

OECD Economic Surveys NETHERLANDS

MARCH 2016





OECD Economic Surveys: Netherlands 2016



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Please cite this publication as:

OECD (2016), OECD Economic Surveys: Netherlands 2016, OECD Publishing, Paris. http://dx.doi.org/10.1787/eco_surveys-nld-2016-en

ISBN 978-92-64-25194-6 (print) ISBN 978-92-64-25196-0 (PDF) ISBN 978-92-64-25195-3 (epub)

Series: OECD Economic Surveys ISSN 0376-6438 (print) ISSN 1609-7513 (online)

OECD Economic Surveys: Netherlands ISSN 1995-3305 (print) ISSN 1999-0367 (online)

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This Survey is published on the responsibility of the Economic and Development Review Committee of the OECD, which is charged with the examination of the economic situation of member countries.

The economic situation and policies of the Netherlands were reviewed by the Committee on 21 January 2016. The draft report was then revised in the light of the discussions and given final approval as the agreed report of the whole Committee on 9 February 2016.

The Secretariat's draft report was prepared for the Committee by Rafal Kierzenkowski, Sanne Zwart and Gabor Fulop under the supervision of Pierre Beynet. Research assistance was provided by Gabor Fulop and Secretarial assistance was provided by Sylvie Ricordeau. The Survey also benefitted from external consultancy work (Aleksandra Paciorek).

The previous Survey of the Netherlands was issued in April 2014.



BASIC STATISTICS OF THE NETHERLANDS, 2014

(Numbers in parentheses refer to the OECD average)¹

L	AND, PEC	OPLE AND) ELECTORAL CYCLE		
Population (million)	16.9		Population density per km ²	407.7	(34.9)
Under 15 (%)	17.0	(18.1)	Life expectancy (years, 2013)	81.4	(80.5)
Over 65 (%)	17.5	(16.0)	Men	79.5	(77.8)
Foreign-born (%, 2013)	11.6		Women	83.2	(83.1)
Latest 5-year average growth (%)	0.5	(0.6)	Latest general election	Septem	oer 2012
		ECON	NOMY		
Gross domestic product (GDP)			Value added shares (%)		
In current prices (billion USD)	880.8		Primary sector	1.8	(2.5)
In current prices (billion EUR)	662.9		Industry including construction	21.2	(26.8)
Latest 5-year average real growth (%)	0.5	(1.9)	Services	77.0	(70.7)
Per capita (000 USD PPP)	48.1	(39.3)			
	GE	NERAL G Per cen	OVERNMENT t of GDP		
Expenditure	46.2	(42.7)	Gross financial debt	80.9	(118 7)
Revenue	43.9	(38.5)	Net financial debt	43.7	(76.1)
	E)	TERNAL	ACCOUNTS		
Exchange rate (FLIB per LISD)	0 753		Main exports (% of total merchandise exports)		
PPP exchange rate (USA = 1)	0.814		Machinery and transport equipment	26.8	
In per cent of GDP	0.011		Chemicals and related products in els	17.2	
Exports of goods and services	82.9	(53.8)	Mineral fuels, lubricants and related materials	16.9	
Imports of goods and services	71.5	(49.8)	Main imports (% of total merchandise imports)		
Current account balance	10.6	(0.0)	Machinery and transport equipment	28.6	
Net international investment position	54.9	()	Mineral fuels, lubricants and related materials	21.1	
			Chemicals and related products, n.e.s.	12.3	
LAB	OUR MAI	RKET, SK	ILLS AND INNOVATION		
Employment rate for 15-64 year-olds (%)	73.1	(65.7)	Unemployment rate, Labour Force Survey (age 15 and over) (%)	7.4	(7.3)
Men	78.2	(73.6)	Youth (age 15-24, %)	12.8	(15.1)
Women	68.1	(57.9)	Long-term unemployed (1 year and over, %)	2.7	(2.5)
Participation rate for 15-64 year-olds (%)	79.0	(71.2)	Tertiary educational attainment 25-64 year-olds (%, 2013)	33.9	(33.3)
Average hours worked per year	1 425	(1 770)	Gross domestic expenditure on R&D (% of GDP, 2013)	2.0	(2.4)
		ENVIRO	DNMENT		
Total primary energy supply per capita (toe)	4.3	(4.1)	CO ₂ emissions from fuel combustion per capita (tonnes, 2013)	9.3	(9.6)
Renewables (%)	4.6	(9.1)	Water abstractions per capita (1 000 m ³ ,2012)	0.6	
Fine particulate matter concentration (PM2.5, μ g/m ³ , 2013)	16.8	(13.8)	Municipal waste per capita (tonnes, 2013)	0.5	(0.5)
		SOC	IETY		
Income inequality (Gini coefficient, 2013)	0.278	(0.308)	Education outcomes (PISA score, 2012)		
Relative poverty rate (%, 2013)	7.9	(10.9)	Reading	511	(496)
Median equivalised household income (000 USD PPP, 2010)	24.9	(20.4)	Mathematics	523	(494)
Public and private spending (% of GDP)			Science	522	(501)
Health care, current expenditure	11.1	(8.9)	Share of women in parliament (%, December 2015)	36.4	(27.7)
Pensions (2011)	6.4	(8.7)	Net official development assistance (% of GNI)	0.64	(0.37)
Education (primary, secondary, post sec. non tertiary, 2012)	3.8	(3.7)			

Better life index: www.oecdbetterlifeindex.org

1. Where the OECD aggregate is not provided in the source database, a simple OECD average of latest available data is calculated where data exist for at least 29 member countries.

Source: Calculations based on data extracted from the databases of the following organisations: OECD, International Energy Agency, World Bank, International Monetary Fund and Inter-Parliamentary Union.

Glossary

BEPS	Base erosion and profit shifting
ECEC	Early childhood education and care
EU	European Union
EUR	Euro
GDP	Gross domestic product
ICT	Information and communication technology
LTV	Loan-to-value
NEET	Neither in employment nor in education or training
PES	Public employment services
PIAAC	Programme for the International Assessment of Adult Competencies
PISA	Programme for International Student Assessment
R&D	Research and development
SME	Small and medium-sized enterprise
STEM	Science, technology, engineering and mathematics
USD	United States dollar
VAT	Value-added tax
VET	Vocational education and training

Executive summary

- Sustaining the recovery
- Enhancing private investment
- Boosting skills for all

Sustaining the recovery



Enhancing private investment



Source: OECD (2016), OECD Economic Outlook: Statistics and Projections (database), February.

Literacy score-point

StatLink and http://dx.doi.org/10.1787/888933334088

Boosting skills for all



Source: OECD (2013), OECD Skills Outlook 2013: First Results from the Survey of Adult Skills.

StatLink and http://dx.doi.org/10.1787/888933334090

Significant structural reforms have recently been implemented. Growth is picking up, although unemployment is falling only slowly and labour productivity has been flat. Public finances have improved significantly and the return to the previous fiscal framework based on spending control is welcome. Policies to reform the tax system need to be revived to make it more efficient, equitable and environmentally-friendly. Incentives for self-employment should be reviewed.

Private investment is strengthening along with stronger growth. Lowering the costs of doing business, further limiting rental regulation and providing more financing for SMEs would spur investment. It is also necessary to boost investment in green infrastructure and support a shift towards renewable energy. Lifting investment in research and development would help the Netherlands to remain among the innovation frontrunners.

The overall skill level is high, but will need to continue to improve. Higher quality of childcare facilities would help less privileged families. With rising demand for complex skills, greater emphasis is needed on generic skills. On-the-job learning should be boosted by encouraging the development of businesses, further lowering barriers to permanent contracts and improving training. Strengthening programmes for those not working, especially for new immigrants and long-term unemployed, would raise living standards. Several of these measures would reduce labour market mismatches, thereby boosting productivity.

Fiscal	policies
The fiscal position has strengthened considerably, but expected tax reforms were not achieved.	Increase tax efficiency, notably by accelerating the reduction of mortgage interest rate relief and phasing out the lower VAT rate, while keeping the tax reform fiscally neutral.
The rapid rise in self-employment promises a more responsive economy, but also poses challenges for the social insurance system.	Reconsider the degree of tax incentives for self- employed, and explore alternatives for ensuring they build adequate savings for disability, and ageing risks if needed.
Enhancing priv	vate investment
The private rental market falls short of rising demand.	Support the supply of rental housing by further limiting strict rent regulation in the private market.
Meeting environmental targets is difficult.	Ensure stronger investment in renewable energy and energy efficiency by improving cost-effectiveness of existing instruments and possibly increasing their scale.
Private spending on R&D is low.	Step up efforts to strengthen innovation performance by increasing direct public support for R&D.
SMEs face difficulties getting credit.	Increase competition in the market for SME loans by considering the creation of a credit register for companies, based on standard reporting data if possible.
Boosting s	kills for all
Overall level of skills is high, but the skills of some groups are lagging behind.	Raise the quality of early childhood education and care further, and foster generic skills in vocational education and training. Further raise teachers' qualification, in particular in disadvantaged schools, and subsequently their wages.
Many businesses remain small.	Enhance entrepreneurial skills by further evaluating the effectiveness of programmes in formal education, developing online stand-alone training programmes, and promoting peer-to-peer learning.
Some vulnerable groups are less attached to the labour market.	Strengthen the provision of public employment services, and create programmes combining work experience and on-the-job training as well as language courses for immigrants.
Permanent contracts facilitate access to formal lifelong learning but are difficult to obtain because of employment protection legislation. Labour mobility is low, which restricts informal on-the-job learning.	To ensure higher prevalence of permanent contracts while enhancing resource allocation in the economy, further ease employment protection legislation on permanent contracts by continuing to reduce the cap on severance payments.

Main Findings and Key Recommendations

Assessment and recommendations

- Sustaining the recovery
- Maintaining healthy public finances
- Enhancing private investment
- Boosting skills for all

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Sustaining the recovery

Key challenges for sustainable and inclusive growth

Following a period of muted economic activity in the wake of the global downturn, growth has picked up since 2014, and gross domestic product (GDP) has recently overtaken its pre-crisis peak (Figure 1, Panel A). Growth has broadened from exports to domestic demand (Figure 1, Panel B). Monetary conditions have been very expansionary for some time, contributing to the revival of the housing market and lifting exports through currency depreciation. The budget deficit has been reduced to below 3% of GDP, and fiscal policy has moved from a restrictive to a neutral stance. Since the 2014 *Economic Survey*, the authorities have adopted a number of structural reforms, recording the largest increase in the *Going for Growth* reform responsiveness index in the OECD (OECD, 2015a), the lowest value of the OECD Product Market Regulation indicator, and the 5th best competitiveness position in the latest World Economic Forum ranking. Reform efforts have supported a business-friendly, competitive and innovative environment, boosting consumer confidence and entrepreneurial spirits.





Source: OECD (2016), OECD Economic Outlook: Statistics and Projections (database), February and DNB (2016), "Balance of payments and international investment position statistics", Statistics DNB, De Nederlandsche Bank, February.
StatLink age http://dx.doi.org/10.1787/888933334102

Well-being outcomes are above or equal to the OECD average, although somewhat weaker than in the Nordic countries (Figure 2, Panel A). Poverty is among the lowest in the OECD (Figure 2, Panel B). Income inequality is below the OECD average according to the Gini coefficient, but nearly 25% of total income accrues to the richest 10%, which is close to the OECD average (OECD, 2015b). Wealth is highly concentrated (Figure 2, Panel C), although



Figure 2. Social indicators are relatively good overall

B. Poverty is low Percentage, 2013 or latest year available²







- Each well-being dimension is measured by one to four indicators from the OECD Better Life Index set. Normalised indicators are averaged with equal weights. Indicators are normalised to range between 10 (best) and 0 (worst) according to the following formula: (indicator value – minimum value)/(maximum value – minimum value) x 10. The aggregate for Nordic countries (i.e. Denmark, Finland, Norway and Sweden) is calculated as an unweighted average.
- 2. The relative poverty rate is based on 50% of the median disposable income (adjusted for family size and after taxes and transfers) of the entire population. 2011 for Canada. The OECD aggregate covers 32 countries and it is calculated as an unweighted average.

3. Wealth refers to net private household wealth and excludes pension wealth. Data refer to the shares of the richest 10% of wealth holders. The OECD aggregate is calculated as an unweighted average of the data shown.

Source: OECD (2015), OECD Better Life Index; OECD (2015), "Income Distribution Database", OECD Social and Welfare Statistics, October; and OECD (2015), In It Together: Why Less Inequality Benefits All.

StatLink and http://dx.doi.org/10.1787/888933334116

less so if pension wealth, which is substantial, is included (Caminada et al., 2014). The authorities' plans to make the occupational pension system actuarially fairer would reduce saving transfers from younger (poorer) cohorts to older (wealthier) cohorts, evening out wealth distribution across generations and over lifetime.

Labour productivity growth has been weak since the onset of the crisis, as observed in many OECD countries, leading to a shortfall of over 15% relative to what would have happened if productivity had continued to rise at the same pace as its pre-crisis trend growth rate of around 2% per year (Figure 3).



Figure 3. Labour productivity is flat

 Labour productivity is defined as real GDP divided by total hours worked. Pre-crisis labour productivity trend growth is calculated between 1982 Q1 and 2007 Q4, and is projected from 2008 onwards.
 Source: OECD (2016), OECD Economic Outlook: Statistics and Projections (database), February.

StatLink and http://dx.doi.org/10.1787/888933334122

The main messages of this Survey are:

- Economic activity has picked up and macro-financial vulnerabilities have been significantly reduced since 2007, putting GDP growth on a sustainable and inclusive footing.
- Raising private sector investment, notably in innovation and business capital, would help to restore productivity growth.
- Continuing to improve skills in school and in the workplace, and better matching skills to jobs, would raise productivity and help to ensure that everyone enjoys the fruits of higher growth.

The economic outlook is positive

Growth reached nearly 2% in 2015, mainly driven by strengthening domestic demand. Business and consumer confidence has been rising (Figure 4, Panel A). Higher employment and stronger wage growth, notably supported by lower contributions to second-pillar pensions since January 2015, have revived private consumption. The housing market is also recovering from a deep slump (Figure 4, Panel B) and higher house prices are, in turn, supporting consumption.

As the government has started to gradually reduce gas extraction to limit the risk of earthquakes, exports of natural gas decreased and imports increased, which reduced the pace of the recovery, subtracting around 0.5 percentage point from GDP growth per year in 2014 and 2015. The current account surplus has fallen to below 10% of GDP but remains high, mainly driven by robust exports, with a significant contribution of exports net of re-exports (Figure 5). The strong current account surplus also reflects persistently higher savings than investment of Dutch corporations (Figure 6). The large saving position of nonfinancial corporations is mainly the consequence of comparatively low dividend payments and high foreign investments of multinationals (European Commission, 2015a). However, some small and medium-sized enterprises (SMEs) still face difficulties accessing finance



Figure 4. Confidence and the housing market have recovered

1. Quarterly data are calculated as unweighted average of monthly figures. Business confidence indicator is calculated as the arithmetic average of the balances (in percentage points) of the answers to the questions on: production – future tendency; finished goods stocks – level; and order books – level. Net balance is used to summarise answers to multiple-choice questions related to business tendency surveys and it takes value between -100% (unfavourable) and +100% (favourable) with a midpoint of 0. Business confidence is calculated as unweighted average of monthly figures of confidence indicators in manufacturing, construction, retail trade and services (excluding retail trade).

 4-quarter moving average applied to the series of dwellings sold. House prices refer to price index of existing own homes that are located on Dutch territory and sold to private individuals. House prices in big cities are calculated as an unweighted average of prices in Amsterdam, The Hague, Rotterdam and Utrecht.

Source: OECD (2016), Main Economic Indicators (database), January and Statistics Netherlands (2016), "House Price Index; existing, Netherlands", in Construction and housing, Statline, January.

StatLink and http://dx.doi.org/10.1787/888933334135

Figure 5. Trade surplus is sizeable and rising





1. Exports of goods and services.

Source: OECD (2016), OECD Economic Outlook: Statistics and Projections (database), February and DNB (2016), "Balance of payments and international investment position", Statistics DNB, De Nederlandsche Bank, February.

StatLink and http://dx.doi.org/10.1787/888933334147

(see below), holding back their domestic investments. Sustainable increases in residential investment, which fell substantially following the housing market downturn in 2008-13, would also help to reduce the sizeable current account surplus and to address euro area imbalances.



Figure 6. Net saving position of sectors has been rising or remained high

As a percentage of GDP

1. Net saving is the sum of current and capital account balances. Households also include non-profit institutions serving households. Source: OECD (2016), OECD Economic Outlook: Statistics and Projections (database), February; Datastream; and Statistics Netherlands (2015), "Current transactions by sectors; National Accounts" in Macroeconomics, Statline, November. StatLink and http://dx.doi.org/10.1787/888933334151

The unemployment rate has fallen to 6.5%, which is around the OECD average, but is still well above the Dutch pre-crisis low of nearly 3.5% in late 2008, and long-term unemployment has increased (Figure 7, Panel A). The fall in the unemployment rate has been driven by recovering output and demand, but labour hoarding during the downturn, which limited the rise in unemployment, may be delaying a stronger recovery in employment. Full-time employment among men has not yet recovered to pre-crisis level and part-time employment has been edging up more recently (Figure 7, Panel B).



1. Long-term unemployment refers to those who have been unemployed for 12 months or more.

Data refer to working-age population aged between 15 and 64. Part-time employment refers to those who work fewer than 35 hours 2. per week. Full-time employment refers to those who work 35 hours or more per week.

Source: Eurostat (2016), Employment and unemployment (Labour Force Survey) (database), January.

StatLink and http://dx.doi.org/10.1787/888933334168

GDP growth is projected to strengthen to 2.1% in 2017 (Table 1). Private consumption growth should continue to recover, supported by further improvements in the labour market. The unemployment rate is set to fall gradually, underpinned by stronger increases in employment than in the labour force. Business investment is projected to contribute positively to growth in the wake of vibrant domestic demand, and of a gradual normalisation in credit conditions. Residential investment growth should moderate, but housing construction is expected to make a stronger contribution to growth. Inflation is projected to increase somewhat, but should remain low as the output gap is not projected to close in the near term.

	2012 Current prices (billion EUR)	2013	2014	2015	2016	2017
Gross domestic product (GDP)	645.0	-0.4	1.0	1.9	1.7	2.1
Private consumption	289.8	-1.4	0.0	1.6	0.9	1.3
Government consumption	169.9	0.2	0.3	0.0	0.6	1.2
Gross fixed capital formation	121.9	-4.5	3.5	10.3	7.2	5.3
Housing	22.6	-11.6	6.9	26.8	10.1	5.7
Business	75.2	-3.0	4.4	8.4	7.8	6.2
Government	24.2	-2.5	-1.9	1.8	1.5	1.2
Final domestic demand	581.6	-1.6	0.8	2.9	2.2	2.2
Stockbuilding ¹	1.6	-0.1	-0.1	-0.6	0.2	0.0
Total domestic demand	583.2	-1.7	0.6	2.2	2.4	2.2
Exports of goods and services	528.2	2.4	4.0	4.2	3.0	4.1
Imports of goods and services	466.4	1.1	4.0	4.9	4.1	4.5
Net exports ¹	61.8	1.1	0.5	0.0	-0.4	0.1
Other indicators (growth rates, unless specified)						
Potential GDP		0.8	0.9	1.1	1.2	1.3
Output gap ²		-3.1	-3.0	-2.2	-1.7	-1.0
Employment		-0.8	-0.6	1.0	0.7	0.9
Unemployment rate		7.3	7.4	6.9	6.3	5.9
GDP deflator		1.3	0.8	0.3	0.7	1.2
Consumer price index (harmonised)		2.6	0.3	0.2	0.7	1.2
Core consumer prices (harmonised)		2.5	0.6	0.9	1.0	1.3
Household saving ratio, net ³		7.3	8.2	8.3	8.8	9.3
Current account balance ⁴		11.0	10.6	9.6	8.7	8.2
General government fiscal balance ⁴		-2.4	-2.4	-2.2	-1.9	-1.5
Underlying general government fiscal balance ²		-1.3	-0.9	-1.1	-1.2	-1.0
Underlying government primary fiscal balance ²		-0.3	0.1	-0.1	-0.4	-0.2
General government gross debt (Maastricht) ⁴		67.9	68.2	66.9	66.6	66.2
General government net debt ⁴		39.9	43.7	44.9	45.8	45.9
Three-month money market rate, average		0.2	0.2	0.0	-0.1	0.1
Ten-year government bond yield, average		2.0	1.5	0.7	0.7	1.1

Table 1. Macroecond	omic indicator	s and pro	jections
Annual percenta	ge change, volume	(2010 prices)

1. Contribution to changes in real GDP

2. As a percentage of potential GDP.

3. As a percentage of household disposable income.

4. As a percentage of GDP.

Source: OECD (2016), OECD Economic Outlook: Statistics and Projections (database), February.

