.3.5), which mitigates the risk of default. There are two important reasons for this. Lower-income households typically bought smaller and less expensive houses and these usually suffered from a smaller drop in price than the more expensive dwellings since 2008. Lower-income groups are also more constrained by ceilings for the loan-to-income ratio that often prevent them from getting high LTV ratios.

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(24) These estimates should be viewed with caution as there are savings in mortgage-related products that do not show up in the statistics.
2.3. Household Debt and Housing Market Developments

From an aggregate perspective, risks of default are also mitigated by the strong overall net asset position of Dutch households. Much of the build-up in mortgage debt has been mirrored by even steeper increases in total household wealth and, even though the latter is often illiquid (such as pension and housing assets, see Section 2.2), households also have, on average, some liquid asset buffers for absorbing direct income loss. Compared to total household gross debt of around 230 % of GDP, liquid assets amounted to around 60 % of GDP in 2013 (97 % of GDP when including equity and investment fund shares)\(^{(25)}\). However, net household assets and pension claims are distributed unevenly and younger households usually have lower net (liquid and total) assets. Still, relatively few households face acute financial problems, thanks mainly to very strict legal protection of creditors (giving a strong incentive not to default on mortgage loans), legally-binding loan-to-income ratios and high repayment rates among young households (Graph 2.3.7). As a result, the non-performing share of the mortgage portfolio has been low and stable, increasing from 2.4 % in 2010 to only 2.6 % in the first half of 2014 (Graph 2.3.8), and the share of financially vulnerable households is one of the lowest in the euro area\(^{(26)}\).

\(^{(25)}\) Source: National Accounts

that covers half of 'underwater mortgages' indicate that risks to the banking sector are contained. Even if some downside risks were to materialise, the financial sector is in a healthy position and is likely to be able to withstand a worsening in the riskiness of the mortgage portfolio. This is reflected in the most recent 'stress tests' of the ECB and the current profitability of the banking sector (Graph 2.3.9).

Graph 2.3.9: Return on assets and equity of banks

Source: ECB Statistical Data Warehouse

Housing market developments

Developments in the housing market are important for assessing the ramifications of a high debt level for the economy. The high level of household debt could have negative macroeconomic consequences if households were unable to repay their mortgages on a large scale and, at the same time, the value of their homes was below the value of the outstanding mortgage. This shows the importance of the housing market in the assessment of the potential macroeconomic risks associated with household debt.

There are signs of recovery in the Dutch housing market. House prices peaked in August 2008 and then dropped until June 2013. Since then, a moderate upturn is visible: prices have increased by 3% since June 2013 (Graph 2.3.10) but, by the end of 2014, house prices were still 19% below their peak. With the fall in prices, fewer transactions took place. Since mid-2013, the number of transactions has increased, indicating smoother functioning of the market. Stabilisation of the housing market can also be seen from the increase in the number of building permits (Graph 2.3.11) in 2013 and the fact that rents are rising at a substantial pace (by 4.7% in 2013 and 4.4% in 2014). All these factors point to slightly higher house prices in the near future, reducing risks to the household and financial sectors.

Graph 2.3.10: Evolution of house prices (lhs, 2010 = 100) and number of transactions

Source: Statistics Netherlands

Graph 2.3.11: Residential building permits, pricee peak and through

Source: Statistics Netherlands
2.3. Household Debt and Housing Market Developments

**Box 2.3.1: Social Housing**

The rental market in the Netherlands is not functioning properly. Fiscal subsidies for debt-financed house purchases and lower recurrent taxation of owner-occupied housing compared to rental housing means that rents outside the social housing segment are high and supply is small. Moreover, the lower end of the market is dominated by a large social housing segment which in effect crowds out the private rental market. Even though social housing corporations own a third of the housing stock, waiting lists are long because many dwellings are occupied by higher-income households (which, based on their current income, would no longer be eligible for social housing). This not only diminishes the effectiveness of social housing as a policy tool to reduce poverty but also impedes labour mobility of people with lower incomes, negatively affecting their employment prospects. Given the already large housing stock owned by the social housing corporations, the problem of the waiting lists is not one of insufficient supply but of excessive demand.

The government is trying to re-focus social housing policies. The government has put forward policy measures to reduce the long waiting lists by encouraging higher-income households to move by means of income-dependent rent increases. This measure, however, is likely to be ineffective as rent increases are relatively modest, even after taking into account the tenant's income. For that reason, the government is investigating to what extent the value of the dwelling can be incorporated more prominently in the rent. Such an approach could help develop a rental market that is more responsive to housing market developments and could provide incentives for tenants, if they can afford to do so, to move to more expensive homes. This in turn may help increase the size and improve the functioning of the currently undersized commercial rental market. Another measure has been proposed to refocus social housing corporations (Herzieningswet Volkshuisvesting, adopted by the second chamber of Parliament on 11 December 2014). Under the proposed law, housing corporations would have to choose between either splitting up into two legal entities or having separate accounting sheets for activities of general economic interest (i.e. social housing) and any other activity (this obligation to have an administrative split/separate accounting also follows from the 2009 Commission Decision on State aid to Dutch Social Housing). This could reduce market distortions by eliminating cross-financing of other activities through social housing revenues. It remains to be seen if this can be achieved through separated balance sheets. If social housing corporations were to sell more non-social housing dwellings, this would simulate the emergency of a functioning commercial rental market and the social housing corporations could improve their support for low-income households.
Box 2.3.2: Long-Term Scenarios on Private Sector Debt

The implemented shift from interest-only to annuity mortgages will ultimately lead to a very sizeable decline in gross private sector debt. Under plausible assumptions about future economic growth, house prices and transactions, scenarios can be sketched of how the private sector debt ratio (as % of GDP) is likely to develop under the new tax regime that triggered the shift from interest-only to annuity mortgages.\(^{(1)}\) Graph 1 summarises the results of this analysis. Historical data are used until 2013 with two alternative subsequent scenarios after 2013. The first scenario is the no-policy-change benchmark, i.e. assuming that the government had not implemented the new tax regime. In this scenario, private debt would have continued to rise in the next decades and stabilise at around 280% of GDP. The second scenario is one which takes the new tax regime into account. In this case, the private debt ratio is expected to decrease to around 190% of GDP in 2040. In the short term, old and small mortgages are replaced by larger mortgages (even though house prices recently decreased, they are still much higher in nominal terms than 30 years ago), resulting in a temporary increase of the ratio. In the medium term, the “annuity effect” dominates and the private debt ratio decreases significantly.

The baseline scenario is not very sensitive to changes in the underlying assumptions. Different assumptions concerning economic growth or house prices do not change the main result that household debt is set to decline substantially due to the policy changes implemented in 2013 (see for example Graph 2).

Households’ savings will be pushed up by the reform but the macroeconomic effects are expected to be positive. In the medium term this deleveraging will negatively impact domestic demand through temporarily heightened savings rates and will put upward pressure on the current account surplus. The long-run general equilibrium effects are more difficult to forecast. Additional savings in the banking sector will improve financial stability and free up capital for lending to more productive activities than housing.

\(^{(1)}\) Both scenarios assume constant nominal GDP growth (3.5%), constant ratios of private household debt (non-mortgages) to GDP, a constant number of transactions (average 1995-2011), a constant LTV ratio of 1 and house prices that develop in line with nominal GDP.

\[\text{Graph 1: Private Sector Debt - Baseline scenario} \quad \text{Graph 2: Alternative policy change scenario}\]

\[\text{Source: European Commission Calculations} \quad \text{Source: European Commission Calculations}\]
Policy measures

Since 2012, the government has taken a series of policy initiatives that are reshaping the Dutch housing market substantially. The most significant legislative change relates to the eligibility for mortgage interest deductibility. New mortgages initiated from 2013 onwards must take an annuity or linear form in order for interest to be tax-deductible and to qualify for an NHG guarantee, and they have to be amortised over a maximum of 30 years. As a result, non-amortising mortgage loans have virtually disappeared from the market. Another aspect of the change in the tax treatment of housing finance relates to the very gradual reduction in the maximum deductible rate. The regulatory ceiling for the loan-to-value (LTV) ratio is gradually being lowered to 100% by 2018. This will not translate into substantial problems for first-time buyers since LTV ratios of new mortgages are currently slightly below 90%.(27)

Lower LTV ratios will improve the resilience of the financial sector and will reduce the gross household debt levels. Any further decrease in the maximum LTV ratios needs to be weighed against the capacity of young households to save outside the pension system and the functioning of the lower end of the rental market. Since 2014, NHG mortgages have limited their guarantee to 90% of any potential losses and the maximum guarantee is being tied to the average house price as of 2016. This initiative should encourage lenders to assess more thoroughly and monitor the risk of their mortgage and thus limit the risk of default.

Overall, private sector debt has been decreasing since 2010. It has been put on a further downward path by policies implemented in recent years and by deleveraging households and non-financial corporations. As long as deleveraging continues, the household saving rate will remain high, consequently restraining domestic demand. So far no significant repercussions from the high household debt level have emerged and risks are fading.

3. OTHER STRUCTURAL ISSUES
3.1. Fiscal structural issues and taxation

Taxation

The Netherlands has improved the financial incentives on labour. Although incremental amendments have been made to the tax system with a view to increasing labour participation, a more comprehensive reform of the tax system, announced in September 2014, is still under discussion. An outline of the reform is expected to be presented to parliament in summer 2015.

Fiscal disincentives to work are substantial in the Netherlands. The average tax burden on labour income in the Netherlands is slightly above the OECD average (28). Taxes on personal income and profits are below the OECD average but social contributions are high (29). Compared to other EU Member States, the tax wedge on labour for low-income earners is low (32.2% in 2013 for a single person earning 67% of the average wage, compared to 37.6% on average in the EU). Even though the tax wedge is relatively low, compulsory non-tax payments are substantial in the Netherlands. When these are taken into account, the tax wedge for a single worker without children earning the average wage increases from 36.9% to 51.8%, the second highest in the EU. (30) Due to this high burden and the relatively high benefits, low-wage traps, inactivity traps and unemployment traps, including for a second member of a couple, are higher than the EU average, pointing to the existence of financial disincentives to work. (31)

Measures have been taken to strengthen financial incentives to work. The in-work tax credit will be gradually increased for lower incomes from 2014 until 2017, which can have a positive effect on disposable income, strengthening incentives to take up work. In addition, tax arrangements for people with (young) children have been adjusted in order to provide a stronger incentive to either enter the labour market or work more hours. However, no figures are available on the impact these measures will have on employment or hours worked.