Past subdued economic growth may have weakened the quality of balance sheets of SMEs, which could negatively weigh on their dynamism and lower economic growth. Moreover, churn in the corporate sector is structurally low, potentially holding back the reallocation of resources towards more productive uses. Further reductions in gas production would reduce growth and fiscal revenues, although lower oil prices should support economic activity. Recent fiscal decentralisation to municipalities could lead to spending overruns, but may also increase the efficiency of spending if local authorities are better tuned to local needs. The effect of past labour hoarding on the evolution of employment and unemployment is difficult to assess, although recent labour market reforms could foster employment growth more than expected. Stronger growth in the euro area would boost external demand, but subdued economic activity of emerging markets would undermine global trade and hold back Dutch exports indirectly by hurting its trading partners.

Indicators of potential macro-financial vulnerabilities have abated significantly since the crisis, although, at nearly 120% of GDP, gross household debt is one of the highest in Europe (CBS, 2015a), owing to high mortgage debt, posing a vulnerability in the event of a financial crisis. This is true even though household net wealth is also large, estimated at 400% of GDP in 2012 (according to Statistics Netherlands), because households with assets (those over 50 years old) are not the same as those holding the debt (young households), as discussed in Chapter 1 of the 2014 Economic Survey (OECD, 2014a). Since 2013, amortisation of new mortgages has become a precondition for mortgage interest deductibility, which should increase amortising mortgages over time as before most of the mortgage portfolio was not amortized regularly (that is, the principal was not paid down in instalments). Also, the maximum tax rate at which mortgage interest can be deducted is being lowered, but only very gradually from 52% to 38% between 2014 and 2042. Other reforms include gradual cuts in the maximum loan-to-value ratios to 100% in 2018, reductions in loan-to-income ratios to offset higher lending capacity driven by lower interest rates, and decreases in the maximum value of a mortgage eligible to public guarantees (insuring against residual liabilities left after a sale of a property).

Financial and other macroeconomic vulnerabilities have fallen since before the onset of the global financial crisis. The main exception is the still large size of the Dutch financial sector, which is well above its long-term average when considering domestic activities, although foreign activities have been reduced, the leverage ratio has increased and external bank debt has diminished relative to historical averages (Box 1).

Other indicators also suggest that banking sector stability has continued to improve since the analysis of the situation of the banking sector in the 2014 *Economic Survey* (OECD, 2014a). Un-weighted capital ratios increased to about 5%, and weighted capital ratios rose to over 15% for Tier 1 capital and close to 20% for total regulatory capital in late 2015. Non-performing loans are low and have been trending downwards, but there is scope to foster banks' capacity to absorb solvency risks as banks' capital would be cut by nearly 40% if non-performing loans were fully written off, which is high in international comparison. At about 130% in mid-2015, the loan-to-deposit ratio was high, exposing banks to potential liquidity shocks, but linking the tax deductibility on mortgage interest payments to the amortisation of new mortgages since 2013 should gradually reduce this ratio. The authorities privatised nearly a fourth of the capital of ABN AMRO in 2015, following the nationalisation of the bank early in the crisis, which was another step in

Box 1. Assessing potential macro-financial vulnerabilities

Potential macro-financial vulnerabilities can be measured and mapped in terms of deviations of indicators from their real time long-term averages (0), i.e. up to the point in time considered, with the highest deviations representing the greatest potential vulnerability (+1), and the lowest deviations representing the smallest potential vulnerability (-1). Deviations from real time long-term averages are used for all indicators except consumer price inflation which is measured as deviations from 2%. Selected indicators are based on recent OECD work on vulnerability indicators (Röhn et al., 2015), and the linkages between finance and economic growth (Cournède and Denk, 2015).

Potential macro-financial vulnerabilities have fallen significantly since the crisis (Figure 8). In 2007, the greatest potential vulnerabilities were in the financial sector, but there were also indications of weaker growth sustainability, price stability and external position (Figure 8, Panel A). More precisely, the size of the financial sector was large and external bank debt was high, household net saving position was poor, there were capacity pressures on the labour market, house prices were overvalued, and the net international investment position was fragile (Figure 8, Panel B). There has been a major correction of imbalances since 2007, except for the size of the financial sector, which remains large. Although the interaction of vulnerabilities may be difficult to predict, their combined effect was signaling important risks to growth in the run-up to the global crisis (Figure 9). The greatest risk exposure was in the financial sector, which only fell during the double-dip recession.

Figure 8. Potential macro-financial vulnerabilities are low and have diminished significantly since 2007

Deviations of indicators from their real time long-term averages (0), with the highest deviations representing the greatest potential vulnerability (+1), and the lowest deviations representing the smallest potential vulnerability (-1)¹



1. Each aggregate macro-financial vulnerability indicator is calculated by aggregating (simple average) normalised individual indicators. Growth sustainability includes: capacity utilisation of the manufacturing sector, total hours worked as a proportion of the working-age population (hours worked), difference between GDP growth and productivity growth (productivity gap), and an indicator combining the length and strength of expansion from the previous trough (growth duration). Price stability includes: the average of overall inflation and core inflation (consumer prices), the average of house prices-to-rent ratio and house prices-to-income ratio (house prices), stock market index for all Dutch shares adjusted by nominal GDP (stock prices), and the difference between long-term and short-term government bond interest rates (term spread). External position includes: the average of unit labour cost based real effective exchange rate (REER) and consumer price based REER (cost competitiveness), relative prices of exported goods and services (price competitiveness), ratio of exports to export markets (export performance), and net international investment position (NIIP) as a percentage of GDP. Net saving includes: government, household and corporate net saving, all expressed as a percentage of GDP. Financial stability includes: banks' liabilities, and capital and reserves as a proportion of total banks' liabilities (leverage ratio).

Source: OECD calculations based on OECD (2015), OECD Economic Outlook: Statistics and Projections (database), December and Datastream. StatLink and http://dx.doi.org/10.1787/888933334174



StatLink and http://dx.doi.org/10.1787/888933334182

the right direction. Finally, the Financial Stability Committee has been outspoken and pro-active about risks, for instance by recommending future governments that the ongoing gradual reduction in the loan-to-value limit to 100% in 2018 should be continued until 90% is reached in 2028.

Economic prospects are also subject to significant potential shocks, the probabilities and consequences of which are difficult to quantify in terms of risks to the projections (Box 2).

Shock	Possible impact
Sharp increase in immigration	A significant increase in the current wave of migrants and refugees, spurred by greater geopolitical instability in the Middle East, would intensify pressures on public spending and the housing market. However, this shock would also lift consumption in the short term and, if the immigrants are integrated into Dutch society and the economy, would raise output in the medium term.
Turbulence in the euro area and/or the European Union	Renewed financial turmoil in the euro area could result in losses for the Dutch budget and hav knock-on effects on the stability of the Dutch financial sector. Impediments in the construction of the European Union could hurt consumer confidence, negatively affect domestic investment decisions of businesses, and hold back the internationalisation of Dutch multinational enterprises.
Distress of financial institutions	A protracted period of low interest rates could jeopardise the financial returns needed, or expected, by the insurance and pension sectors, resulting in potentially costly adjustment.

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Maintaining healthy public finances

Ensuring long-term sustainability and greater efficiency

Public finances have improved significantly since the global financial crisis, owing to sizeable fiscal consolidation and stronger growth. As a result, the budget deficit is now manageable and the public debt is below 70% of GDP. Although the consolidation was procyclical, it now has allowed the government to shift to a broadly neutral stance. The fiscal framework based on a spending ceiling but allowing the automatic stabilisers to work on the revenue side, where they are in any case the most powerful, has served the Netherlands well in the past and the recent return to it is welcome and should be the guidepost for fiscal policy going forward.

The fiscal stance is expected to remain broadly neutral in the short term, which is appropriate given the positive outlook for fiscal sustainability (see below) and the early stage of recovery. Uncertainty regarding potential output is large and the structural deficit is estimated to have risen above the Medium-Term Objective (MTO) of 0.5% of GDP in 2015 (Figure 10, Panel A). However, this increase mainly reflects the government's decision to reduce gas production to limit the risk of related earthquakes which, together with lower gas prices, reduced budget revenues by more than 1% of GDP between 2013 and 2015. As the reduction in annual budget revenues linked to lower gas extraction is permanent. offsetting measures over the medium term could be needed to achieve the MTO. The budget for 2016 includes a fiscal stimulus package of EUR 5 billion (0.7% of GDP), which keeps the fiscal stance neutral as it essentially offsets consolidation measures that had been adopted earlier (Figure 10, Panel B). Moreover, public spending is also being somewhat increased to address the recent inflow of refugees (Box 3).



Figure 10. Sizeable fiscal consolidation and the economic recovery have improved public finances

2. Figures for 2015, 2016 and 2017 are projections.

3. Cumulative net figures.

Source: OECD (2016), OECD Economic Outlook: Statistics and Projections (database), February; CPB (2015), "Macro Economic Outlook (MEV) 2016", Netherlands Bureau for Economic Policy Analysis, September; and CPB (2015), "Tekortreducerende maatregelen 2011-17", Netherlands Bureau for Economic Policy Analysis, September.

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Box 3. Recent refugee surge and its economic impacts

Asylum requests surged in 2015, almost doubling relative to 2014, mainly owing to a large inflow of Syrian refugees (Figure 11, Panel A). Inflows have been falling more recently (Figure 11, Panel B), although they could rise again in case of greater geopolitical instability, in particular in the Middle East. It will take time and effort to integrate the refugees, as many could be traumatized by their experience of war and exodus. There are costs in the short term, but they so far have been contained, and the refugees could ultimately add to the country's economic strength. However, the impact on gross domestic product (GDP) per capita will depend on the success of labour market integration and the skills of refugees, as well as the effectiveness of related policies.





1. Requests for asylum, including first and subsequent requests and requests for family reunification. Source: Statistics Netherlands (2016), "Asylum requests" in Population, Statline, January.

StatLink and http://dx.doi.org/10.1787/888933334205

Costs associated with refugees and other migrants are uncertain given the rapidly changing numbers of new arrivals and mainly relate to housing in asylum centres, healthcare, education, and allowances, and are estimated at EUR 1 billion (0.15% of GDP) for 2015. This is twice the amount in 2014, but it is similar to the costs in, for example, 2001 when significant inflows also occurred (Figure 11, Panel A). Public spending on newly arrived migrants is set to increase further in 2016, but most likely should not exceed projected levels in other countries with large inflows, such as Austria (0.3% of GDP), Germany (0.5% of GDP) or Sweden (0.9% of GDP) (OECD, 2015). The increase in domestic public spending provides a modest stimulus for the economy; for example, the government and municipalities are investing in 3 500 additional dwellings.

Municipalities are expected to play a growing role in the management of the recently arrived refugees. All municipalities are required to take in asylum seekers, helping to spread inflows throughout the entire country. Exchanging expertise between municipalities on social and labour market integration of refugees and adopting a benchmarking system to monitor the effectiveness of measures, as in Denmark (OECD, 2016), could help to identify best practices. This would also provide guidance for municipalities on how to address medium-term impacts as some refugees become official citizens and gain further access to social assistance, child care and schooling.

Box 3. Recent refugee surge and its economic impacts (cont.)

A successful integration of refugees in the labour market is crucial to reap economic benefits. Their participation rate is around 45%, which is much lower than that of natives (Vluchtelingenwerk, 2015). Moreover, their jobs involve few hours of work and are low paid. Enhancing language training, providing assistance in the recognition of foreign diplomas and developing skills relevant for the Dutch labour market would increase the likelihood of finding jobs and jobs of better quality. The overall effects of refugees on unemployment are likely to be small but, as the example of Sweden shows, earlier immigrants from low-and middle-income countries could face stronger competition on the labour market (Ruist, 2013).

Sources: Vluchtelingenwerk (2014), IntegratieBarometer 2014 (Integration Barometer, 2014); OECD (2015), "How will the refugee surge affect the European economy?", Migration Policy Debates, No. 8., OECD Publishing; Ruist, J. (2015), "Refugee immigration and public finances in Sweden", University of Gothenburg, Working paper in Economics, No. 613; and OECD (2016), Making Integration Work: Refugees and Others in Need of Protection, OECD Publishing.

The EUR 5 billion stimulus package supports employment, in particular of low-income earners and women, and household consumption. A reduction of income tax rates will support purchasing power of most people. Effective tax rates on labour income will fall further as the tax credit for employed persons is raised, while the phasing out of the general tax credit is accelerated. Labour costs for employers, which increased in recent years, will be lowered from 2017 onwards for workers with incomes at or just above the minimum wage. A higher childcare subsidy and a lower effective tax rate on second earners with young children will support women's participation in paid work.

The stimulus package was originally intended to facilitate a broad tax reform. Unfortunately, political agreement on reform proved impossible. Nevertheless, such a reform is still needed, as the tax system has become much more complex since the last tax reform in 2001. Broadening the tax base would allow for lower rates and for an increase in spending on social policies for those requiring upskilling (see below). The tax reform should be taken up by the next government, but the political debate should start well in advance to ensure consensus and broad support.

The tax system can be made more efficient, equitable and environmentally-friendly. Numerous deductions, exemptions and other tax expenditures lower taxes for households and companies by EUR 18.5 billion (3% of GDP) per year. However, many measures either do not have the envisaged effect or have not been evaluated (Algemene Rekenkamer, 2015), and it is often richer households who benefit the most from tax expenditures. High mortgage interest deductibility for owner-occupied housing is distortionary and regressive as imputed rents are taxed less. Further recovery of the housing market would allow for accelerating the planned reduction (OECD, 2014a). Standard value-added tax (VAT) rate is 21%, but a 6% rate is applied to a wide range of goods and services and this proportionally benefits the rich more (OECD, 2014b) and should be phased out. Environmentally-related taxes represent nearly 3.5% of GDP, significantly more that the OECD average of about 1.5% of GDP, and constitute a large part of government revenues (OECD, 2015c). However, regressive rates apply on natural gas and electricity consumption and energy taxes are significantly lower for energy-intensive firms relative to small users, particularly households. Electricity generation is covered by the European Union's emissions trading system, but the tax exemption for the use of coal for energy production introduced in 2016 may have harmful environmental impacts which go beyond greenhouse gases

(OECD, 2015c). The advantageous tax treatment of diesel relative to gasoline should be eliminated. Accelerating the overdue upgrade of the tax authority's information and communication (ICT) systems would facilitate reform implementation.

The Netherlands has provided strong support to the OECD/G20 Base Erosion and Profit Shifting (BEPS) project. The continuation of this support will be necessary to ensure that the commitments made as part of the BEPS project are fully implemented. The authorities have been trying to ensure that subsidiaries of foreign companies are contributing to actual economic activity in terms of employment or investment, as many letterbox companies only exist to pass on interest income and royalties to low tax jurisdictions (Knottnerus et al., 2015). The planned revision in tax advantages for innovation would be consistent with OECD recommendations. Equally, it is expected that the Netherlands will swiftly put in place compulsory spontaneous exchange of information on tax rulings to help address potential harmful practices. The increasing reputational risks provide an additional incentive to intensify efforts to combat BEPS and to take appropriate domestic and treatybased measures, in particular regarding "treaty shopping", and the authorities have announced to work in this direction.

Securing debt sustainability

Maintaining a structural budget deficit of 0.5% of GDP, consistent with the Medium-Term Objective, would steadily reduce the public-debt-to-GDP ratio, as indicated by the baseline scenario in Figure 12. This result is quite robust. For example, even if nominal growth were to fall to just 2% – as would happen if inflation were 2% and labour productivity were zero – the debt-to-GDP ratio would fall. On the other hand, if rising ageing-related costs were not dealt with, by containing them through higher taxes or other spending cuts, then the debt-GDP ratio would begin to rise in about 15 years' time.

Pension reforms have successfully contained expected increases in net pension costs. The working-age population between 20 and 64 is projected to fall by slightly more than 10% between 2013 and 2060, placing the Netherlands mid-range of European Union and euro area countries (European Commission, 2015b). The employment rate of people aged 55-64 rose by nearly fifteen percentage points between 2007 and 2014, and the effective retirement age increased to about 63.5 years for men and 62.5 for women in 2012, which is somewhat below the OECD average of respectively slightly above 64 and 63 years (OECD, 2014c). The rise in the statutory retirement age in the state pension system has recently been accelerated, which is welcome, and is set to increase to 66 years in 2018 and to 67 in 2021. The retirement age will subsequently be linked to life expectancy.

However, spending on health and long-term care is projected to rise by almost 2.5% of GDP between 2013 and 2040 (European Commission, 2015b). The rise in overall health expenditure has flattened in recent years, but this could have been caused by the protracted recession (OECD, 2015d). Budget execution therefore needs to be monitored closely and timely provision of information should be stepped up as overruns in the health budget have been common and the reporting delay of health expenditures to the central government is the longest among OECD countries (OECD, 2015e). It will be important that the recent decentralisation of disability and long-term care to municipalities generates the efficiency gains that the government expects. Therefore, it will be critical to monitor the capacity of municipalities to cope with this task, and to avoid risk that services will deteriorate (Charbit and Michalun, 2009).



Figure 12. Simulations point to further reduction in public debt

 The baseline scenario shows projections based on the OECD Economic Outlook: Statistics and Projections database until 2017, and subsequent real GDP growth of 2% during 2018-40, in line with OECD estimates for long-term potential growth, and nominal GDP growth of 4%. The budget deficit is assumed to be 0.5% of GDP from 2020 onwards, excluding financial transactions. The "no productivity growth" scenario assumes real GDP growth averaging 0.1% over 2018-40, which only reflects employment growth. The "without offsetting rising ageing-related costs" scenario adds changes relative to 2017-levels of net public pension costs, health costs and longterm care costs to the baseline budget deficit, which leads to a budget deficit of 3% of GDP in 2040 and an average of 1.5% over 2018-40.
 Source: Calculations based on OECD (2016), OECD Economic Outlook: Statistics and Projections (database), February and European Commission (2015), "The 2015 Ageing Report: Economic and budgetary projections for the 28 EU member states (2013-60)", Directorate-General for Economic and Financial Affairs.

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A striking development on the Dutch labour market, which may have long-term fiscal implications, is the rise in self-employment, which reached more than 1 million persons, or 17% of total employment, in mid-2015 (Figure 13, Panel A). This rise, which appears to be mainly structural as it started before the global downturn, partly reflects a shift towards entrepreneurship, which could bode well for the Dutch economy if the results were the adoption of new innovation and greater resilience. On the other hand, self-employed jobs account for around 60% of financially vulnerable positions (Figure 13, Panel B). But rising self-employment also reveals efforts to avoid the high protection granted to permanent contracts and to benefit from substantial fiscal reliefs accorded relative to employees (Figure 14). Self-employed do not have to participate in collective insurance schemes for disability and a substantial expansion of self-employment would undermine the viability of the disability system if a disproportionate share of good risks were to leave it, although so far there is no evidence of this happening (Josten et al., 2014). Such expansion could also generate an unrecognised public liability should the self-employed not insure themselves for disability risks. Moreover, this may also distort competition across firms depending on the relative size of the self-employed workforce.

In light of these issues, the authorities should consider whether the extent of the implicit subsidy to self-employment is too large, and if the protection afforded to regular employment (which raises labour costs) is too high. For some administrative purposes, the status of self-employment, and therefore the qualification for the benefits of being self-employed, currently depends on whether the individual has more than one "client", on the grounds that having only one would suggest a dependent employment relationship. Another criterion is the degree of control and independence. This test would require



Figure 13. Self-employment is affecting employment and incomes

1. Cumulative changes.

Data refer to full-time (at least 35 hours per week) working men and women between the age of 20 and 64. Those who live on annual incomes below the social security level, and as such not economically independent, are defined as financially vulnerable.
 Source: Statistics Netherlands (2016), "Employment, quarterly", in Labour and social security, Statline, February and Marion van den Brakel (2015), "Wel werk, maar niet economisch zelfstandig", Sociaaleconomische Trends (Social-Economic Trends), Statistics Netherlands, June.

StatLink and http://dx.doi.org/10.1787/888933334222



Figure 14. Tax and benefit system favours self-employed over employees, raising self-employment

Differences in tax-benefit amounts between self-employed workers and workers in standard jobs, % of average wages, 2010²

1. Data refer to working-age population aged between 15 and 64.

2. Data refer to those self-employed who work full-time (40 hours per week) and earn between 40% and 160% of the average wage in the country.

Source: Eurostat (2015), Employment and Unemployment (Labour Force Survey) (database), December and OECD (2015), In It Together: Why Less Inequality Benefits All.

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tighter implementation to distinguish whether the employment relationship in fact resembles dependent employment or not and the authorities are taking steps in this direction. However, it is necessary to find the right balance between higher administrative burdens and the identification of genuine self-employed.

Self-employed are eligible to first pillar pensions, but do not make mandatory contributions to the second pension pillar, which generates a gap in replacement rates relative to workers (OECD, 2015f). The authorities should monitor and raise awareness about the need to build up additional "third pillar" savings, to ensure the self-employed have sufficient pension adequacy in old age and to head off the risk of spending pressures on future budgets. Several OECD countries have such schemes to augment, or even to some extent replace, the first two pillars of universal public pensions and occupational pensions. As part of the National Pension Dialogue, the authorities have started discussing options to strengthen pension savings of self-employed and workers on temporary contracts.

Key fiscal policy recommendations

- Increase tax efficiency, notably by accelerating the reduction of mortgage interest rate relief and phasing out the lower VAT rate, while keeping the tax reform fiscally neutral.
- Reconsider the degree of tax incentives for self-employed, and explore alternatives for ensuring they build adequate savings for disability, and ageing risks if needed.

Enhancing private investment

Private-sector investment was hit by the recent crisis, but had already been weakening before. During 2008-13, residential investment almost halved (Figure 15, Panel A) as house prices fell by 20% from peak to trough. Business investment had already softened before the global downturn, but held up well subsequently (Figure 15, Panel B). By contrast, government investment has been stable over time, despite the fiscal stimulus in 2009 and consolidation afterwards.

Investment has been firming recently, but needs in the coming years remain considerable. New construction is picking up, but housing investment has to increase substantially to accommodate the expected 10% increase in the number of households from now to 2030 (CBS, 2015b), the increasing demand for rental dwellings, and the needs of the recent influx of migrants. The shortfall in non-residential investment is estimated at 15% (about 2.5% of GDP), even when taking into account the latest pick-up in investment (Figure 16). Spending on research and development (R&D) is only around 2% of GDP and below the Dutch official target of 2.5% of GDP for 2020, which itself is lower than the EU-wide target of 3% of GDP. Private investment in R&D as a proportion of GDP is significantly below the OECD average.

Further efforts are needed to enhance investment in green innovation and clean energy. The Netherlands fell from 7th to 13th place in the European Union (EU) eco-Innovation Scoreboard (EIO, 2014), and a more active and integrated eco-innovation policy is needed to reverse this trend (OECD, 2015a). Investment in renewable energy has raised the share of renewables in gross final energy consumption to 5.5% in 2014 (CBS, 2015c), but meeting the official targets of 14% in 2020 and 16% in 2023 could be challenging. Carrying out the evaluation of support measures, planned for 2016, in a thorough, independent and transparent manner would help to make current instruments more efficient and identify where further efforts are needed.



Figure 15. Investment developments have been uneven

1. In nominal terms. Investment refers to gross fixed capital formation. 4-quarter cumulative data. Source: OECD (2016), OECD Economic Outlook: Statistics and Projections (database), February.

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Figure 16. Gap between non-residential investment needs

1. 2014 for Hungary and Poland. The OECD aggregate covers 30 countries and it is calculated as an unweighted average of the data shown.

Source: OECD (2015), OECD Economic Outlook, Volume 2015 Issue 1, June and OECD (2016), OECD Economic Outlook: Statistics and Projections (database), February.

StatLink and http://dx.doi.org/10.1787/888933334254

Promoting private rental investment

New construction is picking up, but still amounts to only half of pre-crisis activity, well short of housing demand. Municipalities in the economic core (Randstad) are set to expand more rapidly than in the rest of the country, but the authorities see sufficient scope to accommodate the construction of new dwellings in urban areas, in particular if some of the stringent local planning regulations are relaxed.

The private rental sector is small, accounting for only 20-25% of rental dwellings and 10% of all dwellings, as housing policies contributed to underinvestment. Stringent rent regulation applies to both social housing and to private dwellings with monthly rents below EUR 710 and covers over 90% of rental dwellings. The rent controls reduce returns for landlords and hold back private investment, in particular in single-person housing, as almost all of it falls below the EUR 710 rent control threshold. The supply of more expensive, unregulated rental housing is also relatively small, crowded out by subsidies for renting regulated dwellings and for home-ownership.

The scarcity of private rentals hampers the functioning of the housing market (De Boer and Bitetti, 2014) and contributes to traffic congestion and suboptimal labour market outcomes, as discussed in Chapter 4 of the 2010 *Economic Survey* (OECD, 2010). Moreover, demand for rental housing is set to increase as a further reduction of mortgage interest relief and tighter loan-to-value requirements force first-time buyers to wait longer to build a down payment. In parallel, recent reforms increasing rents in social housing add to the demand for private rentals, and scarcity is pushing up unregulated rents.

Further limiting strict rent controls in the private rental sector would boost residential investment, while enhancing the functioning of the housing market (De Boer and Bitetti, 2014). Some recent reforms have aimed to support the development of the private rental market. For example, housing corporations have to administratively or legally separate the provision of social housing from their activities in the unregulated segment from 2017 onwards. Another reform has made the maximum initial rent of regulated dwellings partly dependent on the house value since October 2015. Increasing the weight put on this factor would support the provision of rentals in areas with high market demand, such as the main cities.

Stepping up investment in energy efficiency improvements of dwellings would help to meet energy reduction targets. The Dutch housing stock provides ample room in this respect (Meijer et al., 2010), and a number of funds and subsidies exist at the national level for energy efficiency improvements of both rental and owner-occupied housing. Increasing public support for energy-enhancing investments in existing housing regardless of tenure and extending it to cover new construction that replaces old dwellings would help to reduce final energy consumption by the committed 1.5% per annum, and to reach the 2020 reduction target for greenhouse gas emissions. Positive economic effects could limit the budgetary costs (Ecofys, 2015), although the experience of other countries indicates that the subsidies need to be carefully designed to achieve planned reductions in energy use (OECD, 2015c).

Providing the right incentives for business investment

While the improved demand prospects are likely to be the main driver of investment in the coming years, the already good framework conditions for business investment could be further improved to help support investment decisions. Legal barriers to entrepreneurship are comparatively low, as assessed by the OECD Product Market Regulation indicator, but issuing licences automatically after a statutory response period ("silence is consent") would further reduce the gap with the best-performing OECD countries, as discussed in Chapter 2 of the 2014 *Economic Survey* (OECD, 2014a). Other potential reforms to strengthen business conditions include lowering the costs of starting a business, getting construction permits, and registering property; accelerating connection to electricity; improving the quality of judicial processes when enforcing contracts and lowering related costs; and strengthening the protection of minority shareholders (World Bank, 2015).

Business innovation is supported by the so-called top sector approach, which is focused on a number of so-called top sectors. Extending coverage and transferring valuable experience and policy lessons to other sectors would mitigate the risk of overlooking promising developments in other sectors (OECD, 2014d). SMEs are active in all the top sectors, but their large number and diversity warrants continuous efforts to improve their representation, especially given their importance for generating economic growth (Adalet McGowan et al., 2015). There is scope to better align sector policies with initiatives of subnational authorities, such as joint programmes funded by the European structural funds, national government and regions that focus on innovation and top sectors and the recent programme "SME Innovation Promotion Regions and Top Sectors". Efforts to strengthen the cross-regional policy dimension of the top sector approach are welcome, but the focus on innovation should remain the predominant objective (OECD, 2014e). The creation of StartupDelta, an initiative to detect innovative start-ups and to help them to address barriers that hinder their development, is a useful complement to the top sector approach, and the authorities should ensure a follow-up after its dissolution planned for 2016.

Generic support for innovation and R&D is more concentrated on tax incentives, as opposed to direct funding, than in most other OECD countries (Figure 17; OECD, 2014f), and the overall mix may excessively favour incumbents and be less suited for more risky and longer-term innovation activities. Tax incentives of the main programme are well designed, however, direct funding as a share of GDP is low and the impact of the innovation box remains uncertain despite the planned changes. Stepping up R&D support with a more specific focus, such as for example the recently announced EUR 130 million programme for



Figure 17. Support for business R&D is skewed towards tax incentives

1. 2012 for Belgium, Ireland, Israel, Spain, Switzerland and the United States. 2011 for Australia, Iceland and Mexico. Estonia, Germany, Mexico, New Zealand, Sweden and Switzerland did not provide information on expenditure-based research and development (R&D) tax incentives for 2013. For Israel, the R&D component of incentives cannot be identified separately at present. No data on the cost of expenditure-based R&D tax incentive support are available for Poland. Estimates do not cover sub-national and income-based R&D tax incentives and are limited to the business sector (excluding tax incentive support to individuals). Data refer to estimated initial revenue loss (foregone revenues) unless otherwise specified.

Source: OECD (2015), OECD Science, Technology and Industry Scoreboard 2015: Innovation for growth and society.

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healthcare innovation, could help to leverage private sector innovation in promising sectors and potentially "disruptive" technologies. The higher budget in 2016 for the main tax incentive programme, which makes up for the discontinuation of a corporate income tax advantage for R&D will be particularly beneficial for SMEs and start-ups without profits.

The quality of infrastructure is perceived as the world's fourth best (WEF, 2015), but the budget for infrastructure investments in the coming years appears tight relative to the pipeline of projects. Maintenance spending already accounts for 40% of the budget and is set to grow further, which risks crowding out new investment as needs remain important. For example, the economic recovery is increasingly leading to traffic jams, and in particular the access to cities could become a bottleneck. The foreseen budget does also not provide much room to act adaptively to challenges posed by a changing economic and spatial structure on existing infrastructure, and to opportunities stemming from new information technology. Stepping up the public budget for infrastructure, in particular later on in the planning period, would be an option, assuming that there is sufficient fiscal space.

Expanding financing for SMEs

During the crisis, the depressed business outlook reduced companies' appetite for investment, which was further constrained by reduced access to external financing. Banks have been reporting falling loan demand until recently, and lending standards have remained tight (Figure 18, Panel A). Dutch SMEs carry out 50% of overall business investment and about 15% of them have difficulties for getting a loan with most of them being discouraged (Figure 18, Panel B), although this percentage is now smaller than in the recent past. The proportion of rejected SME loan applications has also fallen despite remaining the largest in the euro area (Figure 18, Panel C), but this could also partly reflect improved risk selection of banks since the crisis. As a result, bank lending has continued to fall until recently, although the decline has been mitigated by various public programmes (OECD, 2014a).

Banking sector concentration is high, holding back competition in the market for retail loans. Lending to SMEs is hampered by the relatively high interest rates for small loans, significantly higher than for large loans (Figure 19). Around 90% of bank loans to SMEs are extended by one of the three big banks (ACM, 2015). No new banks have entered the market for retail loans in more than a decade and some foreign banks have left the Dutch market (DNB, 2015). More competition would increase efficiency of the banking sector (DNB, 2015), but potential entrants to the Dutch banking market indicate that the procedure to obtain a licence is long, while ambiguity regarding some conditions contributes to the uncertainty of the application's outcome (ACM, 2014).

Establishing a credit register would help lenders to assess the creditworthiness of SMEs. Estimating the creditworthiness of small firms is particularly difficult and costly, and the related uncertainty drives up interest rates and tightens lending conditions. A credit register for companies, similar to the one that already exists for individuals, would lower these costs by disseminating needed information to all lenders (SER, 2014), and it exists in most European countries (Rothemund and Gerhardt, 2011). The government has a project to allow company information obtained through the Standard Business Reporting to be used for loan applications. However, it is not fully clear that the Reporting data will allow the creation of a credit register, and the authorities should look into the feasibility of this approach with a view to creating a proper credit register.



Figure 18. Bank lending constraints for small and medium-sized enterprises (SMEs) remain high







35 35 April to September 2015 Δ 30 \triangle 30 △ April to September 2013 25 25 20 20 \land 15 15 \triangle Λ 10 10 Δ 5 5 \wedge 0 0 DEU FIN AUT BEL ITA EMU ESP FRA PRT GRC IRL NI D

1. The values of net weighted percentages may vary between +100% (i.e. all banks tighten their lending terms and conditions/all banks record an increase in demand for loan) and -100% (i.e. all banks ease their lending terms and conditions/all banks record a decrease in demand for loan). The answers of the participating banks are weighted by their respective market share. SMEs are defined as having a net annual turnover of less than or equal to EUR 50 million.

2. SMEs are defined as having 0-249 employees. EMU: Euro area.

Source: DNB (2016), "Domestic MFI-statistics", Statistics DNB, De Nederlandsche Bank, January and ECB (2016), "Survey on Access to Finance of Enterprises", Statistical Data Warehouse, European Central Bank, January.

StatLink and http://dx.doi.org/10.1787/888933334276


Figure 19. Small bank loans are relatively expensive

Percentage points, average between December 2014 and November 2015¹

1. At floating rate and up to 1 year initial rate fixation. EMU: Euro area. Source: ECB (2016), "Monetary and Financial Statistics: Bank Interest Rates Statistics", Statistical Data Warehouse, European Central Bank, February.

StatLink and http://dx.doi.org/10.1787/888933334284

Deepening non-bank financing and increasing awareness about alternative financing providers would also support businesses financing and investment (OECD, 2014a). Bank lending is not always suitable for financing innovative start-ups, young firms and SMEs with growth ambitions, due to the high risks involved, while expanding equity financing would support growth (Cournède and Denk, 2015). Alternative financing instruments are generally available, although some markets can be developed further. For example, high public involvement is still necessary to support the venture capital market, and venture funds are still mostly small, limiting their ability to support growing firms. Establishing a regulatory framework for new financing instruments such as crowd funding and credit unions would support the sustainable growth of these new markets. Since September 2015, a website supported by the Ministry of Economic Affairs helps entrepreneurs to understand the many types of financing that are available to them. Requiring banks to accompany a loan refusal with information on other financing options, as will be done in the United Kingdom, would further raise awareness and encourage SMEs to step up their search activity, which is needed as almost 70% of SMEs apply for a loan at only their own bank (GfK, 2014).

Key policy recommendations to enhance private investment

- Support the supply of rental housing by further limiting strict rent regulation in the private market.
- Ensure stronger investment in renewable energy and energy efficiency by improving cost-effectiveness of existing instruments and possibly increasing their scale.
- Step up efforts to strengthen innovation performance by increasing direct public support for R&D.
- Increase competition in the market for SME loans by considering the creation of a credit register for companies, based on standard reporting data if possible.

Boosting skills for all

Strong and adequate skills are essential to support productivity and employment, and to make growth more inclusive. The results of the OECD Programme for the International Assessment of Adult Competencies (PIAAC) show that adults aged 16 to 24 have among the highest cognitive skills in the OECD (OECD, 2013a). Dutch adults aged between 16 and 65 also have above-average skills in the OECD, with almost 20% reaching the highest levels of proficiency in literacy and numeracy, and another 40% are at the mid-level.

Despite this good performance, improving skills of some groups is a very important challenge. First-generation immigrants and those with less than upper secondary education have literacy skill levels which are significantly lower than those of natives and tertiary education graduates (Figure 20). As some countries focus their immigration policies on skills of new migrants, this reduces comparability, but second-generation immigrants also have lower proficiency levels and are the only group with a score below the OECD PIAAC average, which is an important challenge for education and skill policies. Literacy proficiency of youth is significantly higher than that of the old, who also have lower skills relative to peers in top OECD performers.

Figure 20. Literacy skills of immigrants, less educated and the old lag behind other groups and peers



Literacy score-point by socio-demographic groups¹

The estimates show the means for each socio-demographic group. Youth: 16-24 year-olds; Old: 55-65 year-olds; Natives: native-born
and native language; First-generation immigrants: foreign-born and foreign language; Second-generation immigrants: native-born
and foreign language; More educated: tertiary education; Less educated: less than upper secondary education; More educated parents:
at least one parent attained tertiary education; Less educated parents: neither parent attained upper secondary education.
22 OECD countries participated in the OECD Programme for the International Assessment of Adult Competencies (PIAAC).
Source: OECD (2013), OECD Skills Outlook 2013: First Results from the Survey of Adult Skills.

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The Netherlands has been successful in rising qualification levels of its population over time, but recent and expected trends in skill demand require continuous improvement, notably to prepare for the emergence of new activities and sectors. In 2025, 45% of jobs could require higher skills in the Netherlands, against 35% now (CEDEFOP, 2015). The Dutch labour market has been subject to a growing polarisation, although its magnitude is smaller than in other countries (Van den Berge and ter Weel, 2015). Based on recent trends, demand could remain vibrant for occupations performing abstract tasks, and also, although to a lesser extent, for occupations accomplishing manual tasks that are non-routine (i.e. requiring adaptability). Both expanded before the global downturn and have been somewhat resilient since then (Figure 21). Conversely, occupations mainly relying on routine tasks showed the weakest growth before 2008 and have been heavily hit by the crisis (Figure 21), and demand for them could fall further, with some of associated tasks being replaced by technology or outsourced to countries with cheaper labour. However, the polarisation of the labour market is unlikely to continue indefinitely, with some middle-skilled jobs that combine job-specific and generic skills being likely to persist in the coming decades (Autor, 2015).



Figure 21. **Changing demand for skills has led to a polarisation in job tasks** Average annual change in total employment in the Netherlands by occupation categories requiring different tasks,

Source: Eurostat (2015), Employment and unemployment (Labour Force Survey) (database), October.

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There is scope to use existing skills more effectively (Figure 22). Nearly 45% of employees are mismatched either because of inadequate skills, qualifications and/or field of study. This seems high in absolute terms but is in fact small relative to other countries (OECD, 2015g), and labour market mismatch can be temporary as it takes time to find a suitable job. However, according to one estimate, reducing skill mismatches could raise aggregate productivity by around 4% (Adalet McGowan et al., 2015). Owing to tight labour market regulations of permanent contracts workers do not use and develop the full potential of their skills and labour market mobility of older workers is low, which may hamper the reallocation of their skills to the most productive uses.