Lower taxes on labour could be compensated by higher taxes (or lower expenditure) elsewhere. Least detrimental to growth would be increases in property environmental or consumption taxes. Property taxation could be increased for instance by a quicker phasing out of mortgage interest deductibility or higher taxes on social housing corporations. A recent study suggests that there is a potential for additional environmental taxes (32), e.g. by increasing the water abstraction tax, the level of cost recovery under the provision of water services and reintroducing the passenger aviation tax. Taxes on consumption could be raised by broadening the tax base of the standard VAT rate or by increasing the reduced rate.

The employment effects of changes to the tax and benefit system depend on household characteristics. According to a study by the Netherlands Bureau for Economic Policy Analysis (CPB) (33), effects of tax-benefit reforms in terms of participation depend greatly on demographic factors and the composition of the household (children or no children, single parents or couples). Furthermore, although tax-benefit reforms influence considerably the decision to participate, they hardly influence the decision to work more hours. The study concludes that there are only marginal effects from adjusting marginal tax rates. Larger employment effects can be expected by implementing targeted reforms in the field of the in-work tax credit or by reducing benefits.

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(28) OECD Revenue Statistics 2014 – The Netherlands
(29) Social security contributions OECD Revenue Statistics 2014 – The Netherlands. While the tax wedge does not stand out compared with other Member States, the rate of non-tax compulsory payments is particularly high in the Netherlands. Based on the OECD tax database, which takes health care and pension contributions into account, the Netherlands is one of the countries with the highest marginal burden on labour.
(31) The inactivity, unemployment and low wage traps for a single person earning 67% of the average wage (or rising from 33% to 67% in case of the low wage trap) amounted respectively to 80%, 83.8% and 73.6% in 2013 (against a EU average of respectively 54.3%, 75.1% and 41.2%).
Long-term sustainability

With important long-term care and pension reforms, the Netherlands aims to address its medium-term fiscal sustainability risks. Government debt is currently above the 60 % of GDP Treaty threshold (68.6 % of GDP in 2013 and expected to increase slightly until 2016). Ageing-related costs are expected to put upward pressure on public debt, in particular over a horizon of a few decades. The Netherlands appears to face some fiscal sustainability risks in the medium-term. These risks are projected to persist in the long term, primarily due to the projected ageing-related costs, in particular in the field of long-term care. Even though several reforms have been implemented over the last few years that potentially curb the costs related to ageing, it might still be appropriate for the Netherlands further limit the impact of age-related expenditure on the sustainability of public finances in the long term.

A comparatively large part of Dutch GDP is spent on providing pensions. In this regard, the Netherlands has taken steps to reform the publicly and privately funded pillars of the pension system and the long-term care system. In addition to gradually increasing the first-pillar statutory retirement age from 65 in 2012 to 67 in 2023 (34) and a related lowering of the maximum tax-exempt accrual rate, new rules on indexation and financial buffers (financial assessment framework) were adopted by the parliament. Financial supervision of the pension funds has been improved and made more rigorous. Better use will also be made of buffers in order to cope with financial shocks, which should reduce the system’s pro-cyclicality. If pensions need to be adjusted following financial shocks, the Central Bank will assess how the pension funds have taken inter-generational effects into account in order to ensure inter- and intra-generational fairness in pension contracts. Following the debate among the social partners which took place in 2014, the government is expected to introduce proposals for the future of the pension system before the summer of 2015.

Some parts of long-term care responsibilities have been shifted to municipalities and health insurance companies. With the implementation of the Social Support Act and the Youth Act, responsibilities for long-term care are partly transferred to municipalities and health insurance companies. The aim of the decentralisation is to achieve efficiency gains and to provide tailor-made support. The number of people receiving intramural care is reduced, and some new clients will receive care at home. At the same time the municipal budget for care will decrease substantially, as the government expects the importance of informal care to increase. It remains to be seen whether the municipalities will manage to develop the necessary expertise in order to be able to offer accessible and affordable long-term care, especially in view of a pressing time schedule for implementation and fewer resources available. The government has committed itself to closely monitoring the implementation of the reform, elements of which still need to be specified and adopted, and has stated that it would provide additional support to the municipalities if needed.

Fiscal framework

The Netherlands has a robust fiscal framework. The main characteristics of the multi-annual trend-based fiscal framework currently in place are: (i) the use of real (i.e. inflation-adjusted) expenditure ceilings, which are predetermined and apply to the government’s entire term of office; (ii) the use of automatic stabilisers on the revenue side and (iii) the use of independently derived macroeconomic assumptions. When a new central government is formed, yearly budgetary targets for general government expenditure and the tax burden are set for its term in office. Parliament has approved legislation (Wet Houdbare Overheidsfinanciën) for transposing provisions of the Council Directive 2011/85 on requirements for national budgetary frameworks and the Fiscal Compact (which entered into force on 1 January 2014). In particular, a division of the Council of State has been mandated to monitor compliance with the structural budget balance rule, which was also introduced by the new law. However, the mandate appears limited in terms of assessments in relation to budgetary targets.
3.1. Fiscal Structural Issues and Taxation

to the operation of the rule and its correction mechanism and, in addition, the organisation arrangements within the Council of State in terms of staff and decision-making are not spelled out at this stage. The ‘comply-or-explain’ principle is not formalised, although there is an established practice for the government to react to the Council of State’s opinions. The new Dutch legislation also covers provisions and coordination mechanisms for local government finances to improve their monitoring by the central government. The decentralisation of a large number of tasks from central to local governments from January 2015, which includes substantial expenditure cuts, will put to the test the new provisions on monitoring public finances across different levels of government.

The economic crisis and ensuing fiscal repercussions have exposed weaknesses in the fiscal framework, as a result of which the original targets that were set had to be adjusted several times. Since the onset of the crisis successive governments amended their medium-term budgetary plans with wide-ranging additional consolidation measures, partly because initial expenditure ceilings were based on growth paths which turned out to be overly optimistic. Under the current government’s coalition agreement, automatic stabilisers are free to operate within each of the separate expenditure sub-ceilings for ‘core’ central government, social security and healthcare, as long as the country’s overall fiscal position stays in line with the relevant Country Specific Recommendations. As regards national budgetary rules, interest expenditure is excluded from the overall expenditure ceiling, whereas expenditure items sensitive to the cycle (unemployment and social welfare benefits, for example) are kept within the overall expenditure ceiling. This could prevent automatic stabilisers from working fully in an economic downturn. (36)

(36) Short-term multipliers of expenditure-based measures are typically higher than the short-term multipliers of revenue-based measures.
Long into the financial crisis, the Dutch labour market held up well. In the years before the onset of the financial crisis the Netherlands experienced very low unemployment figures (Graph 3.2.1). Even after the crisis hit in 2008, unemployment increased with a delay as employers engaged in labour hoarding, with labour productivity absorbing the loss in domestic production. (37) As the crisis endured, however, the level of unemployment started to increase substantially in 2013 peaking in February 2014 and slowly recovering afterwards. The unemployment rate reached 6.7% in December 2014 (EU average of 9.9%). Following the most recent Commission forecast, the moderate recovery of labour market conditions is set to continue in the coming years.

Increasing labour market participation

Ensuring a high supply of labour in the long term remains an issue for the Dutch economy in view of an ageing population (38). While the employment rate (20-64 age group), at 76.3% in the third quarter of 2014 is well above the EU average of 69.8%, addressing the participation of the groups “further away” from the labour market - including second income earners (often women), people with a migrant background, people with disabilities, young people, older workers and long-term unemployed - is necessary in order to reach the national target of 80% by 2020.

(37) Also short-term work arrangements available to employers (‘werktijdverkorting’ and ‘deeltijd ww’) may have cushioned the labour market reaction, although the actual use of these programs was rather limited compared to the stocks and flows on the labour market (see Hijzen and Venn (2011). The Role of Short-Time Work Schemes during the 2008-2009 Recession, OECD Social, Employment and Migration Working Papers, No 115 and the evaluation report ‘Werkt werktijdverkorting?’ by APE Onderzoek & Advies, May 2012.

(38) According to EUROPOP 2013, the most recent population prognosis by Eurostat, the old age dependency ratio is set to double from currently 1 person aged 65+ to 4 persons aged 15-65 up to 1 to 2 in 2045. The median age of the population is expected to increase from 42 to 45 between 2014 and 2040.

Female employment in the Netherlands is predominantly part-time. While the female employment rate of 70.9% in the third quarter of 2014 is above the EU average, it is far less favourable expressed in full-time equivalents (48.1% in 2013). The Netherlands continues to have the highest proportion of women in part-time employment in the EU (77.2% in 2013). Part-time work is largely voluntary, as only 4.3% of part-time workers would like to work more hours (39) (whereas in all other Member States this figure is much higher). Yet, part-time work can affect the financial independence of women, leading to a high gender pay gap (16.9% in 2012) and a high gender pensions gap later on in life. Measures improving the affordability of formal childcare could have a positive influence on the choice of women to enter the labour market or to work more hours.

Labour market outcomes of non-EU nationals tend to be weaker along all dimensions. The Dutch labour market does not seem to be very accessible to immigrants. These groups have poorer employment outcomes resulting in relatively high (long-term) unemployment rates and one of the highest employment gaps in the

EU.\(^{(40)}\) The skills of non-EU nationals residing in the Netherlands are under-used, as evidence shows that many immigrants are over-qualified for the jobs they do.\(^{(41)}\) Part of this problem might be caused by the strict rules on diploma recognition in the Netherlands, whereas also labour market discrimination might play a role.\(^{(42)}\)

The employment rate of people with a disability in the Netherlands is below the European average.\(^{(43)}\) Furthermore, the employment gap (2011) between people with disabilities and people without disabilities in the Netherlands is over 37 percentage points, the highest gap in the EU.

Although the overall unemployment rate has shown a decrease in 2014, long-term unemployment is on the rise. While the overall unemployment rate has shown a decrease in 2014, long-term unemployment is stable at 2.8% in the first half of 2014. In relative terms, the share of long-term unemployment in total unemployment rose from 21.6% in the last quarter of 2009 to 40.4% in the third quarter of 2014. On the contrary, youth unemployment and NEET (people not in employment, education or training) rates in the Netherlands are fairly low\(^{(44)}\), although both rates have shown increases in the last three years. A specific issue is related to the high youth unemployment rate for those born outside the EU27.

Older workers’ participation is increasing, also resulting from recent pension reforms. The employment rate of older workers (55-64) has shown a steady increase from 2010 (53.7%) to 2013 (60.1%) and is still on the rise. This is in line with the rising effective retirement age in the Netherlands, from 62.8 in 2010 to 64.1 in 2014\(^{(45)}\) and an extended working life (39.6 years compared with an EU-average of 35 years). Older workers are at a higher risk of long-term unemployment, as once they lose their jobs it is difficult for them to re-enter the labour market as the share of long-term unemployment among older workers is far higher than for other age groups.

The incidence of flexible contracts has increased and the transition rates from temporary employment to permanent employment are low in the current juncture. In recent years the number of self-employed and people employed under a temporary contract have increased (Graph 3.2.2). At 16.5% in 2012, the transition rate from temporary to permanent contracts is among the lowest in the EU.\(^{(46)}\) The increase in flexible contracts and the low transition to permanent contracts is often attributed to the assumption that employers’ costs for hiring people under a permanent contract being higher, due to national rules in the field of dismissal protection and severance pay, sickness benefits and social security contributions (which, as concerns occupational funds, do not have to be paid for the self-employed).

\(^{(40)}\) Eurostat: the gap in employment between non-EU nationals and total employment in the Netherlands is 26 p.p. in 2013.
\(^{(41)}\) The over-qualification rate (share of highly educated working in low or medium skilled occupations) is much higher for non-EU nationals (26.2%) than for Dutch nationals (15.8%). Source: Eurostat; Labour force survey 2013.
\(^{(42)}\) SCP, Den Haag, September 2014, Huwelijksmigratie in Nederland, Achtergronden en leefomstandigheden van huwelijksmigranten en SER advies 14/03, April 2014, “Discriminatie werkt niet”.
\(^{(43)}\) NL: 42.7%, EU: 47.3%. Source: Eurostat news release 184/2014, 2-12-14.
\(^{(44)}\) Youth unemployment Q2 2014: 10.6% EU28: 21.7%, NEET 2013: 5.1% EU28: 13.0%. 
\(^{(45)}\) Source: Statistics Netherlands
\(^{(46)}\) European Commission (Eurostat: Labour force survey; ilc_lvhl32); EU-average 24.1%.
3.2. Labour Market and Social Policies

In order to address the challenges concerning labour market supply, the Netherlands has implemented labour market reforms. Notably, significant steps have been taken to stimulate labour market participation, reduce labour market duality and foster labour mobility. The effects of reforms in these areas will be visible in the coming years.

Incentives for participation of people with disabilities are being strengthened, and employment stimulated. The participation act that came into force on 1 January 2015 aims at improving the labour market participation of people with disabilities by merging and reforming several benefits schemes. The Social Assistance Act, which has been incorporated into the Participation Act as of 1 January 2015, has been amended to focus more on labour market activation. The government has made an additional investment of EUR 35 million to help the 35 Dutch labour market regions in setting up their structures for regional cooperation (‘werkbedrijven’). At the same time, the government is limiting new entries into sheltered workshops and is encouraging municipalities to place people on the regular labour market with a subsidy. However, this entails the risk that municipalities close sheltered workshops without being able to offer concrete alternatives.

From the labour demand side, a draft law which has been sent to parliament sets a quota for employers to hire people with disabilities. Social partners are committed to creating 100000 new jobs for this target group in the private sector and 25000 in the public service by 2026. If this obligation is not met the quota law enters into force, meaning that financial penalties will be imposed on those enterprises that do not fulfil the quota. An annual evaluation is foreseen.

The primary set of policy measures to tackle youth unemployment and inactivity is articulated in the Youth Guarantee Implementation Plan. Additional resources are invested in youth-specific measures such as the regional Work Experience Grant (‘startersbeurs’) and a temporary premium discount for employers if they employ young workers with a view to addressing the rising youth unemployment rate.

Active ageing measures are being implemented to offer support to older workers as their working life extends. Adapted workplaces, innovative shift patterns and (re)training are among the measures taken. These measures are financed through ‘Sector Plans’, aimed at creating and retaining jobs within specific sectors and stimulating inter-sectorial mobility. The government reserved an amount of EUR 600 million in funding, of which a third is earmarked for older workers. Another third is earmarked for youth. The ‘Sector Plans’ have the potential to stimulate the creation of (dual) jobs and apprenticeships as well as to foster mobility between sectors.

The comprehensive reform of employment protection legislation enacted in 2014 aims at reducing labour market duality and fostering mobility. With the implementation of the Work

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Graph 3.2.2: Permanent, temporary and self-employed workers as a share of total employment

Source: European Commission (Eurostat: Labour Force Survey)

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(47) Merging of ‘Wet Werk en Bijstand’ (WWB), ‘Wet Sociale Werkvoorziening’ (WSW) and parts of the ‘WAJONG’ into one act: ‘Participatiewet’.

(48) E.g. by implementing an obligation to perform public labour in exchange for benefits (‘verplichte tegenprestatie’) and introduction of a household (before individual) means testing (‘kostendelersnorm’) to assess welfare eligibility.

Security Act (50) the government is trying to address issues of labour market segmentation by reducing the obstacles to hiring and firing, encouraging transitions to permanent contracts and labour mobility. The act enhances the rights of flexible workers and at the same time decreases severance payments and simplifies dismissal procedures. It limits the maximum right to unemployment benefits from 38 months to 24 months (51) and lowers the yearly accrual of unemployment benefits rights. In addition, the government has changed the rules concerning employers’ obligation to pay wages for a maximum of two additional years when an employee falls ill. Although this reduces differences between permanent and temporary workers, the financial risks for the employer in the event of an employee falling ill remain higher for permanent staff. The government is currently examining this issue to see if further reforms could provide an incentive for employers to hire permanent staff.

False self-employment risks distorting the Dutch labour market (52). A study concerning the increase in the number of self-employed is currently being conducted, with the aim of preventing abuses linked to the spread of "bogus" self-employed persons with low income and for whom no social security contributions for occupational funds have to be paid. A new law tackling false self-employment is under discussion in the parliament and the fines for social fraud are expected to be raised.(53)

Ensuring effective social protection

Poverty levels are low but increasing in the Netherlands. As part of the Europe 2020 strategy the Netherlands set a national poverty target of lifting 100000 people out of low-work intensity households, but the trend shows a marginal rise compared to the baseline value in 2008.(54) On other poverty indicators the situation is also good, but with a negative trend(55). Income inequality is lower than the EU average, and has shown a decreasing trend of declining inequality.(56) The highest risk of poverty in the Netherlands is seen for children, non-EU nationals, people receiving social assistance and single parents.(57) In-work poverty (at 4.2%) is significantly lower than the EU average (8.9%) and is most prevalent among the self-employed (almost half of the working poor). As the self-employed often pay lower social security contributions and often have no occupational pension arrangements, they have lower entitlements to social security benefits in situations of labour disability, job loss or old age and are therefore more susceptible to risk of poverty. Recently a special pension fund for self-employed has been established, which falls under the (more favourable) tax regime of the second pension pillar, but still many self-employed choose not to be insured this way.

The shift of many responsibilities related to participation and care to the municipalities has the potential to lead to more efficient and effective delivery of social protection, but also carries risks. With the adoption of several acts in the field of participation and care, many responsibilities have shifted to the municipalities. The concentration of multiple tasks at municipal level should be more cost-efficient and enables tailor-made solutions to beneficiaries’ needs.

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(50) Wet Werk en Zekerheid, adopted on 10 June 2014. 1 July 2015: Better protection to people with a flexible contract by introducing a right for severance pay (after two years), tightening the conditions for offering and extending flexible contracts, simplifying dismissal procedures by offering one dismissal route. 1 January 2016: Gradually reducing the (publically funded) rights to unemployment benefits from 38 to 24 months in 2019, reducing the pace of accrual of unemployment benefits rights.
(51) Nationally funded part. Social partners can agree to supplement the maximum with an additional year.
(53) Wet Anpak Schijnconstructies and Wet aanscherping handhaving en sanctiebeleid SZW-wetgeving (Fraudewet)
(54) The number has increased from 1613000 in 2008 to 1624000 in 2013 (age category 0-64).
(55) The percentage of people living at risk of poverty or social exclusion increased from 14.9% in 2008 to 15.9% in 2013 and the percentage of people experiencing severe material deprivation rose from 1.5% in 2008 to 2.5% in 2013. The percentage of people living at risk of poverty after social transfers decreased slightly (10.5% in 2008 to 10.4% in 2013).
(56) Income inequality as defined by the S80/S20 indicator. Source: European Commission (Eurostat: European Union Statistics on Income and Living Conditions (SILC); ilc_di11)
However, there are risks related to a very tight implementation schedule in combination with a reduction of overall funding.

**Box 3.2.1: Wage growth and job creation**

As shown by the analysis of the 2014 In-depth Review, wage developments in the Netherlands have seen little dispersion across sub-sectors. Wage increases in sectors where productivity developments outpaced wage growth could have the potential to positively affect domestic demand, helping to close the current large output gap in the Netherlands.

Wage setting in the Netherlands takes place by means of collective agreements at sector and firm level. Social partners play a crucial role in negotiating wage developments, with around 700 collective agreements in the country (covering approximately 80% of the workforce). With a long tradition of social dialogue, social partners share the goal of adapting wage developments to the prevailing cyclical (as well as industry-specific) economic conditions, which are internalised in the wage-setting process.

After a phase of slow wage growth in the middle of the crisis, recent developments point at more favourable conditions. While between 2011 and 2013 real compensation per employee grew by a 0.9% on average, real wages have picked up again in 2014, with an estimated increase of 2.5% over that year. This trend reflects the combined effect of contractual wage developments and inflation in recent years. As evident from Graph 1, in a context of rising unemployment, contractually agreed wages have increased significantly less than inflation since the beginning of 2010, hovering around 1% on average. However, this trend seems to have reversed since the end of 2013, when contractual wages started rising on average more than consumer prices. This trend has the potential to sustain real wage growth, contributing to an increase in disposable income and internal demand.

In the medium term, real wages that grow broadly in line with labour productivity could support domestic demand without harming competitiveness. Since 2008, both nominal and real unit labour costs have been on the rise, also owing to cyclical factors (given the fall in labour productivity during recession phases). While this trend is overall consistent with sustaining labour income and domestic demand, continued growth of unit labour costs in the longer run might lead to pressures on the side of labour costs. A high tax wedge, in particular on lower incomes, can make this issue more relevant by compressing households’ disposable income while weighing on labour costs, thus potentially limiting job creation.
The ratio of general government expenditure on education over GDP is expected to remain constant for the coming years (58). Annual expenditure per student in public and private institutions for each educational category is above the EU average. An additional EUR 650 million is earmarked for quality improvement at all levels of education, research and innovation in 2015. Yearly investments of EUR 600 million are also foreseen for the years 2016 to 2019 (59) to be used in areas such as preventing students from repeating school years, appropriate teaching methods, better quality for technical vocational education and the internationalisation of higher education. As of August 2014, schools must provide adapted education for pupils who need extra support (‘passend onderwijs’). The implementation of this reform has started, but the details of inclusive education measures are still being worked out.