^{1.} Refers to population aged between 15 and 64. Abstract tasks refer to problem-solving, intuition, persuasion and creativity. Occupations attached to abstract tasks include managers, professionals, technicians and associate professionals. Routine manual tasks refer to well-understood procedures such as book-keeping, clerical and administrative work, repetitive production or monitoring. Occupations attached to routine tasks include clerical support workers, craft and related trades workers and plant and machine operators and assemblers. Although plant and machine operators and assemblers also include occupations such as drivers that should be classified as non-routine manual occupations, it is classified under routine manual occupations due to lack of data at 2-digit levels. Non-routine manual tasks refer to those requiring adaptability, visual and language recognition, and personal interactions. Occupations attached to non-routine tasks include service and sales workers. Occupations such as skilled agricultural, forestry and fishery workers, elementary occupations, armed forces occupations and those with no responses are not included. There is a structural break in the data due to change in classification in 2010/11. ISCO 08 classification 1-digit level.





 The following tasks are used to construct the measure of numeracy use: calculating prices, costs or budgets; use of fractions, decimals or percentages; use of calculators; preparing graphs or tables; use of algebra or formulas; use of advanced math or statistics (calculus, trigonometry, regressions). For each task, a value of 1 indicates that the task is never carried out at work; a value of 2 indicates that it is carried out less than once a month; a value of 3 indicates that it is carried out less than once a week but at least once a month; a value of 4 indicates that it is carried out at least once a week but not every day; and a value of 5 indicates that it is carried out every day. Data for Belgium refers to Flanders. Data for the United Kingdom refer to England and Northern Ireland.
 Source: OECD (2015), OECD Employment Outlook 2015.

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Developing skills at school

Early childhood education and care (ECEC) increases academic achievement later (OECD, 2014g). Nearly all children participate in ECEC from age 4 at the latest. However, there remains scope for improving the pedagogical and educational quality of ECEC before age 4, which is a key priority (OECD, 2016). Moving towards an integrated system of pre-schools and childcare with a unified program would support quality and equity, and facilitate children's transition into primary education. Better ECEC would also help disadvantaged children to close the gap with the others, and would help immigrant children to improve language proficiency, in particular second-generation immigrants. As a result, skill gaps for immigrant students could narrow. Extending the opening hours of ECEC facilities would also expand the possibilities for those who care for children at home, who are overwhelmingly women, to work full time (Figure 7, Panel B).

The quality of compulsory education is good. The 2012 Programme for International Student Assessment (PISA) test places the mean performance of Dutch students among the top ten OECD countries in reading and science, and in the top five in mathematics (OECD, 2013b). Efforts to make the education system more equitable include social mixing in schools, lower average student-teacher ratios in disadvantaged relative to advantaged schools, and additional funds for disadvantaged schools.

There are shortages of well-qualified secondary school teachers. The proportion of teachers with university (Master) degree is just below 15% in disadvantaged schools as compared to 50% in advantaged schools, which is one of the largest gaps in the OECD (OECD, 2013b). The government has been working to improve teacher education and employment conditions (European Commission, 2015c), which is welcome and should

continue. In particular, further improving the career structure of teachers by providing them greater opportunities for personal development and career advancement is important (Nusche et al., 2014; OECD, 2016). Teachers are less well paid compared to the OECD average, although the maximum possible salary is one of the highest in the OECD (OECD, 2014h). The authorities could consider raising wages of teachers who upgrade their skills. Wages increase with experience, but they are not differentiated according to the type of school (Bonhomme et al., 2012). Training teachers to work specifically with students with disadvantaged backgrounds and reflecting such skills in their wages would help to attract more qualified teachers, in particular to disadvantaged schools. School boards, which are allowed to differentiate teachers' wages, could play an instrumental role in this respect.

Increasing student mobility between tracks and raising minimum educational standards would enhance student performance more widely. Tracking and streaming of students at age of 12 used to be based on the advice of the primary school and on a comprehensive test (Cito test) (OECD, 2015h), but the school's opinion based on teacher's qualitative assessment has recently taken precedence over the test results. Early tracking is positive for talented pupils. However, selection weakens performance of students assigned to follow inadequate tracks, especially if subsequent mobility between tracks is not good (OECD, 2016). Ensuring high minimum curricular standards in all tracks, corroborated by regular performance assessment (such as the partially implemented *Rekentoets* test to ensure basic knowledge in mathematics at the end of high school), would improve skills. In parallel, greater curriculum alignment and differentiated teaching would support upward mobility between secondary tracks, helping to shift students to more appropriate tracks (OECD, 2016).

Vocational education and training (VET) is well established partly because of early tracking. The performance of vocational education is good according to the PIAAC survey, with mean proficiency scores above the average of countries that participated in the survey. However, the performance gap to general upper secondary education for graduates aged 16 to 29 is the highest for numeracy proficiency among OECD countries with PIAAC results, and the second-highest for literacy proficiency (after Germany). Moreover, VET graduates at or below the 25th percentile are not able to understand and respond to dense and lengthy texts, and to process less explicit mathematical information (i.e. they are at or below mid-level and 5% score at the lowest competence level). By contrast, young Dutch adults with the same position in the skill distribution, but who have completed a programme with general orientation, do not face similar problems (OECD, 2013a). Stronger emphasis on the development of generic skills in vocational tracks, without undermining the development of professional skills, would allow greater mobility across jobs over workers' professional career. Also, as technological progress is likely to continue to raise demand for more complex skills, the Netherlands should strengthen the quality and the range of postsecondary qualifications within the VET system, currently provided in the form of short private courses that lack visibility (OECD, 2014i). The authorities have been making progress in this direction, notably by developing a system of certifications.

Over the last twenty years, tertiary education has expanded considerably giving solid foundations to the build-up of skills, but stronger emphasis is needed on the development of non-cognitive skills (such as collaboration, communication or creativity). Results of the PIAAC survey for Dutch workers aged 16-29 suggest that they use their problem-solving skills, as well as co-operation, self-organisation and learning at work less frequently than their peers in other OECD countries (OECD, 2013a). The authorities have recently published a strategic agenda for higher education and research over the next decade, in which they acknowledge that the current system is too focused on the acquisition of knowledge. Recent introduction of a new student loan system should release resources to explore ways in developing courses that would encourage graduates to combine their skills more productively. Boosting the supply of science and engineering skills, which until recently has been among the weakest in the OECD, is another priority and the authorities have launched a range of welcome measures with universities and businesses to address it.

Using skills more effectively at work

Temporary contracts are common in the Netherlands, both for prime-age workers and especially for the young (Figure 23). While temporary contracts can be a stepping-stone to permanent contracts, less than a fifth of Dutch workers on temporary contracts in 2008 moved on a full-time permanent contract three years later (Figure 24). This was the lowest transition rate in the OECD, although it could partly be explained by the high incidence of part-time work in the Netherlands and weak growth prospects of the Dutch economy



Figure 23. Temporary employment is common in the Netherlands

Temporary employment as a percentage of total employment, $2014^1\,$



^{1. 2013} for Australia.

Source: OECD (2015), OECD Employment and Labour Market Statistics (database), November.

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Figure 24. Few temporary workers move to permanent full-time jobs

Percentage of temporary employees in 2008 that were employed as full-time permanent employees in 2011¹

for Ireland. Source: OECD (2014), OECD Employment Outlook 2014.

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in 2011. Temporary contracts lead to a less intensive use of cognitive skills than do permanent contracts (OECD, 2015i), and in the Netherlands this difference is relatively high, in particular for the use of reading, writing and ICT skills. Temporary contracts also limit participation in employer-sponsored training, and many such contracts are associated with low incomes (Figure 13, Panel B).

In July 2015, employment protection legislation was reformed to increase the protection of employees on temporary contracts and to reduce the protection of permanent contracts. The duration of consecutive temporary contracts has been shortened from 3 to 2 years and the period between two consecutive contracts extended from 3 to 6 months. Regarding permanent contracts, the government has capped severance payments (at EUR 75 000 or a year's salary, whichever is higher) and linked them to tenure rather than age. Further narrowing the difference between the two types of employment by lowering the cap on severance payments even more and ensuring the dismissal system works efficiently could make the transition from temporary to permanent work more common, and more people on permanent contracts could increase on-the-job learning and access to training and, thereby, productivity.

Strengthening recognition of existing skills, and providing information about current and expected demand for skills would improve the efficiency of their use. Around 35% of workers are working in a field that they are not formally trained in (Montt, 2015). Maintaining strong anticipation systems of future vacancies and supplying students with comprehensive information to make informed choices would help to reduce saturation in some fields (Quintini, 2011), and the Netherlands has developed high-quality databases which could be made available more widely. In parallel, encouraging formal recognition by employers that some skills can be used across fields would promote skill transferability. Better recognition of foreign qualifications would decrease related mismatches among first-generation immigrants (OECD, 2014j) and the Netherlands has recently set up a one-stop shop for that purpose, which is welcome. Adult learning is well developed in the Netherlands. Overall participation in adult learning is among the highest in the OECD, especially for young employees with high proficiency levels (OECD, 2014h). But training courses are short and provide training within the sector where the person works, which might limit cross-sectoral mobility. More training should be directed to workers who could face the greatest difficulties to adapt throughout their working life, including older workers, and people with low educational attainment and skills. Supporting older workers' skills through lifelong learning would ensure a better alignment of their wages and productivity, improving skill allocation. Strengthening lifelong learning for disadvantaged workers would require increasing public support for employers to provide training, and promoting cooperation between the education system and the business sector especially in tertiary education. Since July 2015, the civil code requests an employer to provide training for the current job, the continuation of employment contract or when the worker is made redundant. An employer can subtract incurred training costs from the dismissal compensation of a redundant worker, but only if the latter agrees on this and the training has broadened skills beyond what is needed for the current job.

Raising entrepreneurial skills would support alternative forms of employment and increase the incidence of fast-growing businesses. For 15% of adults self-employment is difficult owing to a lack of relevant entrepreneurship skills, almost twice as much as in the European Union (European Commission, 2013). Expanding targeted training programmes, such as the "Work for Yourself" scheme in Amsterdam, would help to start-up businesses. Creating online stand-alone programmes through web-based platforms would also be a flexible way to deliver training at low cost. The effectiveness of entrepreneurship education could be improved as the take-up rate of specific courses is one of the highest in the European Union, and the authorities plan to scale up their provision further, but so far the percentage of adults reporting that school education equipped them with competences necessary for running a business has been only about average (European Commission, 2013). Using experienced entrepreneurs for peer-to-peer learning – involving counselling, coaching and mentoring – would foster business development (OECD, 2014k).

Acquiring skills through work

A large part of learning is informal and done "on the job" once initial formal education ends (Figure 25), and could represent as much as around 95% of learning according to recent studies (Borghans et al., 2014), which highlights the importance of finding employment for skill development. Although the employment rate is high in the Netherlands, there is scope to increase it more, in particular for youth, immigrants and people with health problems.

At just below 10%, the proportion of those aged 15-29 who are neither in employment nor in education or training (NEET) is lower than the OECD average of 15%, but higher than in bestperforming Luxembourg (around 5%). Around 60% of Dutch NEETs are inactive and do not seek employment, against 55% for the OECD average, and their skills depreciate quickly relative to those that receive training (OECD, 2015i). Those who participated in education or training in the 12 months prior to the PIAAC survey had significantly higher literacy skills than those who did not, and this gap was larger than in other OECD countries (Figure 26). Therefore, access to social benefits should continue to be made conditional on active job-search, and on participation in further education and training (OECD, 2015i). The type of obligation should depend on an assessment of individuals' skills and specific labour market barriers.



Figure 25. Informal on-the-job learning is dominant after the age of 25

Average hours spent per day¹ on learning by age, 2000

1. Including all days (i.e. weekends, holidays) of the year.

Source: Lex Borghans (2007), "Zonde van de tijd; Leren in Nederland vanuit een economisch perspectief" (Pity of the time: Learning in the Netherlands from an economic perspective), TPEdigitaal 1(1), 2007, pp. 95-118.

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Figure 26. Skills of young NEETs are responsive to training

Gap between average literacy skill scores of NEETs aged 16-29 year-olds who did and did not participate in education or training in the 12 months prior to the survey, 2012¹

 NEET: not in employment, education or training. Data for Belgium refers to Flanders. Data for the United Kingdom refer to England and Northern Ireland. The OECD aggregate is calculated as the unweighted average of the data shown.
 Source: OECD (2015), OECD Skills Outlook 2015: Youth, Skills and Employability.

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The unemployment benefit system has been reformed to sharpen work incentives, although there could be trade-offs between swifter job market integration and the quality of matches between skills and jobs. The duration of publicly funded unemployment benefits is to be gradually cut from 38 to 24 months between January 2016 and July 2019.

The unemployed have had to accept any job offer after 6 months (instead of 12) since July 2015, including below their professional level (or else they risk receiving lower unemployment benefits), which may increase mismatch, resulting in lower productivity. The 6 month period should be suspended when unemployed are on training. Also, older workers over the age of 60 and who become unemployed can benefit, until 2020, from an income allowance (once the regular unemployment benefit insurance has expired) which can be extended to retirement age. The allowance should be coupled with activation policies to make re-entry to work a credible option and with training linked to skills needed in a specific job (OECD, 2014c).

The Netherlands has started important reforms to digitalise public employment services (PES), and to devolve greater responsibilities to municipalities for benefit provision and labour market integration. Municipalities need to have the capacity to get people who have become detached from the labour market back to work. In 2012, the PES was involved in finding a job only in about 5% of cases (against an average of nearly 10% in the OECD) and its services were used by half of the unemployed (against by two-thirds in other OECD countries), despite spending around 0.4% of GDP more on labour market programmes and PES administration than in the OECD (OECD, 2015j). In parallel, the number of job seekers per PES staff member was relatively high compared to other OECD countries, estimated at 125 in 2011, against between 20 and 55 in the United Kingdom, Denmark, Belgium, Austria or Germany (OECD, 2014l). However, the unemployment rate has increased significantly since then (Figure 7, Panel A) and, between 2011 and 2015, the budget of the PES was halved as a result of fiscal consolidation (OECD, 2015j).

Currently, re-integration services are not provided in the first three months of unemployment insurance benefits, which saves costs because many of those who are recently unemployed find jobs anyway, but also creates risks of skill depreciation and reduced employability for workers, in particular those who turn out to have poor job prospects. Only 10% of most disadvantaged unemployed can benefit from intensive support from month four onwards (OECD, 2015j). Nevertheless, retraining possibilities have been stepped up to improve job transition for the unemployed since March 2015, which is welcome. The experience of OECD countries suggests that best-practice PES include jobsearch verification, early and high-intensity personalised counselling interventions, programmes developing work experience and labour market training for long-term unemployed, liaising with employers to both fill vacancies and improve the matching of jobs with skills, and performance management and evaluation of instruments to ensure that PES interventions are cost effective (OECD, 2015j).

Further policy steps are needed to reduce the risk that illness will lead to withdrawal from the labour force and to reduce disability caseload. Employers have strong financial incentives to prevent sickness absences, as they are obliged to pay a sick leave at 70% of the salary for two years (often topped up to 100% in the first year). The introduction of a collective insurance for the second year, currently under discussion, should lower this incentive, but on the other hand it should support the development of businesses, in particular of those with no employees. On the beneficiary side, lowering the initial replacement rate and then phasing it out over time would ensure the right balance between income security during sickness absence and return-to-work incentives. After sick leave, however, people can apply for disability benefits, and they often never get off that benefit. Early interventions, for instance consultations with occupational health care providers (OECD, 2014m) could reduce sickness leave further. The authorities have started to reassess work capacity of 60 000 young people, and if they can work their disability benefits will be reduced to raise work incentives. A more generic reassessment of the eligibility to disability benefits should be considered, especially for those over 50 as re-entry to work for this group is limited.

Policy interventions for first- and second-generation immigrants would help to bridge a large gap in skills relative to natives. While general education policies are key for secondgeneration immigrants, targeted labour market measures and other policies (language training, recognition of foreign qualifications, etc.) are necessary in regard to first-generation immigrants. Immigrants are overrepresented among the low-educated working-age population, whereas the reverse is true for the highly educated. The results of the PIAAC and PISA surveys also show a wide skill gap between foreign- and native-born adults (Figures 27 and 28). Smaller gaps in some countries may partly reflect immigrant selection systems based on educational attainment (Canada or Australia) and immigrants to some countries may have a better prior knowledge of language. Nevertheless, a gap in PISA scores exists between natives and second-generation immigrants (Figure 28, Panel B). Poor skills help to explain one of the largest differences in employment and participation rates between immigrants and native-born in the Netherlands relative to other OECD countries (Figure 29). Developing work schemes that combine work experience - supported by state-financed work placements and/or wage subsidies - on-the-job training and language courses would be an effective policy instrument to help to upgrade the skill set of first-generation immigrants (OECD, 2014j).



Figure 27. Natives have stronger information-processing skills than foreign-born adults

Mean score-point differences between native-born and native language and foreign-born and foreign language adults, 2012¹

 Only statistically significant differences are shown. The differences between the two categories are adjusted for differences associated with all of the following variables: age, gender, education, socio-economic background, and type of occupation. Countries are ranked in ascending order of difference in numeracy scores (native-born and native language minus foreign-born and foreign language adults). Data for Belgium refers to Flanders. Data for the United Kingdom refer to England and Northern Ireland. Source: OECD (2013), OECD Skills Outlook 2013: First Results from the Survey of Adult Skills.

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Figure 28. Gap between native and second-generation immigrant students is important

Mean PISA score for mathematics, 2012¹



A. Mean PISA scores for mathematics by immigrant background²

B. Difference in the mean PISA score for mathematics between students with non-immigrant and second-generation immigrant background³



1. First-generation immigrant students refer to foreign-born students. Second-generation immigrant students refer to native-born students with foreign born parents.

2. Countries are ranked in ascending order of the mean PISA scores of non-immigrant students.

3. After adjusting for students' socio-economic status. Differences for Canada, Ireland and New Zealand are not statistically significant. The larger the difference in mean PISA scores for mathematics between students with non-immigrant and second- generation immigrant background, the less successful second-generation students are in closing the gap with native students. Source: OECD (2013), PISA 2012 Database.

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Figure 29. Employment and participation rates of foreign-born are relatively low

Working-age population, 2014¹



B. Differences in employment and participation rates between foreign-born and native-born



1. 2013 for the OECD aggregate and Chile. 2011 for Israel. Working-age population refers to those aged between 15 and 64. Source: OECD (2015), "Employment, unemployment and participation rates by sex and place of birth", OECD International Migration Statistics (database), October.

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Key policy recommendations to boost skills for all

- Raise the quality of early childhood education and care further, and foster generic skills in vocational education and training. Further raise teachers' qualification, in particular in disadvantaged schools, and subsequently their wages.
- Enhance entrepreneurial skills by further evaluating the effectiveness of programmes in formal education, developing online stand-alone training programmes, and promoting peer-to-peer learning.
- Strengthen the provision of public employment services, and create programmes combining work experience and on-the-job training as well as language courses for immigrants.
- To ensure higher prevalence of permanent contracts while enhancing resource allocation in the economy, further ease employment protection legislation on permanent contracts by continuing to reduce the cap on severance payments.

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ANNEX

Progress in main structural reforms

This table reviews action taken on recommendations since the Economic Survey of April 2014.

Recommendations in previous Surveys	Actions taken and current assessment
A. Public finances	
Return to the initial fiscal framework by adhering to medium-term spending ceilings while allowing automatic stabilisers to play fully on the revenue side.	The improved economic situation allowed authorities to return to the former fiscal framework in 2015.
Continue to actively participate in international negotiations about coordinated action to combat tax base erosion and profit shifting (BEPS) of multinational enterprises and, within this international context, take appropriate domestic measures to support such action.	The Netherlands has provided strong support to the OECD/G20 BEPS project, and is planning a revision in tax advantages for innovation consistent with OECD recommendations.
B. Labour market and social policies	
Strengthen job-search incentives of the unemployed by decreasing unemployment benefits more dynamically throughout their duration, shortening their duration and reducing their ceiling.	Social partners agreed to share the costs of unemployment benefits during the third year of unemployment, which offsets the gradual reduction in the legal duration from three to two years that starts in 2016.
Focus on measures to increase activation and hours worked. Consider making active labour market policy spending more counter-cyclical. Relax employment protection legislation and cap severance pay.	Spending on public employment services was cut by half between 2011 and 2015, notably owing to a transition to e-services. Tax disincentives for second earners to work longer hours should be further reduced in 2016. Since July 2015, dismissal procedures of regular contracts has been somewhat simplified. The severance pay has been linked to seniority rather than age and reduced to EUR 75 000 or an annual salary, whichever is higher.
C. Pension funds	
Use a more stable long-term interest rate as the discount rate to assess pension funds' solvency. Make permanent the extension of the recovery period (from three to five years) for	Since July 2015, a new methodology is used to calculate the discount rate, which brings its value more in line with the current low level of interest rates. The recovery period was set to ten years (with an additional two years granted for
funds to restore solvency.	plans made in 2015) for both reserve and coverage deficits.
rights. Allow members to leave persistently underfunded or underperforming funds.	since danuary 2013, transfers of pension rights have no longer to be done within six months of starting a new job.
Strengthen the boards of the pension funds by increasing the representation of pensioners and sleepers and by making boards more professional.	Since July 2014, a new law allows pensioners to be become board members and to set up fully independent boards made of external professionals.
D. Transport system	
Implement a road pricing scheme.	No action taken.
Focus the tax-free commuting allowance on low-wage workers.	No action taken.
laxation of diesel should be raised to better reflect the relative environmental costs of fuels.	No action taken on the taxation of diesel, but the private motored vehicle and motorcycle purchase tax has become more dependent on CO_2 -emissions since January 2016, while the annual road tax for older diesel cars will increase in 2019.
Facilitate new entry in public transport.	No action taken regarding providers of public transports, but access to the payments systems has been broadened to new providers of payment services.
E. Housing market	
Focus social housing associations on providing affordable housing for low-income households. Give incentives to housing associations to sell off dwellings. Transfer associated excessive capital gains to the government. Reduce the maximum rent of social dwellings.	As of January 2017, social housing associations will have to separate social housing provision from their commercial activities administratively and/or legally. The rent control threshold will be frozen for three years since January 2016.
Continue to improve targeting of social housing to low-income households through means-tested rent increases and ease rent regulations in the private rental market by increasing the role of property's value in setting maximum rents, freeing rents in new constructions and deregulating rents for new contracts in existing dwellings.	Since January 2016, contracts for social housing can be made for a fixed term, and since October 2015 the property value is determining 25% of a properties maximum rent.

Recommendations in previous Surveys	Actions taken and current assessment
F. Health and long-term care	
Further improve the risk-equalisation scheme to reduce insurers' incentives for risk selection, particularly in view of the government's intention to terminate ex post compensations before 2015.	Large variation of risk-equalisation among health insurers, which could point at risk selection, has prompted The Dutch Healthcare Authority to undertake an analysis in 2015.
Lift the current capacity constraints (<i>numerus fixus</i>) for medical schools and facilitate the recognition of foreign diplomas from outside Europe.	No action taken.
Allow for-profit hospitals to enter the hospital market. In addition, the orderly exit of bankrupt hospitals should be secured via measures to guarantee access to essential facilities.	Draft legislation allowing hospitals that meet certain (financial) requirements to pay out profits has stalled.
Health insurers should not receive more responsibility for purchasing care until they are given proper incentives for cost-efficiency. In the longer term, the decentralisation of home care to municipalities could be completed and institutional patients should directly choose their care provider to push institutions to compete on quality to attract patients.	The decentralisation of home care to municipalities took place in January 2015.
Keep the cash benefits scheme for home care but combine it with better screening and monitoring to avoid unintended use. To this end, a system of vouchers directly payable to professionals and topped up by co-payments should be envisaged.	No action taken to create a system of vouchers.
G. Improving the resilience of banks	
Encourage banks to further increase their capital adequacy ratios by issuing equity and retaining earnings.	The fiscal treatment of contingent convertible bonds to promote their use was adapted in December 2014.
Once the housing market starts to recover durably, accelerate the reduction of mortgage interest relief to increase incentives for amortisation of mortgages and further lower the maximum loan-to-value ratio significantly below 100%.	No action taken.
H. Unleashing SME dynamism	
Broaden access to academic research and increase the share of direct innovation grants to SMEs.	The authorities aim to make academic publications freely accessible, and an arrangement was found with a major publisher to broaden free access.
Consider converting the two-rate corporate income tax into a single rate tax system while not increasing the tax burden on SMEs and levelling the playing field between smaller and bigger companies by broadening the corporate income tax base.	No action taken.
Reduce the gap between social security contributions and coverage of own-account self-employed and employees and consider mutualising the costs of disability	No major action taken on the tax treatment of self-employed relative to employees, but there are discussions to introduce a collective insurance for the second year of

through a dedicated fund for SMEs.

ıу employee's sick leave.

Thematic chapters

Chapter 1

Enhancing private investment

Investment has rebounded during the recent economic revival, but, from a low level. The investment slump during the crisis was mostly caused by a fall in residential investment. However, business investment has been trending downwards since 1990, holding back capital stock accumulation and productivity. Raising residential investment is necessary to meet the growing demand, and in particular more private rental housing is needed as the current small stock, which reflects rental regulation and other housing policies, hampers the functioning of the housing market. Financing of owner-occupied housing can be made more resilient by stepping up measures taken after the crisis. Regarding business investment, further reinforcing the already good framework conditions would help to turn its cyclical upswing into a durably higher level. Meeting targets on R&D expenditure and renewable energy requires lifting investments in the related areas. Financing conditions, which are widely perceived as an important bottleneck, could be improved by stimulating competition in the banking sector and the development of alternative financing sources.

The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

The slump in residential investment is accompanied by long-term challenges for business investment

Investment has been recovering, but remains weak

Investment was hit hard by the recent crisis, but had already been weakening before. Until 2007, investment had been growing broadly in line with the overall economy (Figure 1.1, Panel A), but fell by almost 20% between 2008 and 2013, much more than the decline in gross domestic product (GDP). A similar contraction occurred in other advanced countries that simultaneously experienced subdued aggregate demand and a weak housing market (CPB, 2015a; IMF, 2015a; OECD, 2015a). Following the economic recovery in 2014, investment has started to strengthen, although it is still low relative to GDP.



Figure 1.1. Investment had already been weakening before it was hit by the crisis

Investment refers to total gross fixed capital formation. 4-quarter cumulative data for investment expressed as a percentage of GDP.
 In nominal terms. Investment refers to gross fixed capital formation. 4-quarter cumulative data.
 Source: OECD (2016), OECD Economic Outlook: Statistics and Projections (database), February.

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The slump in overall investment of recent years was mostly caused by the severe housing crisis (Figure 1.1, Panel B). For a long period, rising house prices had been sustained by low housing supply and a growing availability of mortgages with loan-to-value ratios of over 100% and no principal repayment until maturity, as discussed in Chapter 1 of the 2014 *Economic Survey* (OECD, 2014a). House prices were further supported by a generous tax treatment of mortgage debt and policies that resulted in a large proportion of the housing stock being used for social housing, as discussed in Chapter 4 of the 2010 *Economic Survey* (OECD, 2010). When the banking sector and the economy were hit by the crisis in 2007-08, house prices followed with a lag, and the downturn was aggravated by uncertainty regarding reforms of the mortgage debt relief. These reforms were contemplated by the authorities for several years and were finally introduced, although very gradually, in January 2013. By the end of that year, nominal house prices had fallen by more than 20%. The depressed housing market weighed on residential investment, which as a share of GDP almost halved during 2008-13.

Despite the rapid house price increases before 2007, the pre-crisis period was not characterized by overinvestment in housing, as was the case in several other European countries that experienced overheating in house prices. Residential investment had been rather stable during the preceding 10 years, hovering between 5.5% and 6.0% of GDP, and the annual additions to the housing stock were broadly in line with demographic developments (Figure 1.2, Panel A). The 40% drop in new construction since 2008 is large given the fall in house prices (Figure 1.2, Panel B), and preliminary numbers indicate that construction rebounded in 2015 on the back of the ongoing housing market recovery and the resumption of economic growth. However, the rebound in new construction has not been large enough to be the main driver of the growth in housing investment, which instead seems to have been driven by housing transactions, similar to investment in commercial real estate having been due to land transactions (Figure 1.3, Panel C). Unfortunately, no data on the various components of residential investment are available, as opposed to, for example, for the United Kingdom (Bank of England, 2015).

Business investment had slowed down during the early 2000s, but it held up relatively well during the crisis (Figure 1.1, Panel C). It has been relatively volatile though, declining in about half of the quarters since 2007. To a large extent, the overall pattern of business investment reflected developments in overall economic activity, as periods of subdued investment broadly coincided with the double-dip in GDP of 2008-09 and 2012-13. During the last decades, real GDP growth of 1% was associated with a 2.3% increase in business investment, which is somewhat higher than the 1.7% found for a group of OECD countries (Lewis et al., 2014), and investment indeed strengthened considerably just shortly after the resumption of economic growth.

Net investment has slowed down as a changing composition of the capital stock has raised replacement needs. The capital stock is depreciating at a rate of 5.5%, up from around 3.2% two decades ago. As real gross fixed capital formation has more or less stalled, while a larger share is used for replacements, the resulting plunge in net investment has caused the growth rate of the productive capital stock to fall to one-third of its long-term pre-crisis average (Figure 1.3, Panel A). The slowdown in capital per worker has been an important reason for the lower trend productivity growth during the crisis (Figure 1.3, Panel B; OECD, 2015b). Excess production capacity and muted growth prospects have been weighing on companies' investment decisions in recent years, but as the economy is now on a firmer footing, stronger net investments would support future productivity growth.





C. Land transactions have recently been driving investment in commercial real estate Year-on-year percentage change with contributions²



1. House prices refer to price index of existing own homes that are located on Dutch territory and sold to individuals. 4-quarter moving average applied for newly built dwellings. There is a structural break in 2012 in the series for newly built dwellings.

2. In 2010 prices. 4-quarter moving average. Sum of contributions from investment in buildings other than dwellings, other structures and costs of ownership transfer of land exceed the growth rate of investment in buildings and structures other than dwellings.

Source: Statistics Netherlands (2016), "Households; key figures", in Population, Statline, February; Statistics Netherlands (2016), "Changes in the dwelling stock", in Construction and housing, Statline, February; Statistics Netherlands (2016), "House Price Index; existing, Netherlands", in Construction and housing, Statline, February; and Statistics Netherlands (2016), "Quarterly National Accounts, values", in Macroeconomics, Statline, February.

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Public investment held up relatively well during the crisis, and the quality of infrastructure is perceived as the world's fourth best (WEF, 2015). Public investment as share of GDP increased slightly in the first years of the crisis due to fiscal stimulus measures, but subsequent efforts to reduce the budget deficit caused a modest decline (Figure 1.1, Panel C). Estimations suggest that the public capital stock in 2014 accounted for about 55% of GDP, similar to the level in 1995 (Eijking and De Jong, 2015). The Netherlands thus fared better than the many other northern European countries, such as Germany, which experienced a decline, although it had not taken advantage of the low interest rates to expand the public capital stock. As the public infrastructure is in general good shape, this chapter focuses on private investment.



Figure 1.3. Lower capital-per-worker growth weighed on trend productivity

1. 2013 instead of 2014 for Australia, Belgium, Denmark, Finland, Germany, Ireland, Japan, New Zealand, Spain, Switzerland and the United Kingdom. Productive capital excludes investment in housing.

Source: OECD (2016), OECD Economic Outlook: Statistics and Projections (database), February and Ollivaud, P. and D. Turner (2015), "Re-Assessing the Contribution of Weak Investment to the Post-Crisis Slowdown in Trend Productivity and Potential Output Growth", OECD Economics Department Working Papers, forthcoming.

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Bolstering private investment to support the housing market and boost growth potential

Residential investment has to increase from the current low level to meet the growing demand for housing and the changing needs. Between now and 2030, the population is expected to grow by only around 4%, but due to shrinking household sizes the number of households should increase by nearly 10%, which amounts to 45 000 per year (CBS, 2015a). In particular, as the population ages, the number of single-person households is set to increase by close to 20% during 2015-30 and the demand of "single-floor" housing will expand even faster (EIB, 2015a). Another 20 000 to 25 000 new dwellings will be needed annually to replace part of the current housing stock (EIB, 2015a), and the recent hike in the inflow of refugees creates another need for housing and could require an additional 40 000 dwellings in 2016-20 (EIB, 2015a). However, since the 2008 fall in residential investment, the number of newly built houses has covered only two-thirds of the long-term need. Although new construction is now rising, additional investment is needed. Raising the low energy efficiency of the current housing stock (Buildings Performance Institute Europe, 2015) requires investment as well.

Demand for private rental housing is set to increase in particular. The high rent increases in recent years indicate that rentals in the middle and upper segment are relatively scarce. Moreover, demand is set to increase further as young people are postponing the acquisition of their first house and recent reforms aim to make social housing more expensive for households with relatively high incomes. Boosting private investment in rental housing is needed to mitigate further upward pressures on rents.

Turning to non-residential investment, an indication of the gap between current levels and long-term needs can be obtained from the steady-state investment-to-output ratio and the OECD long-term growth projections (OECD, 2014b and 2015a; Lewis et al., 2014). The estimated shortfall in non-residential investment is over 2% of potential GDP (Figure 1.4) and closing this gap would require lifting investment by 15%. The investment gap would be twice as large if structural reforms would raise trend output growth and a continuation of the upward trend in the depreciation rate would raise the depreciation rate, by 0.5 percentage point each.

The changing economic structure is not reducing investment needs. Between 2000 and 2014, the service sector was expanding, while the manufacturing sector was shrinking (Figure 1.5), as the Netherlands is increasingly specialising in services both before and after the actual production of goods (CBS, 2015b; Los et al., 2014). However, business services are making considerable investments in intangible assets, and as their overall capital intensity has been broadly comparable to that of manufacturing, in particular a decade ago, the shift has had only a small effect on the level of business investment. When including other economic activities, the changing economic structure affected investment only marginally. The lower overall investment intensity is thus almost entirely due to the changing investment intensities of individual economic activities. In particular, investment of business services as share of gross value added was about a third lower in 2014 than in 2000, and this was the main driver of the observed fall in investment in this period. Part of this decline is due to weaker business prospects during the crisis and increased difficulties to arrange financing; another part reflects falling prices of information and communications technology (ICT), although their overall impact is tempered by the small share of related investments.

Technological developments caused a rapid increase in ICT investment since 2000 (Figure 1.6, Panel A), which does reflect higher volumes and significant quality improvements. Investment in ICT is an import driver of productivity (Andrews and De Serres, 2012), and sectors in which ICT is intensively used are increasingly becoming the main driver of economic growth (Adalet McGowan et al., 2015). In a highly innovative



Figure 1.4. Gap between non-residential investment needs and actual investment is substantial

1. 2014 for Hungary and Poland. The OECD aggregate covers 30 countries and it is calculated as an unweighted average of the data shown. Source: OECD (2015), OECD Economic Outlook, Volume 2015 Issue 1, June and OECD (2016), OECD Economic Outlook: Statistics and Projections (database), February.

StatLink and http://dx.doi.org/10.1787/888933334254



Figure 1.5. Lower investment by business services has driven the decline in investment intensity

Arrows indicating the change between 2000 and 2014¹

1. Investment intensity refers to the share of non-residential investment in gross value added. Non-residential investment is calculated as total gross fixed capital formation (GFCF) minus GFCF in dwellings. Business services excluding real estate refers to all services activities (G-U) minus real estate activities (L), public administration and defence, compulsory social security (O), education (P) and human health and social work activities (O).

Source: OECD (2015), OECD National Accounts Statistics (database), November and Eurostat (2015), National Accounts (ESA 2010) (database), November

StatLink and http://dx.doi.org/10.1787/888933334425

Figure 1.6. Investment in ICT equipment has grown fast, but investment in intangibles has stalled¹



1. Data refer to business sector excluding real estate (i.e. all activities minus real estate activities (L), public administration and defence,

compulsory social security (O), education (P) and human health and social work activities (O). In volume. Investment refers to gross fixed capital formation. Intangible investment refers to intellectual property product that includes computer software and databases as well as research and development. ICT: information and communication technology. 2. 3. KBC assets consistent with the definition in the System of National Accounts (SNA) include: software, R&D, entertainment, literary and artistic originals, and mineral exploration. Other KBC assets include: design, new product developments in the financial industry, brands, firm-specific training and organisational capital.

Source: Eurostat (2016), National Accounts (ESA 2010) (database), February; OECD (2015), OECD Science, Technology and Industry Scoreboard 2015: Innovation for growth and society; and Corrado, C., J. Haskel, C. Jona-Lasinio and M. Iommi, (2012), "Intangible Capital and Growth in Advanced Economies: Measurement Methods and Comparative Results", Working Paper, June, (available at www.intan-invest.net).

StatLink and http://dx.doi.org/10.1787/888933334434

country as the Netherlands, investment in ICT has already a large impact: it accounts for nearly 45% of the contribution of capital to value added growth, despite only making up around 5% of total investment costs (CBS, 2015c).

Investment in intangibles has a large effect on growth as well, but has slowed down relative to other countries. Investment in intangibles, which according to the national accounts definition includes research and development (R&D) and software, has stalled relative to gross value added, and the Netherlands is no longer among the OECD countries with the highest ratios (Figure 1.6, Panel B). These investments, as well as those in other intangible assets such as advertising, marketing research and organisational capital, are important sources of growth (CBS, 2015c; Corrado et al., 2013; OECD, 2013a).

This chapter analyses how private investment can be enhanced in the Netherlands. First, boosting residential investment in the private rental sector would improve the housing market, as would raising efforts to make the financing of owner-occupied housing more sustainable. *Second*, further improving the conditions for business investment, especially investment in R&D and innovation and in new companies, and stepping up support for environmentally-friendly investments would support long-term and sustainable growth. *Third*, business investment can be reinforced by improving access to finance, in particular bank loans and alternative sources of finance.

Promoting private rental investment

The housing sector mainly consists of owner-occupied dwellings, with most of the remainder being social rental housing. The number of owner-occupied houses almost doubled during 1986-2012, raising its share from 45% to 60% of the total housing stock (Ministerie van Binnenlandse Zaken en Koninkrijksrelaties, 2013). The number of rental houses, however, remained broadly stable. Rental houses which according to a point-system should have rents below the rent control threshold (EUR 710.68 in 2015), are subject to rent regulation which limits both the maximum rent and annual rent increases. Around 35% of all households live in rental houses with regulated rents, which is by far the highest share among OECD countries (Andrews et al., 2011). Over 80% of regulated rentals concerns social housing owned by corporations as the private rental sector is small, accounting for 20-25% of rental dwellings and 10% of all dwellings.

Spending on housing has increased since the outbreak of the crisis, but remains moderate compared to other OECD countries (Figure 1.7). Subsidies for low-income earners, rent controls and generous tax advantages for mortgage interest hold housing costs low. However, the unregulated rental market is relatively expensive as this is the only tenure without public support. Moreover, demand for unregulated rentals outstrips supply, causing rents to increase in cities in particular. Demand is even set to increase further as recent reforms for social housing allows for larger rent increases for higher-income earners, although so far the effects have been limited, and for fixed-term contracts after which a tenant's qualification needs to be reassessed. In addition, the reduction of mortgage interest relief and tighter loan-to-value requirements force first-time buyers to wait while saving for a down payment.