In 2014, several initiatives were taken to better match vocational education and training to the needs of the regional labour markets. Focus is placed on the general improvement of the quality of education, on the incentives for employers to provide more and better quality internships and on more opportunities for students’ personal development including more attention to avoiding drop-outs. Increasing the amount of work-based learning remains a particular challenge.

The Dutch economy needs a highly-skilled and adaptive workforce to maintain its competitiveness. Although there is a relatively low level of skills mismatches in the Netherlands (60), a shortage of information and communication technology professionals hampers the potential of the digital economy for growth and jobs. The Netherlands addresses this gap with a range of programmes (64) that seek to better align education with the labour market. Further efforts to reduce skill shortages are needed to meet the growing demand and to increase the competitiveness of the Dutch economy.

In secondary education, there are teacher shortages in languages, maths and science in an ageing teaching population. 70% of Dutch school heads report that quality of education is negatively affected by shortages of qualified or capable teachers (62). In order to reduce the shortage, the government has introduced more flexibility in teacher training and extra coaching to prevent teachers from dropping out.

PISA results have shown a declining trend, but scores are still above the EU average. (60) Furthermore, adults in the Netherlands have above-average proficiency in literacy, numeracy and problem solving in technology-rich environments compared to other countries. (61)
3.4. STRUCTURAL MEASURES

Research, innovation and enterprise policy

A key challenge for the Netherlands is to better leverage its science base of excellent quality into a more innovation-intensive economy. The ‘Top sectors’ approach aims to address this challenge by enhancing science-business cooperation complemented by wider use of indirect support to research and innovation activities through general instruments such as tax incentives and an innovation fund supporting entrepreneurship (Innovatiefonds MKB+). Nevertheless, given the high potential of the Netherlands in this area, additional efforts are required to foster the creation, development and growth of knowledge-intensive innovative firms.

A strong publicly-funded base in both fundamental and applied research must be preserved in order to support private-sector innovation. Yet public R&D intensity in the Netherlands, at 0.84% in 2013, is lower than in most of the Member States with similar levels of economic development (Denmark, Sweden, Germany, Austria), which have continued to raise their support for public research in recent years, while the Netherlands slipped from holding fourth position in terms of public R&D intensity in the EU in 2011 to eighth place in 2013. Despite the budgetary increases decided in 2014 in favour of the Netherlands Organisation for Scientific Research (NWO) and of university research, the overall level of public support to R&D is expected to decline over the period 2013-2019: for this period, direct support for R&D is expected to decrease by 6% and indirect support through fiscal instruments by 7% (65).

SMEs are an important driver of the economy in terms of value added and employment. They account for 67.3% of all employees and create 61.6% of added value, which slightly exceeds the total EU shares. The average balance of registrations and liquidations has been at more or less zero between 2010 and 2013, leading to a number of SMEs fluctuating constantly around 800,000. The number of start-ups has been rising since 2003 from around 60,000 to 150,263 registrations in 2013. To some extent, this might be due to favourable start-up conditions. However, the increase in one-person companies (self-employed) from 55 to 66 percent of new businesses between 2007 and 2012 was also a big driver of this development. Despite recent improvement in the take-up of innovation support by SMEs and the overall focus on market-based innovation, the large majority of Dutch SMEs seem to be unable to benefit from support, because they are not active in the five priority areas defined for innovation. Improving the resource efficiency framework targeted at SMEs, could already lead to cost saving as large as EUR 3.6 billion in a small number of sectors, with a high projected impact on competitiveness (65).

Access to finance remains a problem for some SMEs, but overall the negative impact seems limited. In 2014, bank loan refusals were at 43%, more than double the EU average of 17% (67). However, SME demand for credit is low compared to other Member States and originates largely from companies in poor financial shape. The government has created a complementary fund for high-risk capital mobilising institutional investors (Nederlandse Investeringsinstelling (NLIJ)) and adopted measures to reduce SME dependency on bank financing, including a programme providing support to obtain bank credits (MKB-Go), an action plan to strengthen the equity base of SMEs, an increase in the ceiling of the micro-financing instrument (Qredits) and additional means to supply SME finance. The government now partly finances platforms for crowd-funding. The government is at the same time following through on the decision to reduce guarantees drastically by 2015.

Emissions, renewable energy and congestion

By 2020, in accordance with the Effort Sharing Decision (ESD), the Netherlands needs to decrease emissions not covered by the EU Emissions Trading Scheme (ETS) by 16% compared to 2005 levels. According to the latest


(67) European Commission SAFE Survey 2014
national projections based on existing measures, non-ETS emissions will decrease by 15% between 2005 and 2020, leading to a shortfall of one percentage point.

**The share of renewable energy in the production of energy in the Netherlands was just 4.5% in 2012, far from its EU target of 14% in 2020.**\(^{(68)}\) The Netherlands is also not on track for meeting its indicative energy efficiency target of 60.7 Mtoe in primary energy consumption by 2020. On 6 September 2013, the national government, local government and stakeholders signed a legally non-binding *Energy Agreement for Sustainable Growth*, which commits the parties to work towards meeting EU and national targets on energy efficiency and renewable energy deployment. Increased investment in renewable energies seems to be needed to reach the 2020 target. According to the National Energy Outlook, the expected size of public budgetary support is not a limiting factor for meeting the renewables and energy efficiency targets, but rather the conditions for mobilising investment from the private sector need improvement, in particular from a regulatory and policy clarity perspective.

**Compared to the EU average, congestion constitutes a problem in the Netherlands.** This holds true both inside the agglomeration as well as on essential interurban links. Whereas the downturn and recent infrastructure developments have significantly improved traffic flows, no complementary measures such as dynamic road pricing schemes have been taken. The Netherlands is still confronted with significant congestion.\(^{(69)}\)

**Modernisation of public administration**

The public administration of the Netherlands generally performs well. Overall, the government was very active in 2013-2014 in further improving the business environment. Significant investments have been made in online accessibility and cutting red tape. The impact assessment system is comprehensive and is monitored by an advisory body (AFSCA), but it is complex, not systematically applied to all policy options and consultation of stakeholders is not mandatory.

At least since 2011, the Netherlands has had one of the lowest EU publication rates for public procurement contracts advertised at EU level. The share of public contracts for works, goods and services published by the Dutch authorities and entities under EU procurement legislation was only 7.6% of their total expenditure (excl. utilities) on these contracts in 2013. This is well below the EU average of 19.1% and the second lowest in the EU. Increasing this rate might bring economic benefits.

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\(^{(68)}\) The interim renewable energy share (RES) target was 4.7% for 2011-2012. The RES share reached 4.3% in 2011 and 4.5% in 2012. For 2013-2014 the interim target is 5.9%, but according to Statistics Netherlands, the 2013 RES share was only 4.5%.

\(^{(69)}\) [http://www.inrix.com/scorecard/key-findings-us/](http://www.inrix.com/scorecard/key-findings-us/)
ANNEX A
Overview Table

<table>
<thead>
<tr>
<th>2014 Commitments</th>
<th>Summary Assessment(70)</th>
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<tbody>
<tr>
<td><strong>2014 Country specific recommendations (CSRs)</strong></td>
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**CSR 1**
Following the correction of the excessive deficit, reinforce the budgetary measures for 2014 in the light of the emerging gap of 0.5% of GDP based on the Commission services 2014 spring forecast, pointing to a risk of significant deviation relative to the preventive arm of the Stability and Growth Pact requirements. In 2015, significantly strengthen the budgetary strategy to ensure reaching the medium-term objective and maintain it thereafter, and ensure that the debt rule is met in order to keep the general government debt ratio on a sustained downward path. Protect expenditure in areas directly relevant for growth, such as education, innovation and research.

The Netherlands has made **some progress** in addressing CSR 1 of the Council recommendation (this overall assessment of CSR 1 excludes an assessment of compliance with the Stability and Growth Pact).

**CSR 2**
When the economic environment allows, step up efforts to reform the housing market by accelerating the reduction in mortgage interest tax deductibility, by providing for a more market-oriented pricing mechanism in the rental market, and by further relating rents to household income in the social housing sector. Monitor the effects of the social housing reforms in terms of accessibility and affordability for low-income households. Continue efforts to refocus social housing policies to support households most in need.

The Netherlands has made **limited progress** in implementing CSR 2:
- **No progress:** The partial phasing out of mortgage interest deductibility has not been stepped up despite a recovery of the housing market and the economic environment.
- **Limited progress:** The implementation of income-related rent increases has only shown a small increase in rents on top of inflation. The introduction of a more market-based pricing mechanism ('Huursomnadering') to support mobility in the housing market was planned to be adopted after two years of income-related rent increases (introduced in 2013), but the introduction of this system has been postponed until at least the beginning of 2016.
- **Some progress:** Effects of the reforms on accessibility

(70) The following categories are used to assess progress in implementing the 2014 country specific recommendations: **No progress:** The Member State has neither announced nor adopted any measures to address the CSR. This category also applies if a Member State has commissioned a study group to evaluate possible measures. **Limited progress:** The Member State has announced some measures to address the CSR, but these measures appear insufficient and/or their adoption/implementation is at risk. **Some progress:** The Member State has announced or adopted measures to address the CSR. These measures go a long way in addressing the CSR. **Substantial progress:** The Member State has adopted measures, most of which have been implemented. These measures go a long way in addressing the CSR. **Fully addressed:** The Member State has adopted and implemented measures that address the CSR appropriately.
### CSR 3

Implement reforms of the second pillar of the pension system, ensuring an appropriate intra- and inter-generational distribution of costs and risks. Underpin the gradual increase of the statutory retirement age with measures to improve the employability of older workers. Implement the envisaged reform in the area of long-term care with a view to ensure sustainability, while ensuring fair access and the quality of services and monitor its effects.

The Netherlands has made **substantial progress** in implementing CSR 3:

- **Some progress**: The reform of the second pillar of the pension system to ensure an appropriate distribution of costs and risks and to keep the Dutch pension system resilient to financial shocks in the long term is still subject to cumbersome negotiations. A new law reducing the fiscally exempted annual accrual rates to 1.875% in 2015 and the proposal for reforming the financial assessment framework were adopted in 2014.