Bolstering investment in the private rental market

Housing policies contributed to underinvestment in the private rental sector. Lowincome earners can benefit from stringent rent regulation applying to those social and private dwellings, which have monthly rents below the rent control threshold. They have



Figure 1.7. Household spending on housing has increased, but remains moderate

As a percentage of gross adjusted disposable income of households¹

 In nominal terms. Disposable income adjusted for social transfers in kind. 2013 instead of 2014 for Australia, France, Iceland, Mexico, the OECD aggregate Poland, Spain and the United States. Spending on housing refers to actual rentals for housing, imputed rentals for housing and maintenance and repair of the dwelling. For Australia and the United States spending on housing excludes maintenance and repair of the dwelling. The OECD aggregate covers 25 countries and it is calculated as an unweighted average of the data shown.
 Source: OECD (2016), OECD National Accounts (database), February.

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few incentives to leave once their incomes rise. Higher-income earners are supported in becoming home-owners by tax advantages that are larger for higher levels of income and mortgage debt (RLI, 2015). The large subsidies for renting in the regulated market and for homeownership have crowded out investment in rental dwellings with monthly rents above the rent control threshold. In addition, rent regulation for private rentals below this threshold reduces returns for landlords, which limits private investment in this segment. In particular, rent controls lower the profitability, and hence the supply, of single-person housing as for almost all such dwellings the point-system results in a rent below the rent control threshold. Finally, the large tax benefits for home-owners also hamper the development of private rental housing, as prospective owners can anticipate the benefits and bid more for new building plots.

The small size of the unregulated rental sector limits the functioning of the housing market. The relative scarcity of unregulated rentals limits the options for the part of the population that is not willing or able to enter the owner-occupied market and that has no access to the social housing market, while other people, e.g. young people, singles and childless couples, could also be better served by a greater availability of unregulated rental dwellings (De Boer and Bitetti, 2014). In addition, the small unregulated rental market clogs the regulated housing sector, and thus contributes to the long waiting lists there, as people whose income or family situation no longer qualify them for social housing, cannot find new rental housing easily. Finally, renters typically have a higher residential mobility, and a larger unregulated rental sector would thus help to reduce traffic congestion and improve labour market outcomes (OECD, 2010).

Further limiting strict rent controls in the private rental sector would boost residential investment. Some recent reforms are already supporting the development of the private rental market, but they may not be sufficient to address the large needs. For example, since

October 2015, the house value partly determines the maximum initial rent, but the weight would need to be increased further to support the provision of unregulated dwellings in areas with high market demand, such as the main cities. Allowing rents for new tenants to better reflect market rates would increase financial incentives for private landlords to undertake investment and would thereby mitigate further upward pressures on rents. It would in particular support the provision of single-person housing, as due to the low rent control threshold these dwellings are currently almost necessarily subject to the strict rent regulation.

From 2017 onwards, corporations will have to administratively or legally separate commercial activities from the provision of social housing, which is welcome. Competition by the not-for-profit housing corporations limited the provision of rentals by private parties (OECD, 2010). The corporations often charge below-market rents, even for dwellings with rents above the rent control threshold, which makes it difficult for private investors to compete in the unregulated segment. Corporations also often get discounts when buying plots and can benefit from a state guarantee when borrowing. However, since 2012 corporations are no longer allowed to subsidise their commercial activities through measures intended as support for social housing. As a result, they have stepped up the sale of mostly larger dwellings. Although this reduced their presence in the unregulated rental market, the houses sold usually ended up in the owner-occupied sector and thus did not add much to the supply of private rentals. The separation of commercial and social activities should be done rigorously, and requiring corporations to divest their commercial branches would allow them to focus more on their core task.

Safeguarding sustainable residential investment to maintain an adequate housing stock

Authorities see sufficient scope for the construction of new housing in urban areas to meet growing demand, especially if some of the stringent local planning regulations were relaxed. Municipalities in the economic core (Randstad) are set to expand more rapidly than in the rest of the country. New constructions are subject to the Sustainable Urbanisation Procedure of 2012 (*Ladder voor duurzame verstedelijking*), which aims for an efficient use of the scarce space without being overly prescriptive, and both municipalities and investors have been involved making the procedure simpler and easier to apply. Housing construction in urban areas is picking up rapidly, especially in Amsterdam where it reached a height in 2015. The conversion of empty offices could potentially provide 25 000 additional housing units, which is about 5% of the demand until 2025 (Deloitte, 2015).

Three-quarters of available building plots are owned by municipalities, following large investments in land, partially driven by speculation motives, in the years before the housing market bust. When the book value of land had to be revised downwards subsequently, municipalities incurred losses, at least notional, that so far amount to EUR 4 billion. A revision of accounting rules in 2016 aims to reduce land speculation by municipalities, which is welcome, although the short-term effect on the provision of building plots has to be monitored closely.

The financial sustainability of residential investment would be strengthened by accelerating the reduction of mortgage interest relief and lowering the maximum loan-to-value (LTV) ratios for new mortgages. The outstanding mortgage debt of Dutch households is very high in international comparison (OECD, 2014c; OECD, 2014a), and due to the crisis a quarter of households had outstanding mortgages above their house value in 2015

(Rabobank, 2015a). Since 2013, mortgage interest relief has been reduced very gradually, but the recovery of the housing market and the low interest rates provide favourable conditions for stepping up the pace. The government also decided to reduce the maximum LTV ratio by 1 percentage point per year until it reaches 100% in 2018. This increases the financial resilience of especially young buyers, makes banks less dependent on market funding and reduces the risk of boom-bust cycles (CPB, 2015b; DNB, 2015a). Nevertheless, the new limit would still be relatively high, as, for example, the typical LTV ratio for a first-time house buyer in the euro area was nearly 80% in 2007. The gradual reduction of the LTV limit should therefore be continued beyond 2018 until the limit is 90%, as recommended by the Dutch Financial Stability Committee (Financieel Stabiliteitscomité, 2015), or even further (IMF, 2015b), especially if a further reduction in the tax relief for mortgages proves politically infeasible (CPB, 2015b).

Stepping up investment in energy efficiency improvements of dwellings would help to meet energy reduction targets. The Dutch housing stock provides ample room for energetic renovations (Meijer et al., 2010). Home-owners can apply for a subsidy or a loan with a low interest rate from the National Energy Fund to finance energy efficiency improvements, and improving isolation is supported by a lower value-added tax (VAT) rate. Following the 2013 Energy Agreement, subsidies exist for rental housing in the regulated sector, though, and landlords are in general allowed to raise the rent after the renovation. Increasing public support for energy enhancing investments in existing housing regardless of tenure and extending it to cover new construction that replaces old dwellings would help to reduce final energy consumption by the committed 1.5% per year and to reach the 2020 reduction target for greenhouse gas emissions. Positive economic effects could limit the budgetary costs (Ecofys, 2015), although the experience of other countries indicates that the subsidies need to be carefully designed to achieve planned reductions in energy use (OECD, 2015c).

Providing the right incentives for business investment

Strengthening the current rebound in business investment would support future potential growth. After a long period of subdued domestic demand, the economic revival has boosted investment recently. Further bolstering investment conditions, including the tax and regulatory framework, government support and access to finance, would help to turn the cyclical upswing into a durably higher level. Specific measures could stimulate investments in innovation, start-ups, clean energy and green growth.

Promoting investment in innovation and R&D

The Netherlands is a highly innovative country, but safeguarding its position requires to step-up investments. Expenditures on R&D, which besides investment in assets also covers wage costs, have increased from 1.7% of GDP in 2010 to 2.0% in 2013, but are still considerably below the target of 2.5% set for 2020, which itself is lower than the European Union (EU) average of 3.0%. Public expenditure has fallen between 2010 and 2013, and although as a percentage of GDP it remains above the EU average, peers such as most of the northerm European countries, have higher budgets relative to GDP. The proportion of business spending in total R&D expenditure is lower than in many other countries, which reflects that business investment in R&D is well below the OECD average, or just average when adjusted for the industrial structure (OECD, 2013b). Policies to support innovation and R&D combine specific generic policies with support for the most innovative sectors, the top sectors.

The top sector policy supports innovation, and hence competitiveness, by promoting entrepreneurship and co-ordination among businesses, government and knowledge institutes in the strongest economic sectors. Strengthening the diffusion of innovation from top sectors to the rest of the economy would boost growth, as in general companies at the frontier are experiencing much faster productivity growth than those further away (OECD, 2014d; Adalet McGowan et al., 2015). A welcome move in this direction is the programme "SME Innovation Promotion Regions and Top Sectors" (*MKB-Innovatiestimulering Regio en Topsectoren*, MIT) of 2015. This programme is funded by the central government and the regions and provides more than EUR 50 million in subsidies to stimulate innovation by small and medium-sized enterprises (SMEs) across provincial borders. Demand was much higher than the available budget, which suggests that strengthening the cross-regional policy dimension could also be useful. Doing so would also better align the top sector approach with the EU smart specialisation agenda, which emphasises the regional dimension of innovation (OECD, 2014e), provided that the efficacy of the support is not affected by a wider range of objectives.

Generic support for R&D is more concentrated on tax incentives, as opposed to direct funding, than in most other OECD countries (Figure 1.8; OECD, 2014f and OECD, 2015d), and the overall mix may excessively favour incumbents and be less suited for more risky and longer-term innovation activities. Tax incentives of the main programme, the Research and Development Promotion Act (Wet Bevordering Speur- en Ontwikkelingswerk, WBSO), are well designed, leading to a high take-up by SMEs and start-ups. The higher budget in 2016, which makes up for the discontinuation of a corporate income tax allowance for R&D, will be particularly beneficial for companies without profits. However, direct funding as share of GDP is well below that of peer countries, which leaves relatively little room for influencing the scope and ambition of innovation and the apparent need for parts of the Dutch business sector, and might not fully exploit the potential of co-operation between science and industry (OECD, 2014d). The reliance on tax incentives also risks tilting public support towards established companies. Stepping up support with a more specific focus, for example the recently announced EUR 130 million programme for healthcare innovation, could help to leverage private sector innovation in promising sectors and potentially "disruptive" technologies.

The planned changes in tax support for innovation activities are welcome, but questions about its impact remain. Innovation-related profits that qualify for the innovation box are taxed at 5% instead of the standard corporate tax rate of 25%, which is among the lowest rates in Europe, although the qualifying income matters as well for a full assessment of the tax systems' generosity (OECD, 2014d). However, it is in general not clear how effective innovation (or patent) boxes are in addressing market failures, and whether they represent value-for-money (OECD, 2015e). An innovation box does not necessarily foster experimentation and might even steer companies to particular types of research in order to reap the benefits as much as possible. Moreover, support typically goes to larger firms, including multinationals. The authorities plan a change in tax advantages consistent with OECD recommendations regarding Base Erosion and Profit Shifting (BEPS). Unfortunately, it is complicated to evaluate the effectiveness of innovation boxes, but an international comparison indicates that their impact is low, both compared to R&D tax incentives and patent boxes in other countries (CPB, 2014).



Figure 1.8. Support for business R&D is skewed towards tax incentives

As a percentage of GDP, 2013¹

1. 2012 for Belgium, Ireland, Israel, Spain, Switzerland and the United States. 2011 for Australia, Iceland and Mexico. Estonia, Germany, Mexico, New Zealand, Sweden and Switzerland did not provide information on expenditure-based research and development (R&D) tax incentives for 2013. For Israel, the R&D component of incentives cannot be identified separately at present. No data on the cost of expenditure-based R&D tax incentive support are available for Poland. Estimates do not cover sub-national and income-based R&D tax incentives and are limited to the business sector (excluding tax incentive support to individuals). Data refer to estimated initial revenue loss (foregone revenues) unless otherwise specified.

Source: OECD (2015), OECD Science, Technology and Industry Scoreboard 2015: Innovation for growth and society.
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Ensuring sufficient and coherent investment in ICT infrastructure is needed to boost innovation. For example, the penetration of standard broadband is high, but only 10% of broadband subscriptions in 2014 were for fibre connections, which is lower than the OECD average and much lower than the 70% in Korea and Japan (OECD, 2015f). More investment is needed to maintain the high standard of public ICT infrastructure for education and research institutes. Recently, the top sectors stepped up coordination of ICT infrastructure development, and further strengthening such an integral approach would allow for a better focus and a more adequate reaction to new developments and challenges (AWTI, 2015).

Supporting investments of start-ups and SMEs with growth ambitions

SMEs account for about half of total business investment, the same as large firms (Figure 1.9). SMEs are less capital intensive than large firms, though, as reflected by an investment share that is below their labour share. SMEs and large companies allocate a similar percentage of their investments to intangibles. As in other OECD countries, the SME sector has become less dynamic in recent years (Criscuolo et al., 2014), although the vast majority of existing Dutch SMEs are not planning to grow, the share of fast-growing SMEs is high (OECD, 2015g). Supporting start-ups and young SMEs is important as they are quickly reacting to new opportunities and technologies. Facilitating SMEs with growth potential to invest and expand would also support economic growth.

Addressing regulatory and tax bottlenecks would help start-ups and attract financing for investment. A wide range of financial support is already available to support innovation by young firms and financing of young or fast-growing companies (see below). To identify bottlenecks for start-ups, the Ministry of Economic Affairs initiated the StartupDelta



Figure 1.9. SMEs and large firms each account for half of business investment

1. Small and medium-sized enterprises (SMEs) are defined as having 0-249 employees.

2. Data for investment refer to 2012.

Source: OECD (2016), "Structural business statistics ISIC Rev. 4", Structural and Demographic Business Statistics (database), February and Statistics Netherlands (2015), "Investeringen uitgesplitst naar bedrijfsgrootte conform totalen Nationale Rekeningen", May.
StatLink Tage http://dx.doi.org/10.1787/88893334457

initiative, where start-ups, investors, launching customers, governments and knowledge institutions work together to boost the start-up eco-system and connect it to other international start-up hubs. StartupDelta made several welcome recommendations to make the tax system friendlier for start-ups, in particular reducing income taxation for entrepreneurs by allowing those whose start-ups do not make profits to pay themselves a wage, making it fiscally more attractive for entrepreneurs to pay employees with options in the firm and introducing a more favourable treatment for providers of venture capital (StartupDelta, 2015).

Support for innovation that could lead to major breakthroughs should be complemented by an accommodative regulatory framework that allows for a quick adoption of new technologies. Many new and fast growing firms use new technologies and business models, and maintaining an accommodating regulatory stance is needed to provide sufficient space for innovation and to spur related investment. Societal and technological developments offer possibilities for companies, but overly restrictive regulation could risk smothering entrepreneurship. Current institutions that safeguard the public interest and quality can pose obstacles for new companies as they are based on incumbents (Camps, 2015; OECD, 2015e). Authorities are in general supportive of new initiatives and willing to adapt regulations. For example, the Ministry of Infrastructure and the Environment decided that taxis are no longer required to have a taxi meter or issue paper receipts, and is actively engaged in initiatives to develop self-driving cars. An example at the local level is the city of Amsterdam, where a violation of regulation by new businesses will not only result in a sanction, but also in a review of related regulation. However, adjustment can take a long time, which would call for making regulation more technology-neutral, for example by stipulating the public interest to be ensured, while allowing companies flexibility in deciding how to achieve this (Camps, 2015).
Stepping up investment in clean energy and green growth

Green innovation in the Netherlands risks falling behind. Less than 1% of the government budget on R&D was related to the environment in 2012-13, down from over 3% in the early 2000s (OECD, 2015c), while a further decline is projected (Van Steen, 2014). During 2010-13, the Netherlands fell from seventh to thirteenth place in the EU eco-Innovation Scoreboard (EIO, 2014). In only three of the nine top sectors is sustainability an integral part of planned innovation contracts (OECD, 2015c).

Investment in renewable energy has raised the share of renewables in gross final energy consumption, but meeting the official target could be challenging. Renewable energy sources accounted for 5.5% of energy consumption in 2014, up from 4.8% a year earlier. However, it remains one of the lowest in the EU, while the distance to the target for 2020, 14% for the Netherlands, is one of the largest (Figure 1.10). The official forecast indicates that the target will not be met (ECN, 2015).



Figure 1.10. Meeting the target for renewable energy is at risk

1. The EU28 aggregate refers to the European Union.

Source: Eurostat (2016), "Climate change and energy", in Europe 2020 Indicators, February.

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The National Energy Agreement of 2013 includes several measures to step up renewable energy production, while raising the target to 16% by 2023. It emphasises that further developing wind energy, which already accounts for almost half the renewable energy, is crucial. The Offshore Wind Energy Bill adopted in 2015 clears the way for more wind parks off the coast, and tenders for new parks will likely open in the first half of 2016. Plans for a large park to test new technologies were cancelled, but instead a smaller site that is integrated with a new park will be constructed. Co-firing biomass in coal-fired power stations would also help to reach the target, and is stimulated by the new Stimulering Duurzame Energieproductie (Renewable Energy Producers Subsidy, SDE+). Making subsidies available for projects abroad could be a cost-effective way to help meeting the target (Algemene Rekenkamer, 2015).

Investment in clean energy has been substantial during the past decade, but existing measures appear insufficient to reach the 1.5% annual savings of final energy consumption agreed under the energy agreement (OECD, 2015c). The Energy Investment Tax Allowance provides tax incentives for investment in energy-savings technologies and sustainable energy production, and green investment schemes provide for investment deductions and accelerated depreciation. Companies can also commit to implement energy efficiency plans in return for an exemption from energy taxes and this has led to significant energy savings. However, it is unclear whether taxing energy use would have provided better environmental outcomes (PBL, 2011), while the focus of the current renewable energy subsidy on low-cost and proven technologies could exclude more innovative technologies. Moreover, the budget for the support schemes has not been fully used due to several market barriers. Carrying out the evaluation of existing policy measures, planned for 2016, in a thorough, independent and transparent manner would provide a basis for improving the cost-efficiency of current instruments (OECD, 2015c).

A more active eco-innovation policy is needed to become a frontrunner again. As discussed earlier, a more balanced mix of tax incentives and direct public support for R&D would allow for a better targeting and steer funding to areas where green innovation will support Dutch competitiveness (OECD, 2015c). Carrying out eco-innovation support through the mainly demand-driven top sector approach also risks underinvestment in applied publicly-funded research, which creates a gap in the eco-innovation chain between basic research and product development. Tightening demand-side measures related to regulation, standards and consumer policies, and stepping up partnerships with the private sector, in particular frontrunner SMEs, would also support green innovation.

Further strengthening framework conditions for business investment

Raising the potential return on investments by further strengthening framework conditions would buttress the rebound of investment that followed the recovery of domestic demand. Business conditions are in general good, and the Netherlands is among the top five competitive economies worldwide (WEF, 2015). Corporate governance policies support investor confidence, investment and capital allocation, and the overall framework for the private sector is largely in line with the OECD Principles of Corporate Government, while corruption perceptions are among the lowest in the world (Transparency International, 2014).

Business regulation promotes strong competition and stimulates companies to innovate and operate efficiently, and only few barriers remain. According to the OECD Product Market Regulation (PMR) indicator, the Netherlands is the least restrictive among all OECD countries (Koske et al., 2015). This strong performance reflects the limited direct and indirect involvement of the government in business operations. In addition, it is relatively easy to start a business, and barriers to trade and investment are very low as well. Room for improvement remains, in particular with regard to public ownership and vertical integration in the electricity and gas sectors, entry barriers to road transport, legal services and accounting, and the regulation of shop opening hours, and reforms in these areas would strengthen framework conditions for investment. Other potential reforms to strengthen business conditions include lowering the costs of starting a business, getting construction permits, and registering property; accelerating connection to electricity; improving the quality of judicial processes when enforcing contracts and lowering related costs; and strengthening the protection of minority shareholders (World Bank, 2015). Bankruptcy legislation is among the most debtor-friendly systems, which supports investment of, among others, innovative firms by reducing the penalty of failure (Panteia, 2014). The costs of closing a business are limited compared to the estate's value. However, the relatively low level of creditor protection could hamper access to finance for young firms. Moreover, creditors' costs and uncertainty in case of a debt restructuring are further raised by the right of single creditors to block an arrangement. The revision of the Business Continuity Act currently under discussion would make the process more efficient by making out-of-court settlements binding if a majority of creditors agree, as is already the case in, for example, several other European countries.

The budget for maintaining the high quality infrastructure networks and undertaking new projects appears tight. Unlike many other OECD countries, fiscal consolidation did not lead to infrastructure investment shortfalls (OECD, 2015a), and public investment as share of GDP is above the EU average, although lower than in, for example, Finland and Sweden. In general, most infrastructure networks have broad coverage and do not require major extensions, but already 40% of the budget is spent on maintenance to keep infrastructure that was put in place some decades ago up-to-date, and this part of the budget will be a major driver of the required rise in spending, put by some estimates on 25% between now and 2040 (EIB, 2015a). Needs for new projects remain substantial though. For example, the economic recovery is increasingly leading to traffic jams, and in particular the access to cities and the mainports Rotterdam and Schiphol could become a bottleneck. However, budgetary space in the medium term is limited (Figure 1.11), and the projected budget for 2015-19 can only finance about half the projects that are currently being explored (EIB, 2015b). The foreseen budget does also not provide much room to act adaptively to challenges posed by a changing economic and spatial structure on existing infrastructure, and to opportunities stemming from new information technology. Hence, authorities should consider stepping up the budget for infrastructure, especially later on in the planning period, assuming that there is sufficient fiscal space.



Figure 1.11. Infrastructure budget has been almost fully allocated until 2028

EUR billion¹

1. Data refer to the aggregate of two funds, namely the Infrastructure and Delta funds. *Source:* Ministry of Infrastructure and the Environment.

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Despite the overall business friendly conditions and a high entrepreneurial spirit, birth rates of companies with employees are very low (OECD, 2015g). The churn rate, which reflects a country's degree of "creative destruction", is lowest among all OECD countries, and many firms do not have growth ambitions. Factors that limit business dynamics include stringent labour market regulations (OECD, 2014b), lack of the right skills (see Chapter 2), and perhaps high risk aversion of entrepreneurs. The importance of risk taking is widely recognised (Rutte, 2015), but cultural perceptions of failure might hamper entrepreneurship and only change slowly.

Expanding financing for SMEs

The crisis lowered companies' possibilities to finance investment from their own funds or to access external financing sources. During the crisis, the depressed business outlook reduced companies' appetite for investment, which was further constrained by their reduced financial health. Net operating profits as share of total assets remained low throughout the crisis, and dropped as recently as 2013, the last year for which data is available (Figure 1.12, Panel A). Lower profits made it more difficult to finance investments from own funds, while the reduced performance of companies also hampered their access to external finance. Although at first sight, the growing difference between corporate savings and investment suggests that companies have accumulated vast reserves, this is not the case as they steadily increased their investment abroad (Figure 1.12, Panel B). With the return of economic growth, profits have started to recover, as did investment appetite. During the first half of 2015, about 25% all companies looking for external financing were doing so to finance investments, up from 18% during the second half of 2014 (Panteia, 2015).



Figure 1.12. Corporate profitability has fallen and growth in corporate savings has stopped

1. Total economy except for financial service activities, except insurance and pension funding and activities of head offices management consultancy activities. Small and medium-sized enterprises (SMEs) are defined as having an annual turnover of less than EUR 50 million.

Source: Banque de France (2015), BACH (Bank for the Accounts of Companies Harmonised) (database), November; Statistics Netherlands (2016), "Current transactions by sectors", in Macroeconomics, Statline, February; and Mark de Haan (2014), "De dalende investeringsquote", in De Nederlandse economie 2013, Statistics Netherlands, September.

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Improving access to bank financing

Banks remain the dominant financing source for companies, although their share in companies' external financing has fallen to around 75% as large companies have been able to turn to market funding. For SMEs, considerable costs and their higher perceived riskiness often limits access to market funding, and they remain highly dependent on banks. The tax system provides incentives for debt-financing as interest payments are deductible from the corporate income tax base, while instead tax is levied over the return on equity investment (CPB, 2015c). Making equity investments more fiscally attractive from the viewpoint of both investors and companies would strengthen firms' balance sheets and support companies with high ambitions. The provision of equity would in particular benefit from making losses on venture capital tax deductible, as was the case before 2011.

Bank lending was hit hard during the crisis and the recovery of lending to SMEs is still hesitant. The volume of new loans fell sharply during the crisis (Figure 1.13, Panel A), and lending to remains weak (Figure 1.13, Panel B). Moreover, the availability of bank loans for SMEs is only slowly reviving (Figure 1.14). A thorough analysis of bank lending to SMEs is hampered by the lack of statistics. For example, data spanning a long period only differentiate between loans based on the loan amount instead of debtor size, SME-specific data have frequent changes in methodology which impede comparisons over time, and reporting across banks is not always harmonised. Improving reporting obligations would provide a more timely and reliable insight of SME bank financing (OECD, 2014a).





1. Excludes collateralised loans.

Lending by the three Dutch major banks to Dutch small and medium-sized enterprises (SMEs). SMEs consist of all privately owned companies and institutions which are involved in non-financial services or production of goods with the aim of making profit, and with a maximum turnover of EUR 50 million.

Source: DNB (2016), "Domestic MFI-statistics (monetary)", Statistics DNB, De Nederlandsche Bank, February.

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Public programmes have prevented a further contraction of bank lending, but their efficacy and scope can be improved (OECD, 2014a). The various public programmes help a wide range of companies to obtain mainly bank financing (Box 1.1). Support was intensified during the crisis and in July 2015 through the Additional Action Plan SME-financing. The microcredit programme Qredits, which was launched in 2009 together with banks, has broadened the scope of companies served. The programme offers microcredit



Figure 1.14. Bank lending constraints for small and medium-sized enterprises (SMEs) remain high









1. The values of net weighted percentages may vary between +100% (i.e. all banks tighten their lending terms and conditions/all banks record an increase in demand for loan) and -100% (i.e. all banks ease their lending terms and conditions/all banks record a decrease in demand for loan). The answers of the participating banks are weighted by their respective market share. SMEs are defined as having a net annual turnover of less than or equal to EUR 50 million.

2. SMEs are defined as having 0-249 employees. EMU: Euro area.

Source: DNB (2016), "Domestic MFI-statistics", Statistics DNB, De Nederlandsche Bank, January and ECB (2016), "Survey on Access to Finance of Enterprises", Statistical Data Warehouse, European Central Bank, January.

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Box 1.1. A wide range of public support programmes help companies obtain financing

Three general programmes help companies obtain financing through providing guarantees (Figure 1.15). Small and medium-sized enterprises (SMEs) can benefit from the long-standing SME Guarantee Scheme (*Borgstellingsregeling MKB*, *BMKB*) to obtain easier access to bank loans. The programme Guarantee for Financing Entrepreneurship (*Garantie Ondernemingsfinanciering*, GO facility) was launched in 2009 and targets mostly larger SMEs. Although conceived as a temporary measure, the GO facility was made permanent in 2012. Both schemes aim to improve the access to credit of healthy companies that face financing constraints. However, due to limited insights into the extent of credit rationing, it is unclear what share of the BMKB reaches the target group and how the scheme can be improved (Algemene Rekenkamer, 2015; CPB, 2015). Estimates for the GO facility suggest that the extended guarantee has been crucial in obtaining financing in around 50% of the cases (De Jong et al., 2014). Reaching a larger share of the target group would also require raising awareness among companies, as only few have heard of either guarantee scheme (Panteia, 2015). A third general programme, Qredits, was launched in 2009 to help small entrepreneurs obtain microcredit.



Figure 1.15. Public programs supported SMEs' access to credit during the crisis and beyond

Source: Kamp, H. (2015), Letter to parliament regarding government support for the financing of entrepreneurship.

In addition to the general programmes, there is specific support for innovation. Through the SME+ Innovation Fund (Innovatiefonds MKB+), an amount of EUR 500 million was available for the period 2012-15 in the form of a credit for innovation, co-investment for early-stage capital and a fund-of-funds. The Early Stage Financing (Vroege Fase Financiering) programme supports starters in assessing the potential of their business ideas and is in particular open to support the development of economic activities directly resulting from academic research. Around EUR 7 million was available for the second half of 2015. The Ministry of Economic Affairs has also stepped up guidance for SMEs that want to apply for Horizon2020 programme of the European Commission.

Source: Algemene Rekenkamer (2015), Resultaten verantwoordingsonderzoek 2014 Ministerie van Economische Zaken (Result of the accountability analysis 2014 Ministry of Economic Affairs); CPB (2015), Inzicht in the bmkb (Insight into the bmkb), CPB notitie; De Jong, J. H. Doornbos, H. Stoops. I. van den Berk and A. Ziegelaar (2014), Evaluatie garantiefaciliteit Ondernemingsfinanciering (GO): Eindrapport (Evaluation guarantee facility business financing (GO): Final report); and Panteia (2015), Financieringsmonitor 2015-1 Onderzoek naar de financiering van het Nederlandse bedrijfsleven (Financing monitor 2015-1: Analysis of Dutch private sector financing).

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to young companies that cannot fulfil the regular loan criteria of banks due to lack of collateral, for example. The lending ceiling was raised twice and now stands at EUR 250 000 to also cater for SMEs whose applications for bank loans failed, although the number of larger loans remains low. Lending has increased rapidly from just below EUR 10 million in 2010 to around EUR 28 million in 2014, although less than 20% of the loan applications are approved. Given the apparent shortage of ordinary bank lending for small entrepreneurs, the programme could be expanded, while an analysis of past loan approvals and rejections could indicate whether from a public point of view particular groups of entrepreneurs are underserved.

Banking sector concentration is high, holding back competition in the market for retail loans. Around 92% of bank loans to SMEs are extended by one of the three big banks (ACM, 2015). The interest rate charged on these usually small loans is much higher than that on large loans, and the difference is large in international comparison (Figure 1.16). Since the crisis, lending margins have increased steadily. Meanwhile, competition has declined: some smaller domestic banks have been taken over by larger ones or stopped lending to SMEs and several foreign banks have decided to halt their lending activities in the Netherlands. No new banks have entered the market for retail loans in more than a decade, but less concentration and more diversity would improve stability and efficiency of the sector (DNB, 2015b).





Percentage points, average between December 2014 and November 2015¹

1. At floating rate and up to 1 year initial rate fixation. EMU: Euro area. Source: ECB (2016), "Monetary and Financial Statistics: Bank Interest Rates Statistics", Statistical Data Warehouse, European Central Bank, February.

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Competition in the market for retail loans can be stimulated by streamlining the procedure to obtain a banking licence. Potential entrants to the Dutch banking market indicate that the procedure is long, while ambiguity regarding some conditions contributes to the uncertainty of the application's outcome (ACM, 2014). A review of the procedure would indicate if improvements are possible without loosening the safeguards that the licence procedure currently provides.

Supporting SMEs to broaden their search for bank loans would also stimulate competition in retail lending. Almost 70% of the SMEs needing external finance only apply for a loan at their own bank, and 16% only ask their own bank and a single other bank (GfK, 2014). Increasing information regarding the supply, criteria and costs would lower search costs for SMEs. In addition, establishing the portability of bank account numbers, as was the case in the years before the introduction of IBAN numbers, would stimulate SMEs to switch banks by reducing administrational barriers (ACM, 2015).

Establishing a credit register would help lenders to assess the creditworthiness of SMEs. Estimating the creditworthiness of small firms is particularly difficult and costly, and the related uncertainty drives up interest rates and tightens lending conditions. A credit register for companies, similar to the one that already exists for individuals, would lower these costs by disseminating needed information to all lenders (SER, 2014), and it exists in most European countries (Rothemund and Gerhardt, 2011). The government has a project to allow company information obtained through the Standard Business Reporting to be used for loan applications. However, it is not fully clear that the Reporting data will allow the creation of a credit register, and the authorities should look into the feasibility of this approach with a view to creating a proper credit register.

Encouraging market-based financing for SMEs

Deepening non-bank financing would support companies in accessing financing suitable to their needs (OECD, 2014a). Bank loans generate moderate returns for lenders and are therefore most appropriate for low-risk lending related to sustaining ordinary activity and short-term needs of SMEs (OECD, 2013c). Financing innovative start-ups, young firms and SMEs with growth ambitions typically involves higher risks, due to a lack of collateral, cash flow and track record. For other investments, financial returns might be too uncertain or the required maturities too long. Alternative financing instruments with different risk-sharing mechanisms cover the entire risk/return spectre (OECD, 2013c; OECD, 2015h; Table 1.1) and are generally available in the Netherlands. However, for some types markets are underdeveloped which constrains especially new companies and those with high growth ambitions.

Low Risk/ Return	Low Risk/ Return	Medium Risk/ Return	High Risk/ Return
Asset-Based Finance	Alternative Debt	"Hybrid" Instruments	Equity Instruments
Asset-based lending Factoring Purchase Order Finance Warehouse Receipts Leasing	Corporate Bonds Securitised Debt Covered Bonds Private Placements Crowdfunding (debt)	Subordinated Loans/Bonds Silent Participations Participating Loans Profit Participation Rights Convertible Bonds Bonds with Warrants Mezzanine Finance	Private Equity Venture Capital Business Angels Specialised Platforms for Public Listing of SMEs Crowdfunding (equity)

Table 1.1. A wide range of market-based financing complements bank lendingfor SMEs

Source: OECD (2015h), New approaches to SME and entrepreneurship finance: Broadening the range of instruments, OECD Publishing, Paris.

Market-based financing for larger SMEs is expanding. At NPEX, the SME stock exchange, companies can attract funding from investors starting from EUR 500 000 either by issuing shares or bonds. Tradable assets have grown seven-fold since 2012, but the size

remains modest at EUR 244 million. For midcaps with growth ambitions, private placements are increasingly becoming an alternative source of medium- and long-term financing. The market for private placements has slowly been taking off in recent years (DNB, 2015c). However, the market is too small to meet all financing needs and Dutch companies have issued USD 11 billion in private placements in the United States during the past five years. The development of a pan-European market is supported by the Capital Markets Union proposal of the European Commission and relatively favourably Solvency II capital requirements vis-à-vis investments with a lower creditworthiness.

The brighter economic prospects are also improving access to equity-based financing for start-ups and SMEs with growth ambitions. Investments by private equity and venture capital funds provided financing to a record number of 386 companies in 2014 (NVP, 2015). Total investments equalled EUR 3.1 billion, 30% higher than in 2014, although still below pre-crisis levels. Almost 60% of companies receiving financing were in an early stage, however, as amounts were small: seed, start-up and later stage venture financing accounted for less than 6% of total investments and the amount was below the level in 2013. High public involvement remains necessary though, and almost 30% of the financing is brought by Regional Development Funds. Continuous efforts for establishing larger funds should make it easier to finance the growth phase of firms and attract larger (institutional) investors from home and abroad.

The authorities should continue to support the development of equity-based financing alternatives. The Dutch Venture Initiative of EUR 300 million, backed by the European Investment Fund and the Regional Participation Company of the province of Brabant and supported by the Ministry of Economic Affairs, is a useful addition to the venture capital ecosystem. In addition, the Growth Facility (*Groeifaciliteit*) of the government supports companies that need capital to finance for example an ambitious growth plan, a buy-out or expansion abroad by providing a 50% guarantee on the risk-capital provided by investors. With the better economic prospects, the guarantees are quickly gaining in popularity: in the first half of 2015 EUR 43 million of guarantees were approved, which was already above the total for 2014.

New financing instruments such as crowdfunding and credit unions could help to close part of the finance gap for small firms when the market becomes more mature. Currently, they account for only 0.1% of business needs (Rabobank, 2015b), which is small in comparison to frontrunners such as the United Kingdom. However, the supply of these financing forms has grown rapidly in recent years. Crowdfunding, for example, has increased from EUR 2.5 million in 2011 to EUR 63 million in 2014 (Douw and Koren, 2015). Many initiatives stem from entrepreneurs, but some banks are also actively involved in the development of these new financing forms, which they see as complementary to traditional bank lending.

Dutch authorities are supportive of new financing instruments, but could do more to ensure sustainable market growth. The quick developments in financial technologies require regulation that limits risks for borrowers, lenders and the financial system – although these risks are often difficult to assess. Moreover, regulation should not unnecessarily inhibit growth of these new financing instruments (ACM, 2015). Regulations for credit unions are being simplified, so that they can attract deposits and loans for fixedterms up to EUR 100 million without being considered and regulated as a bank. Regulations for crowd funding could also be improved (AFM, 2014), and planned legislation notably foresees an exemption to the ban on inducements, which should make business models more viable. Disclosure requirements could be eased, as a full prospectus is needed for projects with a value above EUR 2.5 million, although in many EU countries this is only required from the EU-wide minimum threshold of EUR 5million. Most legislation focuses on the protection of the lender, but at the same time, corporate borrowers have less legal protection than individuals, which in particular makes self-employed vulnerable. Better protection of corporate borrowers reduces the risk that insufficient due diligence from ambitious lenders leads to severe repayment problems that ultimately may harm the development of this nascent market (Turfboer, 2015).

Government programmes to support SME financing should better recognise the contribution new financing instruments can make, especially in the medium- to long-run. Current programmes mostly involve guarantees and funds, and many indirectly support bank lending. Favouring a specific financing form should be done with restraint (ACM, 2015). Extending government programmes to include new financing instruments, or formulating them in more general terms, would remove their current bias and increase the options for SMEs.

Increasing awareness among companies of alternative financing providers would benefit both. Since September 2015, a website supported by the Ministry of Economic Affairs helps entrepreneurs to understand the many available types of financing. Several private sector initiatives aim to help entrepreneurs in finding suitable financing by intermediating between companies and investors. In addition, they often help entrepreneurs to write a solid financing proposal. However, many companies are still only considering bank credit and cancel their investment plans when a loan is refused. Among this group, awareness of alternative financing sources could be raised by requiring banks to accompany a loan refusal by information on other financing options. For example, authorities in the United Kingdom plan to oblige major banks to refer a company to new online platforms when rejecting a loan application.

Recommendations to enhance private investment

Policies to promote adequate and financially sustainable investment in housing

- Support the supply of rental housing by further limiting strict rent regulation in the private market.
- Monitor the provision of building plots by municipalities, especially for private rental housing. Review urban spatial planning regulation to identify obstacles for a higher residential density.
- Increase the financial sustainability of residential investment by accelerating the reduction of mortgage interest relief and lowering the maximum loan-to-value ratio of new mortgages significantly below 100%.
- Increase public support for energy efficiency improvements, especially for owneroccupied housing and unregulated rentals, and make the replacement of old buildings by more efficient new constructions eligible as well.
- Improve insight in the developments of residential investment by providing data on its main components.

Recommendations to enhance private investment (cont.)

Policies to support business investment

- Step up efforts to strengthen innovation performance by increasing direct public support for R&D.
- Continue to strengthen the diffusion of knowledge among the most innovative sectors and beyond, and further integrate SMEs and regions in the top sector approach.
- Support investment in ICT infrastructure by developing a strategic vision and increasing co-ordination among the stakeholders.
- Ensure stronger investment in renewable energy and energy efficiency by improving cost-effectiveness of existing instruments and possibly increasing their scale.
- Promote eco-innovation through increased support for R&D, complementary demand side measures and partnerships with the private sector.

Policies to support financing of business investment

- Make equity investments more fiscally attractive, from the viewpoint of both investors and companies, to strengthen firms' balance sheets and to support both startups and companies with high growth ambitions.
- Increase competition in the market for SME loans by considering the creation of a credit register for companies, based on standard reporting if possible. In addition, increase publicly available information on lending terms and make bank account numbers portable.
- Support the sustainable development of new financing instruments through a balanced regulatory framework and their inclusion in public support programmes for SME financing. In addition, make referrals to alternative finance providers compulsory when banks reject a loan application.
- Adjust reporting obligations of banks to get a timely, reliable and publicly available insight of SME bank financing.