- **Fully addressed**: The Netherlands has continued taking measures to improve older workers’ employability and to increase mobility and participation of older workers. The law proposals for reform of the unemployment benefit system and the employment protection legislation have been adopted and additional measures aimed at older workers’ employability have been taken (‘Actieplan 50+ werkt’). The effective retirement age and older workers’ labour participation in the Netherlands keep increasing.

- **Some progress**: The comprehensive reforms of the long-term care system have all been adopted by the parliament and have entered into force on 1 January 2015. The government took additional measures to ensure smooth transition of the responsibilities for parts of the long-term care system to municipalities and private insurers but the effects of the reform remain to be seen.

### CSR 4

Take further measures to enhance labour market participation particularly among people at the margins of the labour market and to reduce tax disincentives on labour. Implement reforms of employment protection legislation and the unemployment (reduction of waiting lists) and affordability of social housing and the number of tenants above the income threshold for social housing (‘scheefhuurders’) cannot be assessed yet.

The Netherlands has made **some progress** in implementing CSR 4:

- **Substantial progress**: Most of the labour market reforms aimed at increasing labour participation of people at the margin of the labour market were adopted by the parliament during the summer of 2014. The participation
benefit system, and further address labour market rigidities. In consultation with the social partners and in accordance with national practice, allow for more differentiated wage increases by making full use of the existing institutional framework.

act has been implemented as of 1 January 2015. The Quota act, following the agreement between the government and social partners to hire at least 125 000 people with a disability, has been sent to the parliament and is expected to be adopted at the beginning of 2015. The reforms constitute a major shift of responsibilities to the municipalities. The smooth transition will be supported by the government.

- Some progress: Important tax measures to provide incentives to work have been implemented. This includes increasing labour tax credits for lower incomes and simplifying child schemes in a way that makes working more attractive, especially for single parents. In September 2014, a comprehensive reform of the Dutch tax system was announced. This reform, which could include a tax shift from labour to other forms of taxation, which are less detrimental to the Dutch economy, such as taxation of property, environment and consumption, still needs to be elaborated.

- Some progress: Reforms of the unemployment benefit system and employment protection legislation have been adopted and will be gradually implemented in the course of 2015. The way these reforms affect labour market mobility and reduce labour market duality remains to be seen.

- No progress: As regards wage developments, the government has made clear that this is solely a task for the social partners. No national policies will be implemented in this field.

<table>
<thead>
<tr>
<th>Europe 2020 (national targets and progress)</th>
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<tbody>
<tr>
<td>Employment rate target set out in the Netherlands: 80%. The employment rate was 77.0% in 2011, 77.2% in 2012 and 76.5% in 2013. In view of past performance, and based on the recovery the Dutch labour market shows, the Europe 2020 employment rate target of 80% seems ambitious but feasible.</td>
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<tr>
<td>R&amp;D target set out in the Netherlands: 2.5% of GDP. The 2013 R&amp;D intensity for the Netherlands stands at 1.98%, against 1.97% in 2012 (2011: 1.89%). Private R&amp;D investments have increased slightly from 1.06% in 2011 to 1.14% of GDP in 2013 but still remain below the EU average (1.29%). Public R&amp;D intensity is stable at 0.84%. The Netherlands is currently not on track to reach its 2.5% target and would need additional efforts to reach it.</td>
</tr>
<tr>
<td>The Netherlands has an Effort Sharing Decision target to reduce non-ETS Non-ETS greenhouse gas emissions decreased by 15% between 2005 and 2013. According to the latest national</td>
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<td>emissions by:</td>
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<tr>
<td>16% relative to 2005 levels by 2020.</td>
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<tr>
<td><strong>2020 renewable energy target:</strong></td>
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<tr>
<td>14%</td>
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<tr>
<td>Proportion of renewable energy in all modes of transport:</td>
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<tr>
<td>10%</td>
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<tr>
<td><strong>Energy efficiency target:</strong></td>
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<tr>
<td>20%</td>
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<tr>
<td><strong>Early school leaving target set out in the Netherlands:</strong></td>
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<tr>
<td>&lt;8.0%</td>
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<tr>
<td><strong>Tertiary education attainment target set out in the Netherlands:</strong></td>
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<tr>
<td>&gt;40%</td>
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<tr>
<td><strong>Target for reducing the number of people living in households with very low work intensity in number of people:</strong></td>
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<tr>
<td>- 100,000 (aged 0-64).</td>
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### Table AB.1: Macroeconomic indicators

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<td><strong>Core indicators</strong></td>
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<tr>
<td>GDP growth rate</td>
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<td>1.7</td>
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<td>-0.7</td>
<td>0.7</td>
<td>1.4</td>
<td>1.7</td>
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<td>Output gap</td>
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<td>-0.8</td>
<td>-2.6</td>
<td>-3.5</td>
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<td>HICP (annual % change)</td>
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<td>2.8</td>
<td>1.5</td>
<td>2.5</td>
<td>2.8</td>
<td>2.6</td>
<td>0.3</td>
<td>0.4</td>
<td>0.7</td>
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<td>Domestic demand (annual % change)</td>
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<td>1.5</td>
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<td>-2.0</td>
<td>0.3</td>
<td>1.1</td>
<td>1.6</td>
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<td>Unemployment rate (% of labour force)</td>
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<td>4.0</td>
<td>3.9</td>
<td>4.4</td>
<td>5.3</td>
<td>6.7</td>
<td>6.9</td>
<td>6.6</td>
<td>6.4</td>
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<td>Gross fixed capital formation (% of GDP)</td>
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<td>21.0</td>
<td>21.1</td>
<td>20.3</td>
<td>19.1</td>
<td>18.2</td>
<td>18.4</td>
<td>18.9</td>
<td>19.4</td>
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<tr>
<td>Gross national saving (% of GDP)</td>
<td>28.5</td>
<td>27.1</td>
<td>28.0</td>
<td>27.6</td>
<td>28.2</td>
<td>26.8</td>
<td>27.0</td>
<td>26.9</td>
<td>27.5</td>
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<td><strong>General government (% of GDP)</strong></td>
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<td></td>
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<tr>
<td>Net lending (+) or net borrowing (-)</td>
<td>-0.4</td>
<td>-1.5</td>
<td>-2.0</td>
<td>-4.3</td>
<td>-4.0</td>
<td>-2.3</td>
<td>-2.8</td>
<td>-2.2</td>
<td>-1.8</td>
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<td>Gross debt</td>
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<td>49.2</td>
<td>51.6</td>
<td>61.3</td>
<td>66.5</td>
<td>68.6</td>
<td>69.5</td>
<td>70.5</td>
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<td>Net financial assets</td>
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<td>-33.4</td>
<td>-28.2</td>
<td>-36.2</td>
<td>-39.5</td>
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<td>Total revenue</td>
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<td>42.2</td>
<td>43.3</td>
<td>42.7</td>
<td>43.5</td>
<td>44.5</td>
<td>44.7</td>
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<tr>
<td>Total expenditure</td>
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<td>43.7</td>
<td>45.3</td>
<td>47.0</td>
<td>47.5</td>
<td>46.8</td>
<td>47.5</td>
<td>46.9</td>
<td>46.4</td>
</tr>
<tr>
<td>of which: Interest</td>
<td>4.1</td>
<td>2.5</td>
<td>2.0</td>
<td>1.8</td>
<td>1.7</td>
<td>1.5</td>
<td>1.5</td>
<td>1.4</td>
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<tr>
<td><strong>Corporations (% of GDP)</strong></td>
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<tr>
<td>Net lending (+) or net borrowing (-)</td>
<td>3.7</td>
<td>6.2</td>
<td>8.2</td>
<td>9.3</td>
<td>9.4</td>
<td>6.8</td>
<td>7.1</td>
<td>6.4</td>
<td>5.7</td>
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<tr>
<td>Net financial assets</td>
<td>-137.4</td>
<td>-92.9</td>
<td>-62.9</td>
<td>-39.4</td>
<td>-35.1</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
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<tr>
<td>Total revenue</td>
<td>44.2</td>
<td>42.2</td>
<td>43.3</td>
<td>42.7</td>
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<td>44.5</td>
<td>44.7</td>
<td>44.7</td>
<td>44.7</td>
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<tr>
<td>Gross capital formation</td>
<td>12.4</td>
<td>10.2</td>
<td>10.4</td>
<td>11.4</td>
<td>10.9</td>
<td>10.3</td>
<td>10.4</td>
<td>10.8</td>
<td>11.3</td>
</tr>
<tr>
<td>Gross operating surplus</td>
<td>24.6</td>
<td>25.7</td>
<td>27.8</td>
<td>28.7</td>
<td>28.4</td>
<td>27.5</td>
<td>27.1</td>
<td>27.4</td>
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<td><strong>Households and NPISH (% of GDP)</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Net lending (+) or net borrowing (-)</td>
<td>1.8</td>
<td>1.1</td>
<td>-0.1</td>
<td>1.8</td>
<td>2.4</td>
<td>3.4</td>
<td>3.5</td>
<td>3.5</td>
<td>4.2</td>
</tr>
<tr>
<td>Net financial assets</td>
<td>199.4</td>
<td>158.0</td>
<td>147.3</td>
<td>159.1</td>
<td>179.6</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>Gross wages and salaries</td>
<td>40.7</td>
<td>39.4</td>
<td>37.9</td>
<td>38.5</td>
<td>38.9</td>
<td>38.8</td>
<td>38.3</td>
<td>38.5</td>
<td>38.5</td>
</tr>
<tr>
<td>Net property income</td>
<td>7.2</td>
<td>6.9</td>
<td>5.8</td>
<td>5.6</td>
<td>6.1</td>
<td>6.7</td>
<td>7.0</td>
<td>7.8</td>
<td>8.2</td>
</tr>
<tr>
<td>Current transfers received</td>
<td>22.8</td>
<td>22.2</td>
<td>20.1</td>
<td>21.8</td>
<td>22.1</td>
<td>22.5</td>
<td>22.6</td>
<td>22.2</td>
<td>22.7</td>
</tr>
<tr>
<td>Gross saving</td>
<td>9.2</td>
<td>8.2</td>
<td>6.9</td>
<td>6.9</td>
<td>7.1</td>
<td>7.7</td>
<td>7.9</td>
<td>8.0</td>
<td>8.8</td>
</tr>
<tr>
<td><strong>Rest of the world (% of GDP)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net lending (+) or net borrowing (-)</td>
<td>5.2</td>
<td>5.8</td>
<td>6.0</td>
<td>6.8</td>
<td>7.8</td>
<td>7.9</td>
<td>7.9</td>
<td>7.8</td>
<td>8.2</td>
</tr>
<tr>
<td>Net financial assets</td>
<td>9.7</td>
<td>-12.6</td>
<td>-49.1</td>
<td>-70.0</td>
<td>-82.6</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>Net exports of goods and services</td>
<td>6.0</td>
<td>7.0</td>
<td>8.2</td>
<td>8.5</td>
<td>9.1</td>
<td>10.3</td>
<td>10.4</td>
<td>10.3</td>
<td>10.6</td>
</tr>
<tr>
<td>Net primary income from the rest of the world</td>
<td>1.3</td>
<td>0.5</td>
<td>0.0</td>
<td>0.1</td>
<td>1.2</td>
<td>0.2</td>
<td>0.2</td>
<td>0.1</td>
<td>0.1</td>
</tr>
<tr>
<td>Net capital transactions</td>
<td>-0.3</td>
<td>0.0</td>
<td>-0.5</td>
<td>-0.3</td>
<td>-0.9</td>
<td>-0.5</td>
<td>-0.7</td>
<td>-0.2</td>
<td>0.0</td>
</tr>
<tr>
<td>Tradable sector</td>
<td>42.3</td>
<td>40.8</td>
<td>39.4</td>
<td>39.0</td>
<td>39.3</td>
<td>39.2</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>Non-tradable sector</td>
<td>47.6</td>
<td>48.4</td>
<td>50.0</td>
<td>51.1</td>
<td>51.1</td>
<td>50.8</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>of which: Building and construction sector</td>
<td>4.9</td>
<td>4.9</td>
<td>5.0</td>
<td>4.7</td>
<td>4.3</td>
<td>4.1</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
</tbody>
</table>

**Notes:**

1. The output gap constitutes the gap between the actual and potential gross domestic product at 2005 market prices.
2. The indicator of domestic demand includes stocks.
3. Unemployed persons are all those who were not employed, had actively sought work and were ready to begin working immediately or within two weeks. The labour force is the total number of people employed and unemployed. The unemployment rate covers the age group 15-74.

**Source:** European Commission
**Table AB.2: Financial Market indicators**

<table>
<thead>
<tr>
<th></th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total assets of the banking sector (% of GDP)(^1)</td>
<td>386.8</td>
<td>385.3</td>
<td>405.1</td>
<td>415.0</td>
<td>373.3</td>
<td>392.0</td>
</tr>
<tr>
<td>Share of assets of the five largest banks (% of total assets)</td>
<td>85.1</td>
<td>84.2</td>
<td>83.6</td>
<td>82.1</td>
<td>83.8</td>
<td>n.a.</td>
</tr>
<tr>
<td>Foreign ownership of banking system (% of total assets)</td>
<td>5.3</td>
<td>15.4</td>
<td>13.1</td>
<td>11.0</td>
<td>8.1</td>
<td>n.a.</td>
</tr>
<tr>
<td>Financial soundness indicators:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- non-performing loans (% of total loans)(^2)</td>
<td>3.2</td>
<td>2.8</td>
<td>2.7</td>
<td>3.1</td>
<td>3.2</td>
<td>3.0</td>
</tr>
<tr>
<td>- capital adequacy ratio (%(^\text{a}))</td>
<td>14.9</td>
<td>13.9</td>
<td>13.5</td>
<td>14.2</td>
<td>14.9</td>
<td>17.3</td>
</tr>
<tr>
<td>- return on equity (%(^\text{a}))</td>
<td>-0.5</td>
<td>8.9</td>
<td>9.6</td>
<td>7.4</td>
<td>6.2</td>
<td>7.8</td>
</tr>
<tr>
<td>Bank loans to the private sector (year-on-year % change)(^1)</td>
<td>1.8</td>
<td>4.0</td>
<td>4.1</td>
<td>4.0</td>
<td>-1.1</td>
<td>-0.9</td>
</tr>
<tr>
<td>Lending for house purchase (year-on-year % change)(^1)</td>
<td>0.8</td>
<td>5.5</td>
<td>3.3</td>
<td>4.3</td>
<td>-0.1</td>
<td>0.9</td>
</tr>
<tr>
<td>Loan to deposit ratio (^\text{a})</td>
<td>124.6</td>
<td>120.3</td>
<td>119.4</td>
<td>119.0</td>
<td>117.4</td>
<td>115.2</td>
</tr>
<tr>
<td>Central Bank liquidity as % of liabilities (^\text{a})</td>
<td>1.8</td>
<td>0.4</td>
<td>0.4</td>
<td>1.2</td>
<td>0.5</td>
<td>0.3</td>
</tr>
<tr>
<td>Private debt (% of GDP)</td>
<td>231.3</td>
<td>229.4</td>
<td>228.0</td>
<td>230.3</td>
<td>229.8</td>
<td>n.a.</td>
</tr>
<tr>
<td>Gross external debt (% of GDP)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- public (^\text{a})</td>
<td>43.0</td>
<td>40.3</td>
<td>39.0</td>
<td>40.9</td>
<td>40.8</td>
<td>40.1</td>
</tr>
<tr>
<td>- private (^\text{a})</td>
<td>82.8</td>
<td>84.2</td>
<td>89.2</td>
<td>91.4</td>
<td>89.6</td>
<td>327.1</td>
</tr>
<tr>
<td>Long-term interest rate spread versus Bund (basis points)*</td>
<td>46.4</td>
<td>24.8</td>
<td>38.1</td>
<td>43.8</td>
<td>39.2</td>
<td>29.0</td>
</tr>
<tr>
<td>Credit default swap spreads for sovereign securities (5-year)*</td>
<td>55.7</td>
<td>44.6</td>
<td>66.0</td>
<td>86.4</td>
<td>49.0</td>
<td>28.2</td>
</tr>
</tbody>
</table>

Notes:
2. Latest data Q2 2014.
3. After extraordinary items and taxes. Basel II.
4. Latest data September 2014.
5. Latest data June 2014. Monetary authorities, monetary and financial institutions are not included.
6. Measured in basis points.

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

**Table AB.3: Taxation indicators**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total tax revenues (incl. actual compulsory social contributions, % of GDP)</td>
<td>37.7</td>
<td>39.0</td>
<td>39.2</td>
<td>38.9</td>
<td>38.6</td>
<td>39.0</td>
</tr>
<tr>
<td>Breakdown by economic function (% of GDP)(^1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consumption</td>
<td>11.4</td>
<td>11.7</td>
<td>11.4</td>
<td>11.4</td>
<td>11.1</td>
<td>11.0</td>
</tr>
<tr>
<td>of which:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- VAT</td>
<td>7.2</td>
<td>7.4</td>
<td>7.3</td>
<td>7.3</td>
<td>6.9</td>
<td>7.0</td>
</tr>
<tr>
<td>- excise duties on tobacco and alcohol</td>
<td>0.5</td>
<td>0.5</td>
<td>0.5</td>
<td>0.5</td>
<td>0.3</td>
<td>0.5</td>
</tr>
<tr>
<td>- energy</td>
<td>1.8</td>
<td>2.0</td>
<td>1.9</td>
<td>2.0</td>
<td>2.0</td>
<td>1.9</td>
</tr>
<tr>
<td>- other (residual)</td>
<td>1.9</td>
<td>1.8</td>
<td>1.6</td>
<td>1.7</td>
<td>1.7</td>
<td>1.6</td>
</tr>
<tr>
<td>Labour employed</td>
<td>16.2</td>
<td>17.2</td>
<td>18.3</td>
<td>19.0</td>
<td>19.2</td>
<td>19.9</td>
</tr>
<tr>
<td>Labour non-employed</td>
<td>2.6</td>
<td>2.8</td>
<td>2.4</td>
<td>2.4</td>
<td>2.5</td>
<td>2.6</td>
</tr>
<tr>
<td>Capital and business income</td>
<td>5.0</td>
<td>4.7</td>
<td>4.6</td>
<td>3.7</td>
<td>3.5</td>
<td>3.4</td>
</tr>
<tr>
<td>Stocks of capital/wealth</td>
<td>2.5</td>
<td>2.6</td>
<td>2.5</td>
<td>2.4</td>
<td>2.2</td>
<td>2.2</td>
</tr>
<tr>
<td>(^p.m.) Environmental taxes(^2)</td>
<td>3.5</td>
<td>3.9</td>
<td>3.8</td>
<td>3.8</td>
<td>3.7</td>
<td>3.6</td>
</tr>
<tr>
<td>VAT efficiency(^3)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Actual VAT revenues as % of theoretical revenues at standard rate</td>
<td>56.9</td>
<td>59.9</td>
<td>59.9</td>
<td>57.2</td>
<td>55.1</td>
<td>54.6</td>
</tr>
</tbody>
</table>

Notes:
1. Tax revenues are broken down by economic function, i.e. according to whether taxes are raised on consumption, labour or capital. See European Commission (2014), Taxation trends in the European Union, for a more detailed explanation.
2. This category comprises taxes on energy, transport and pollution and resources included in taxes on consumption and capital.
3. VAT efficiency is measured via the VAT revenue ratio. It is defined as the ratio between the actual VAT revenue collected and the revenue that would be raised if VAT was applied at the standard rate to all final (domestic) consumption expenditures, which is an imperfect measure of the theoretical pure VAT base. A low ratio can indicate a reduction of the tax base due to large exemptions on the application of reduced rates to a wide range of goods and services (‘policy gap’) or a failure to collect all tax due to e.g. fraud (‘collection gap’). It should be noted that the relative scale of cross-border shopping (including trade in financial services) compared to domestic consumption also influences the value of the ratio, notably for smaller economies. For a more detailed discussion, see European Commission (2012), Tax Reforms in EU Member States, and OECD (2014), Consumption tax trends.

Source: European Commission
### Table AB.4: Labour market and social indicators

<table>
<thead>
<tr>
<th></th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employment rate (% of population aged 20-64)</td>
<td>78.9</td>
<td>78.8</td>
<td>76.8</td>
<td>77.0</td>
<td>77.2</td>
<td>76.5</td>
<td>75.9</td>
</tr>
<tr>
<td>Employment growth (% change from previous year)</td>
<td>1.6</td>
<td>-0.9</td>
<td>-0.7</td>
<td>0.9</td>
<td>-0.5</td>
<td>-1.3</td>
<td>-0.5</td>
</tr>
<tr>
<td>Employment rate of women (% of female population aged 20-64)</td>
<td>72.2</td>
<td>72.7</td>
<td>70.8</td>
<td>71.4</td>
<td>71.9</td>
<td>71.6</td>
<td>70.5</td>
</tr>
<tr>
<td>Employment rate of men (% of male population aged 20-64)</td>
<td>85.5</td>
<td>84.9</td>
<td>82.8</td>
<td>82.6</td>
<td>82.5</td>
<td>81.3</td>
<td>81.2</td>
</tr>
<tr>
<td>Employment rate of older workers (% of population aged 55-64)</td>
<td>53.0</td>
<td>55.1</td>
<td>53.7</td>
<td>56.1</td>
<td>58.6</td>
<td>60.1</td>
<td>60.5</td>
</tr>
<tr>
<td>Part-time employment (% of total employment, age 15 years and over)</td>
<td>47.3</td>
<td>48.3</td>
<td>48.9</td>
<td>49.1</td>
<td>49.8</td>
<td>50.8</td>
<td>50.5</td>
</tr>
<tr>
<td>Part-time employment of women (% of women employment, age 15 years and over)</td>
<td>75.3</td>
<td>75.8</td>
<td>76.5</td>
<td>76.7</td>
<td>77.0</td>
<td>77.2</td>
<td>76.9</td>
</tr>
<tr>
<td>Part-time employment of men (% of men employment, age 15 years and over)</td>
<td>23.9</td>
<td>24.9</td>
<td>25.4</td>
<td>25.4</td>
<td>26.4</td>
<td>27.9</td>
<td>28.1</td>
</tr>
<tr>
<td>Fixed term employment (% of employees with a fixed term contract, age 15 years and over)</td>
<td>18.2</td>
<td>18.2</td>
<td>18.5</td>
<td>18.4</td>
<td>19.5</td>
<td>20.6</td>
<td>21.6</td>
</tr>
<tr>
<td>Transitions from temporary to permanent employment</td>
<td>27.1</td>
<td>26.2</td>
<td>20.0</td>
<td>20.8</td>
<td>16.5</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>Unemployment rate (%) of labour force, age group 15-74</td>
<td>3.1</td>
<td>3.7</td>
<td>4.5</td>
<td>4.4</td>
<td>5.3</td>
<td>6.7</td>
<td>6.8</td>
</tr>
<tr>
<td>Long-term unemployment rate (%) of labour force</td>
<td>1.1</td>
<td>0.9</td>
<td>1.2</td>
<td>1.5</td>
<td>1.8</td>
<td>2.4</td>
<td>2.7</td>
</tr>
<tr>
<td>Youth unemployment rate (% of youth labour force aged 15-24)</td>
<td>6.3</td>
<td>7.7</td>
<td>8.7</td>
<td>7.6</td>
<td>9.5</td>
<td>11.0</td>
<td>10.5</td>
</tr>
<tr>
<td>Youth NEET rate (% of population aged 15-24)</td>
<td>3.4</td>
<td>4.1</td>
<td>4.3</td>
<td>3.8</td>
<td>4.3</td>
<td>5.1</td>
<td>n.a.</td>
</tr>
<tr>
<td>Early leavers from education and training (% of pop. aged 18-24 with at most lower sec. educ. and not in further education or training)</td>
<td>11.4</td>
<td>10.9</td>
<td>10.0</td>
<td>9.1</td>
<td>8.8</td>
<td>9.2</td>
<td>n.a.</td>
</tr>
<tr>
<td>Tertiary educational attainment (% of population aged 30-34 having successfully completed tertiary education)</td>
<td>40.2</td>
<td>40.5</td>
<td>41.4</td>
<td>41.1</td>
<td>42.2</td>
<td>43.1</td>
<td>n.a.</td>
</tr>
<tr>
<td>Formal childcare (from 1 to 29 hours; % over the population aged less than 3 years)</td>
<td>41.0</td>
<td>43.0</td>
<td>44.0</td>
<td>46.0</td>
<td>39.0</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>Formal childcare (30 hours or over; % over the population aged less than 3 years)</td>
<td>6.0</td>
<td>6.0</td>
<td>6.0</td>
<td>6.0</td>
<td>7.0</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>Labour productivity per person employed (annual % change)</td>
<td>0.2</td>
<td>-2.2</td>
<td>1.7</td>
<td>1.0</td>
<td>-1.0</td>
<td>0.7</td>
<td>1.2</td>
</tr>
<tr>
<td>Hours worked per person employed (annual % change)</td>
<td>0.0</td>
<td>-0.6</td>
<td>0.0</td>
<td>0.1</td>
<td>0.2</td>
<td>-0.3</td>
<td>0.0</td>
</tr>
<tr>
<td>Labour productivity per hour worked (annual % change; constant prices)</td>
<td>0.4</td>
<td>-1.9</td>
<td>1.8</td>
<td>0.7</td>
<td>-1.3</td>
<td>0.8</td>
<td>1.3</td>
</tr>
<tr>
<td>Compensation per employee (annual % change; constant prices)</td>
<td>1.3</td>
<td>2.3</td>
<td>-0.6</td>
<td>2.2</td>
<td>1.3</td>
<td>1.2</td>
<td>1.1</td>
</tr>
<tr>
<td>Nominal unit labour cost growth (annual % change)</td>
<td>3.0</td>
<td>5.3</td>
<td>-0.7</td>
<td>1.1</td>
<td>2.8</td>
<td>2.0</td>
<td>n.a.</td>
</tr>
<tr>
<td>Real unit labour cost growth (annual % change)</td>
<td>0.9</td>
<td>5.2</td>
<td>-1.5</td>
<td>0.0</td>
<td>1.5</td>
<td>0.6</td>
<td>n.a.</td>
</tr>
</tbody>
</table>

**Notes:**

1. Unemployed persons are all those who were not employed, but had actively sought work and were ready to begin working immediately or within two weeks. The labour force is the total number of people employed and unemployed. Data on the unemployment rate of 2014 includes the last release by Eurostat in early February 2015.
2. Long-term unemployed are persons who have been unemployed for at least 12 months.

**Source:** European Commission (EU Labour Force Survey and European National Accounts)
### Table AB.5: Expenditure on social protection benefits (% of GDP)

<table>
<thead>
<tr>
<th></th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sickness/healthcare</td>
<td>8.6</td>
<td>9.4</td>
<td>10.4</td>
<td>10.7</td>
<td>10.9</td>
<td>11.3</td>
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<tr>
<td>Invalidity</td>
<td>2.4</td>
<td>2.4</td>
<td>2.5</td>
<td>2.5</td>
<td>2.4</td>
<td>2.3</td>
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<tr>
<td>Old age and survivors</td>
<td>10.9</td>
<td>10.9</td>
<td>11.6</td>
<td>11.9</td>
<td>12.0</td>
<td>12.5</td>
</tr>
<tr>
<td>Family/children</td>
<td>1.6</td>
<td>1.2</td>
<td>1.3</td>
<td>1.2</td>
<td>1.2</td>
<td>1.1</td>
</tr>
<tr>
<td>Unemployment</td>
<td>1.1</td>
<td>1.0</td>
<td>1.4</td>
<td>1.6</td>
<td>1.5</td>
<td>1.8</td>
</tr>
<tr>
<td>Housing and social exclusion n.e.c.</td>
<td>0.4</td>
<td>0.4</td>
<td>0.4</td>
<td>0.4</td>
<td>0.4</td>
<td>0.4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>26.7</td>
<td>26.9</td>
<td>29.7</td>
<td>30.3</td>
<td>30.5</td>
<td>31.4</td>
</tr>
<tr>
<td><strong>of which: means-tested benefits</strong></td>
<td>3.7</td>
<td>3.9</td>
<td>4.5</td>
<td>4.6</td>
<td>4.7</td>
<td>4.8</td>
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</table>

### Social inclusion indicators

<table>
<thead>
<tr>
<th></th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>People at risk of poverty or social exclusion (AROPE) (% of total population)</td>
<td>14.9</td>
<td>15.1</td>
<td>15.1</td>
<td>15.7</td>
<td>15.0</td>
<td>15.9</td>
</tr>
<tr>
<td>Children at risk of poverty or social exclusion (% of people aged 0-17)</td>
<td>15.5</td>
<td>17.5</td>
<td>16.9</td>
<td>18.0</td>
<td>16.9</td>
<td>17.0</td>
</tr>
<tr>
<td>Elderly at risk of poverty or social exclusion (% of people aged 65+)</td>
<td>9.7</td>
<td>8.1</td>
<td>6.2</td>
<td>6.9</td>
<td>6.2</td>
<td>6.1</td>
</tr>
<tr>
<td>At-risk-of-poverty rate (% of total population)</td>
<td>10.5</td>
<td>11.1</td>
<td>10.3</td>
<td>11.0</td>
<td>10.1</td>
<td>10.4</td>
</tr>
<tr>
<td>Severe material deprivation rate (% of total population)</td>
<td>1.5</td>
<td>1.4</td>
<td>2.2</td>
<td>2.5</td>
<td>2.3</td>
<td>2.5</td>
</tr>
<tr>
<td>Proportion of people living in low work intensity households (% of people aged 0-59)</td>
<td>8.2</td>
<td>8.5</td>
<td>8.4</td>
<td>8.9</td>
<td>8.9</td>
<td>9.3</td>
</tr>
<tr>
<td>In-work at-risk-of-poverty rate (% of persons employed)</td>
<td>4.8</td>
<td>5.0</td>
<td>5.1</td>
<td>5.4</td>
<td>4.6</td>
<td>4.5</td>
</tr>
<tr>
<td>Impact of social transfers (excluding pensions) on reducing poverty</td>
<td>47.2</td>
<td>45.9</td>
<td>51.2</td>
<td>47.4</td>
<td>51.0</td>
<td>50.0</td>
</tr>
<tr>
<td>Poverty thresholds, expressed in national currency at constant prices</td>
<td>11530.4</td>
<td>11648.2</td>
<td>11612.9</td>
<td>11516.4</td>
<td>11376.7</td>
<td>11214.3</td>
</tr>
<tr>
<td>Gross disposable income (households)</td>
<td>283487.0</td>
<td>280226.0</td>
<td>284583.0</td>
<td>289179.0</td>
<td>288683.0</td>
<td>n.a.</td>
</tr>
<tr>
<td>Relative median poverty risk gap (60% of median equivalised income, age: total)</td>
<td>14.9</td>
<td>16.5</td>
<td>16.2</td>
<td>15.5</td>
<td>17.3</td>
<td>16.5</td>
</tr>
<tr>
<td>Inequality of income distribution ($80/$20 income quintile share ratio)</td>
<td>4.0</td>
<td>4.0</td>
<td>3.7</td>
<td>3.8</td>
<td>3.6</td>
<td>3.6</td>
</tr>
</tbody>
</table>

**Notes:**

1. People at risk of poverty or social exclusion (AROPE): individuals who are at risk of poverty (AROP) and/or suffering from severe material deprivation (SMD) and/or living in households with zero or very low work intensity (LWI).
2. At-risk-of-poverty rate (AROP): 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 colour TV, or vii) 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 (HICP) = 100 in 2006 (2007 survey refers to 2006 incomes).
6. 2014 data refer to the average of the first three quarters.

**Source:** For expenditure for social protection benefits ESSPROS; for social inclusion EU-SILC.
<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Labour productivity(^1) in total economy (annual growth in %)</td>
<td>1.7</td>
<td>-2.1</td>
<td>2.1</td>
<td>1.1</td>
<td>-0.8</td>
<td>0.9</td>
<td>n.a.</td>
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<tr>
<td>Labour productivity(^1) in manufacturing (annual growth in %)</td>
<td>4.0</td>
<td>-6.2</td>
<td>8.1</td>
<td>4.5</td>
<td>0.4</td>
<td>1.2</td>
<td>n.a.</td>
</tr>
<tr>
<td>Labour productivity(^1) in electricity, gas (annual growth in %)</td>
<td>3.3</td>
<td>3.6</td>
<td>-2.6</td>
<td>-0.4</td>
<td>-3.4</td>
<td>-4.1</td>
<td>n.a.</td>
</tr>
<tr>
<td>Labour productivity(^1) in the construction sector (annual growth in %)</td>
<td>2.5</td>
<td>-3.4</td>
<td>-5.4</td>
<td>1.1</td>
<td>-5.5</td>
<td>1.7</td>
<td>n.a.</td>
</tr>
<tr>
<td>Labour productivity(^1) in the wholesale and retail sector (annual growth in %)</td>
<td>3.6</td>
<td>-5.0</td>
<td>5.2</td>
<td>3.4</td>
<td>-2.3</td>
<td>-0.7</td>
<td>n.a.</td>
</tr>
<tr>
<td>Labour productivity(^1) in the information and communication sector (annual growth in %)</td>
<td>1.8</td>
<td>-1.2</td>
<td>3.0</td>
<td>0.0</td>
<td>-2.5</td>
<td>-0.3</td>
<td>n.a.</td>
</tr>
<tr>
<td>Patent intensity in manufacturing(^2) (EPO patent applications divided by gross value added of the sector)</td>
<td>0.1</td>
<td>0.1</td>
<td>0.0</td>
<td>0.0</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
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</tbody>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Enforcing contracts(^3) (days)</td>
<td>514</td>
<td>514</td>
<td>514</td>
<td>514</td>
<td>514</td>
<td>514</td>
<td>514</td>
</tr>
<tr>
<td>Time to start a business(^3) (days)</td>
<td>8.4</td>
<td>8</td>
<td>8</td>
<td>5</td>
<td>4</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>R&amp;D expenditure (% of GDP)</td>
<td>1.8</td>
<td>1.7</td>
<td>1.7</td>
<td>1.9</td>
<td>2.0</td>
<td>2.0</td>
<td>n.a.</td>
</tr>
<tr>
<td>Total public expenditure on education (% of GDP)</td>
<td>5.5</td>
<td>6.0</td>
<td>6.0</td>
<td>5.9</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
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</table>

<table>
<thead>
<tr>
<th>Product market regulation(^4), overall</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product market regulation(^4), retail</td>
<td>0.96</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>0.92</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>Product market regulation(^4), professional services</td>
<td>0.91</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>0.91</td>
<td>n.a.</td>
<td>n.a.</td>
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<tr>
<td>Product market regulation(^4), network industries</td>
<td>1.28</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>1.23</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
</tbody>
</table>

Notes:
1. Labour productivity is defined as gross value added (in constant prices) divided by the number of persons employed.
2. Patent data refer to applications to the European Patent Office (EPO). They are counted according to the year in which they were filed at the EPO. They are broken down according to the inventor’s place of residence, using fractional counting if multiple inventors or IPC classes are provided to avoid double counting.
3. The methodologies, including the assumptions, for this indicator are presented in detail here: http://www.doingbusiness.org/methodology.
4. Index: 0 = not regulated; 6 = most regulated. The methodologies of the OECD product market regulation indicators are presented in detail here: http://www.oecd.org/competition/reform/indicatorsofproductmarketregulation/homepage.htm
5. Aggregate OECD indicators of regulation in energy, transport and communications (ETCR).

Source: European Commission; World Bank — Doing Business (for enforcing contracts and time to start a business); OECD (for the product market regulation indicators)
### Table AB.7: Green Growth

<table>
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<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Energy intensity €/kgoe</td>
<td>0.16</td>
<td>0.15</td>
<td>0.15</td>
<td>0.16</td>
<td>0.14</td>
<td>0.15</td>
</tr>
<tr>
<td>Carbon intensity €/kg</td>
<td>0.41</td>
<td>0.36</td>
<td>0.37</td>
<td>0.38</td>
<td>0.35</td>
<td>0.35</td>
</tr>
<tr>
<td>Resource intensity €/kg</td>
<td>0.35</td>
<td>0.36</td>
<td>0.35</td>
<td>0.34</td>
<td>0.34</td>
<td>n.a.</td>
</tr>
<tr>
<td>Waste intensity €/kg</td>
<td>n.a.</td>
<td>0.18</td>
<td>n.a.</td>
<td>0.22</td>
<td>n.a.</td>
<td>0.23</td>
</tr>
<tr>
<td>Energy balance of trade % GDP</td>
<td>-2.5</td>
<td>-2.1</td>
<td>-1.8</td>
<td>-2.9</td>
<td>-3.8</td>
<td>-5.3</td>
</tr>
<tr>
<td>Energy weight in HICP %</td>
<td>9.1</td>
<td>10.7</td>
<td>10.2</td>
<td>10.3</td>
<td>11.3</td>
<td>11.3</td>
</tr>
<tr>
<td>Difference between energy price change and inflation %</td>
<td>6.0</td>
<td>0.8</td>
<td>-0.1</td>
<td>-8.8</td>
<td>3.4</td>
<td>3.6</td>
</tr>
<tr>
<td>Ratio of environmental taxes to labour taxes</td>
<td>19.3%</td>
<td>18.2%</td>
<td>18.0%</td>
<td>17.9%</td>
<td>17.2%</td>
<td>15.9%</td>
</tr>
<tr>
<td>Ratio of environmental taxes to total taxes</td>
<td>9.8%</td>
<td>9.6%</td>
<td>9.9%</td>
<td>9.8%</td>
<td>9.7%</td>
<td>9.1%</td>
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<thead>
<tr>
<th>Sectoral</th>
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</thead>
<tbody>
<tr>
<td>Industry energy intensity €/kgoe</td>
<td>0.17</td>
<td>0.17</td>
<td>0.15</td>
<td>0.16</td>
<td>0.16</td>
<td>0.15</td>
</tr>
<tr>
<td>Energy-intensive industries in the economy % GDP</td>
<td>10.9</td>
<td>10.5</td>
<td>10.2</td>
<td>10.8</td>
<td>10.5</td>
<td>10.6</td>
</tr>
<tr>
<td>Electricity prices for medium-sized industrial users €/kWh</td>
<td>n.a.</td>
<td>0.10</td>
<td>0.11</td>
<td>0.10</td>
<td>0.10</td>
<td>0.10</td>
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<tr>
<td>Gas prices for medium-sized industrial users €/kWh</td>
<td>n.a.</td>
<td>0.04</td>
<td>0.04</td>
<td>0.03</td>
<td>0.03</td>
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<tr>
<td>Public &amp; D for energy % GDP</td>
<td>0.02</td>
<td>0.02</td>
<td>0.02</td>
<td>0.01</td>
<td>0.01</td>
<td>0.02</td>
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<tr>
<td>Public &amp; D for the environment % GDP</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.01</td>
<td>0.01</td>
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<tr>
<td>Recycling rate of municipal waste ratio</td>
<td>46.8%</td>
<td>57.3%</td>
<td>57.8%</td>
<td>79.1%</td>
<td>90.8%</td>
<td>97.3%</td>
</tr>
<tr>
<td>Share of GHG emissions covered by ETS*</td>
<td>n.a.</td>
<td>40.8</td>
<td>40.8</td>
<td>40.3</td>
<td>40.8</td>
<td>39.7</td>
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<tr>
<td>Transport energy intensity €/kgoe</td>
<td>0.67</td>
<td>0.63</td>
<td>0.64</td>
<td>0.63</td>
<td>0.63</td>
<td>0.61</td>
</tr>
<tr>
<td>Transport carbon intensity kg/kgoe</td>
<td>1.53</td>
<td>1.42</td>
<td>1.47</td>
<td>1.47</td>
<td>1.46</td>
<td>1.41</td>
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<table>
<thead>
<tr>
<th>Security of energy supply</th>
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</thead>
<tbody>
<tr>
<td>Energy import dependency %</td>
<td>35.9</td>
<td>34.3</td>
<td>35.8</td>
<td>30.4</td>
<td>29.7</td>
<td>30.7</td>
</tr>
<tr>
<td>Diversification of oil import sources</td>
<td>HHI</td>
<td>0.08</td>
<td>0.08</td>
<td>0.08</td>
<td>0.08</td>
<td>0.10</td>
</tr>
<tr>
<td>Diversification of energy mix</td>
<td>HHI</td>
<td>0.36</td>
<td>0.36</td>
<td>0.38</td>
<td>0.36</td>
<td>0.35</td>
</tr>
<tr>
<td>Renewable energy share of energy mix %</td>
<td>2.5</td>
<td>3.5</td>
<td>3.9</td>
<td>3.5</td>
<td>4.1</td>
<td>4.3</td>
</tr>
</tbody>
</table>

2013 is not included in the table due to lack of data.

All macro intensity indicators are expressed as a ratio of a physical quantity to GDP (in 2000 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
- Energy weight 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)
- Environmental taxes over labour or total taxes: from DG TAXUD'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 EUR)
- Energy import dependency: net energy imports divided by gross inland energy consumption incl. consumption of international bunker fuels
- Recycling rate of municipal waste: ratio of recycled municipal waste to total municipal waste
- Transport energy intensity: final energy consumption of transport activity (kgoe) divided by transport industry gross value added (in 2005 EUR)

**Source:** Eurostat unless indicated otherwise; ECFIN elaborations indicated below
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