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Chapter 2

Boosting skills for all

Strong and adequate skills are essential to support workers' productivity and to ensure robust employment outcomes. Developing workers' skills would also increase their personal satisfaction and wages, contributing in making growth more inclusive. The Netherlands performs well in terms of competences of a large part of the population. Moreover, the country has been successful in adjusting the required level of skills over time. The education system plays a key role in developing skills and achieves good results, but there is room to make vocational education and lifelong learning less job-specific to better adapt to new economic trends. There is scope to use more effectively existing skills at work of youth entering the labour market and entrepreneurs, and to reduce labour market mismatches. Another challenge is to help some people to acquire skills by facilitating their labour market integration – in particular first- and second-generation immigrants, long-term unemployed, and people with low educational attainment and health problems –, which requires stronger targeted active labour market policies.

The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law. **S**kills (or competences) are an important determinant of employment and productivity. People acquire, use and maintain or lose skills over their whole life span. Skills are a bundle of knowledge, attributes and capacities that can be learned and extended through formal and informal learning, and that enable individuals to successfully perform an activity or task (OECD, 2012a). Therefore, qualification/diplomas attained or the number of years of formal education and training are only an approximation of skills. People need both cognitive skills (such as literacy, numeracy, and science) and non-cognitive skills (such as collaboration, communication or entrepreneurship).

Skills in the Netherlands

Snapshot on today's skills

Many Dutch adults have robust skills, as measured by the results of the OECD Programme for the International Assessment of Adult Competencies (PIAAC) (OECD, 2013a). Young adults aged 16 to 24 have among the highest average proficiency scores for cognitive skills among the countries that participated in PIAAC. Dutch adults aged between 16 and 65 also have above-average skills in the OECD, with almost 20% reaching the two highest levels of proficiency (Level 4 or 5) in literacy and numeracy, and nearly 40% being proficient at the mid-level (Level 3).

Despite progress achieved, the skills of some people are lagging behind. First-generation immigrants and those with less than upper secondary education have literacy skill levels which are significantly lower than those of natives and tertiary education graduates (Figure 2.1). As some countries focus their immigration policies on skills of new migrants, this reduces comparability, but second-generation immigrants also have lower proficiency levels and are the only group with a score below the OECD PIAAC average, which is an important challenge for education and skill policies. Literacy proficiency of youth is significantly higher than that of the old, who also have lower skills relative to peers in top OECD performers.

Expected trends in occupations and qualifications

Between the mid-1990s and 2010, the Dutch labour market was affected by a polarisation in occupations depending on the content of tasks (Figure 2.2), although its magnitude is smaller than in other countries (Van den Berge and ter Weel, 2015). However, labour market polarisation is underway in many other leading OECD countries and is mainly driven by technological changes (Autor and Dorn, 2013; OECD, 2015a). The demand rose for skills needed to perform abstract tasks (problem-solving, intuition, persuasion and creativity, in occupations such as law, medicine, science or engineering) and for skills necessary to do non-routine manual tasks (requiring adaptability, visual and language recognition, and personal interactions in services occupations such as personal health



Figure 2.1. Literacy skills of immigrants, less educated and the old lag behind other groups and peers

Literacy score-point by socio-demographic groups¹

1. The estimates show the means for each socio-demographic group. Youth: 16-24 year-olds; Old: 55-65 year-olds; Natives: native-born and native language; First-generation immigrants: foreign-born and foreign language; Second-generation immigrants: native-born and foreign language; More educated: tertiary education; Less educated: less than upper secondary education; More educated parents: at least one parent attained tertiary education; Less educated parents: neither parent attained upper secondary education. 22 OECD countries participated in the OECD Programme for the International Assessment of Adult Competencies (PIAAC). Source: OECD (2013), OECD Skills Outlook 2013: First Results from the Survey of Adult Skills.

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Figure 2.2. Changing demand for skills has led to a polarisation in job tasks

Average annual change in total employment in the Netherlands by occupation categories requiring different tasks, thousand employed persons¹

1. Refers to population aged between 15 and 64. Abstract tasks refer to problem-solving, intuition, persuasion and creativity. Occupations attached to abstract tasks include managers, professionals, technicians and associate professionals. Routine manual tasks refer to well-understood procedures such as book-keeping, clerical and administrative work, repetitive production or monitoring. Occupations attached to routine tasks include clerical support workers, craft and related trades workers and plant and machine operators and assemblers. Although plant and machine operators and assemblers also include occupations such as drivers that should be classified as non-routine manual occupations, it is classified under routine manual occupations due to lack of data at 2-digit levels. Non-routine manual tasks refer to those requiring adaptability, visual and language recognition, and personal interactions. Occupations attached to non-routine tasks include service and sales workers. Occupations such as skilled agricultural, forestry and fishery workers, elementary occupations, armed forces occupations and those with no responses are not included. There is a structural break in the data due to change in classification in 2010/11. ISCO 08 classification 1-digit level.

Source: Eurostat (2015), Employment and unemployment (Labour Force Survey) (database), October.

StatLink and http://dx.doi.org/10.1787/888933334307

assistance or security). Both expanded before the global downturn and have been somewhat resilient since then (Figure 2.2). Conversely, the demand was subdued for skills crucial to execute routine tasks (based on well-understood procedures such as book-keeping, clerical and administrative work, repetitive production or monitoring) before 2008 and has been hit heavily by the global downturn (Figure 2.2). Demand could fall further as routine tasks are replaced by robots or outsourced to developing countries. However, the polarisation of the labour market is unlikely to continue indefinitely, with some middle-skilled jobs that combine job-specific and generic skills being likely to persist in the coming decades (Autor, 2015).

To adjust to the challenge of a more versatile labour demand, the Netherlands' labour force has been steadily becoming more qualified over time. Between 2005 and 2013, medium-level qualifications fell by 2 percentage points and low-level qualifications declined by almost 4 percentage points, but high-level qualifications increased by 5 percentage points. In 2005, 30% of the labour force was highly educated and this proportion was nearly 5 percentage points higher than in the European Union (CEDEFOP, 2015). In 2013, 35% of Dutch workers had high-level qualifications, 40% had medium-level qualifications and nearly 25% had low-level qualifications.

Looking ahead, experts concur that the Netherlands will require more high-level qualifications, which are projected to reach about 45% of the labour force in 2025, 7 percentage points more than in the European Union (CEDEFOP, 2015; ROA, 2011). In parallel, medium-level qualifications are projected to shrink by nearly 4 percentage points and low-level qualifications by around 6 percentage points. Among jobs to be created between 2013 and 2025, one in three will be for professionals in science, engineering, healthcare, business and teaching; one in ten for managers; one in ten for technicians and associate professionals; and one in six for service and sales workers. In parallel, the proportion of medium- and low-level qualifications will decline further, with job openings increasing by less than implied by replacement needs. In terms of sectors, future employment growth is expected in business and other services, and the distribution and transport sectors; jobs prospects should be weaker but remain positive for the primary and construction sectors; however, manufacturing jobs should continue to fall.

Incidence of labour market mismatches

There are several types of mismatches, which can affect skills, qualifications, and/or field of study. Skill mismatches measure the level of actual skills relative to that needed in a specific job. Qualification mismatches occur when workers have a different level of qualification than required by the job. Field-of-study mismatches appear when workers are trained in a field but are working in another one. According to the PIAAC survey, the incidence of total labour market mismatch in the Netherlands is about 45%, which is high in absolute terms but is comparatively one of the lowest percentages in the OECD (OECD, 2015b).

Skill mismatches are among the lowest in the OECD. According to the PIAAC survey, around 90% of workers are well matched for each literacy and numeracy skills, which is close to 5 percentage points higher than the OECD average. This is a strong performance given the fact that skill mismatches can be temporary at an individual level, for instance as it may take time for a worker to find a job that fits his skills, but then part of the skill mismatches can be persistent at the aggregate level. One empirical estimate suggests that reducing skill mismatches to the best practice level would boost aggregate productivity by around 4% in the Netherlands (Adalet McGowan et al., 2015).

Some Dutch workers are affected by under-qualification, which requires upskilling. Under-qualified workers may have the skills required at work, but there is a risk that this may result from employers' lowering the job content rather than being successful in identifying employees' real skills. According to the PIAAC survey, a third of Dutch workers are mismatched by qualifications, close to the OECD average, but there is large heterogeneity. Over-qualification is the second-lowest in the OECD after Italy, with 15% of workers reporting to underuse their skills, but such workers face a large wage penalty in the Netherlands (Montt, 2015). Just below 20% of workers are under-qualified, that is report having lower qualifications then required by their jobs, which is the third-highest percentage in the OECD after Italy and Sweden.

Developing skills at school

To support access to the labour market, a well performing education system should combine robust quality, efficiency and equity, with the latter associating high fairness and inclusiveness. High quality and efficiency are essential to sustain strong growth in innovation-driven economies such as the Dutch one. High fairness means students are able to achieve their educational potential irrespective of their background. Insufficient fairness might result in school failure, leading to increased dropout rates. An equitable education system should also be inclusive by giving everyone a chance to get at least the minimum level of skills necessary to function well in the society. Insufficient inclusiveness of the education system might result in lower labour market attachment, resulting in weaker economic growth.

To reduce the risk of different forms of mismatches, it is important to address the discrepancy between student choices and the demand for skills. While allowing students certain flexibility in choosing the programme according to their preferences, their choices need to correspond to current and future employers' needs. Targeted grants for students who learn in areas of skills shortage or a provision of workplace training can support the balance of skills' supply and demand. However, it is also essential for the education system to equip workers with general skills, ensuring flexibility needed to adapt job-specific skills to changing demand, in particular in vocational programmes. Results of the PIAAC survey indicate that Dutch workers in high-skilled clerical occupations are more affected by structural changes in their workplace and report more frequently new ways of working than in the OECD (OECD, 2013a).

Making compulsory education more equitable in imparting basic skills

Early childhood education and care (ECEC) increases academic achievement later (OECD, 2014a). In the Netherlands, nearly all children participate in ECEC from age 4 at the latest. However, there remains important scope for improving the pedagogical and educational quality of ECEC before age 4, which is a key priority (OECD, 2016). Moving towards an integrated system of pre-schools and childcare with a unified program would support quality and equity, and facilitate children's transition into primary education. Better ECEC would also help disadvantaged children to close the gap with the others, and would help immigrant children to improve language proficiency, in particular second-generation immigrants. As a result, skill gaps for immigrant students could narrow. Extending the opening hours of ECEC facilities would also expand the possibilities for those who care for children at home, who are overwhelmingly women, to work full time.

The overall quality and equity of the Dutch education system are good. According to the latest 2012 Programme for International Student Assessment (PISA) test, the mean performance of students places the Netherlands among top ten OECD achievers in terms of reading and science, and in top five in mathematics (OECD, 2013b). However, Dutch students perform less well in problem solving relative to countries with similar scores in mathematics, reading and science (Figure 2.3). The proportion of resilient students – who are socio-economically disadvantaged but perform among the top 25% of students, after accounting for socio-economic status – is comparatively high at around 8.5%, against the OECD average of 6.5%. Social mixing exists, as a higher percentage of disadvantaged students attend schools with students from better-off backgrounds than the OECD average (OECD, 2012b). Also, disadvantaged Dutch schools have a lower average student-teacher ratio than advantaged ones and additional funds are allocated to disadvantaged schools.



Figure 2.3. Performance in problem solving is relatively low

1. Each student's expected performance is estimated, using a regression model, as the predicted performance in problem solving given his or her score in mathematics, reading and science. Thus, this figure shows a ranking of countries in relative performance by comparing students from each country with students in other countries who have similar scores in mathematics, reading and science. Differences are not statistically significant for France, Norway, Chile, Czech Republic, Canada, Sweden, Portugal, Slovak Republic and Austria.

Source: OECD (2013), PISA 2012 Database.

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Despite notable policy efforts, there is scope to ensure greater equity in education by increasing teacher quality in schools with higher proportions of disadvantaged students (so-called disadvantaged schools). The proportion of teachers with university (Master) degree is just below 15% in disadvantaged schools as compared to 50% in advantaged schools, which is one of the largest gaps in the OECD (OECD, 2013b). The government has been working towards improving teacher education and employment conditions, and addressing shortages of teachers' qualifications for languages, mathematics and sciences (European Commission, 2015), which is welcome and should continue. In particular, further improving the career structure of teachers by providing them greater opportunities for personal development and career advancement is important (Nusche et al., 2014; OECD, 2016).

Teachers are less well paid compared to the OECD average when considering earning of tertiary-educated workers as a benchmark (Figure 2.4), although the maximum possible salary is one of the highest in the OECD (OECD, 2014b). Wages increase with experience, but they are not differentiated according to the type of school (Bonhomme et al., 2012). While general wage increases would be costly, the authorities could consider raising wages of teachers who upgrade their skills. Training teachers, who report having difficulties in personalizing their teaching, to work with students with disadvantaged backgrounds and reflecting such skills in their relative wages would help to attract more qualified teachers (OECD, 2015c), in particular to disadvantaged schools. School boards, which are allowed to differentiate teachers' wages, could play an instrumental role in this respect.

Figure 2.4. Teachers' salaries relative to earnings for tertiary-educated workers are comparatively low



Ratio of salaries of teachers in lower secondary education relative to earnings for tertiary-educated workers aged 25-64, 2012¹

 2011 for Canada, Chile, Ireland, New Zealand, Portugal, Spain and Sweden. Teachers' salaries either refer to actual salary, including bonuses and allowances, for teachers aged 25-64 or to statutory salary after 15 years of experience and minimum training. Figure for Belgium is calculated as the unweighted average of the data for the Flemish and French Communities of Belgium. Data for the United Kingdom refers to England.

Source: OECD (2014), Education at a Glance 2014.

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Increasing student mobility between tracks and raising minimum educational standards would enhance student performance more widely. Tracking and streaming of students at age of 12 used to be based on the advice of the primary school and on a comprehensive test (Cito test) (OECD, 2015d), but the school's opinion based on teacher's qualitative assessment has recently taken precedence over the test results. Early tracking is positive for talented pupils. However, selection weakens performance of students assigned to follow inadequate tracks, especially if subsequent mobility between tracks is not good (OECD, 2016). Ensuring high minimum curricular standards in all tracks, corroborated by regular performance assessment (such as the partially implemented *Rekentoets* test to ensure basic knowledge in mathematics at the end of high school), would improve skills. In parallel, greater curriculum alignment and differentiated teaching would support upward mobility between secondary tracks, helping to shift students to more appropriate tracks (OECD, 2016).

The school system should be more inclusive in equipping immigrant students with generic skills. Dutch native students perform considerably better in the PISA mathematics tests than immigrant students, even after accounting for the socio-economic background (OECD, 2013b). The skills gap persists even when comparing the results of native and second-generation immigrant students (Figure 2.5). Immigrants' children are overrepresented in disadvantaged schools, which has a detrimental effect on their achievements (OECD, 2013b). In addition, there is a high degree of school competition, which may result in worse outcomes as socio-economically disadvantaged immigrant parents are less likely to benefit from greater choice (OECD, 2012c). Although access to all relevant information regarding school choice is publicly available in the Netherlands,

Figure 2.5. Gap between native and second-generation immigrant students is important Mean PISA score for mathematics, 2012¹



A. Mean PISA scores for mathematics by immigrant background²

1. First-generation immigrant students refer to foreign-born students. Second-generation immigrant students refer to native-born students with foreign born parents.

2. Countries are ranked in ascending order of the mean PISA scores of non-immigrant students.

 After adjusting for students' socio-economic status. Differences for Canada, Ireland and New Zealand are not statistically significant. The larger the difference in mean PISA scores for mathematics between students with non-immigrant and second-generation immigrant background, the less successful second-generation students are in closing the gap with native students. Source: OECD (2013), PISA 2012 Database.

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immigrant parents may be impeded to send their children to the most appropriate school because of language barriers, resource constraints, or the lack of knowledge of the Dutch school system (OECD, 2015c). Assisting parents of immigrant students would help families to make well informed decisions on school choice.

Early exposure to the Dutch language would help to develop immigrants' language skills, in particular when starting at an early age. The lack of basic literacy proficiency is not only holding back foreign-born students, but also those immigrant children who were born in the Netherlands. Evidence suggests that early childhood education and care (ECEC) has a highly beneficial impact on language proficiency and on basic education outcomes of children with a lower educated immigrant family background (OECD, 2014c). The Netherlands is among top OECD performers regarding the attendance rate of immigrant children in ECEC, but the rate is below the one for natives (OECD, 2015e). Introducing universal language diagnostic tests and providing support in pre-school education, as in Austria and Germany, would be additional options (OECD, 2014c).

Ensuring stronger formation of generic and higher skills by vocational education and training

Vocational education and training (VET) is well developed partly owing to early tracking, but its perceived image and quality is relatively low (Figure 2.6), and a better balance is needed between imparting practical and generic skills. Occupational skills are essential to facilitate entry into the labour market, yet key information-processing skills help in updating one's skills, changing jobs and retraining. Nearly 70% of Dutch students enrolled in upper-secondary education follow vocational programmes, among the highest rates in the OECD (OECD, 2014b). The absolute performance of vocational education is strong according to the PIAAC survey, with the mean literacy and numeracy proficiency scores for adults aged between 16 and 29 significantly above the OECD mean for the same group (OECD, 2013a).

Figure 2.6. Perceived vocational education and training image and quality lag behind



Source: European Commission (2011), "Attitudes towards vocational education and training", Special Eurobarometer, No. 369, September. StatLink 📷 14ttp://dx.doi.org/10.1787/888933334536 Despite a robust VET system, the performance gap to general upper secondary education for graduates aged 16 to 29 is the highest for numeracy proficiency among OECD countries with PIAAC results, and the second-highest for literacy proficiency (after Germany). Moreover, VET graduates at or below the 25th percentile are not able to understand and respond to dense and lengthy texts, and to process less explicit mathematical information, i.e. they are at or below mid-level (Level 3) and 5% score at the lowest competence level. By contrast, young Dutch adults with the same position in the skill distribution, but who have completed a programme with general orientation, do not face similar problems (OECD, 2013a). Stronger emphasis on the development of generic skills in vocational tracks, without undermining the development of professional skills, would allow greater mobility across jobs over workers' professional life, especially if demand for more complex skills continues to rise over time.

Greater emphasis on the development and the quality of post-secondary VET qualifications would allow students to acquire higher level skills. Despite rising enrolment rates, there are few options available to Dutch students to continue education beyond upper-secondary VET other than tertiary education (OECD, 2014d). Work-related private courses aim to fill this gap in provision, but they have an insufficient visibility and often focus on specific needs of one employer. Yet, technological progress is likely to continue to raise demand for more complex skills. Strengthening the quality and the range of postsecondary VET, as done by other OECD countries, would help match the trend of rising demand for medium- and higher-level qualifications, which are projected to reach 82.5% of the labour force in 2025, against less than 80% today (CEDEFOP, 2015). The authorities have been making progress in this direction, notably by developing a system of certifications, and they also announced the creation of new post-secondary VET programmes in October 2014.

There is also scope to improve the provision of skills within the current VET system. The lowest level of upper-secondary VET (MBO 1) has a high incidence of young people with disadvantaged background, who face difficulties to enter the labour market, although the programme does not intend to lead to a labour market qualification. Creating a single prevocational education programme at lower secondary level and making MBO 1 the main entry route into higher VET programmes would facilitate the integration of students from disadvantaged background, and improve the overall reputation of the VET system (OECD, 2014d). Another issue is to continue updating the skills of VET teachers and trainers, which could be addressed through regular industry placements integrated into teachers' careers and by facilitating the entry of industry practitioners into the teaching staff (currently limited by requirements to have an academic qualification) (OECD, 2014d).

Developing advanced skills

The strong results of the PIAAC survey indicate that high quality education system is successful in transferring advanced skills (OECD, 2013a). Young adults aged 16 to 29 who have acquired academically-oriented qualifications have outstanding informationprocessing skills, well above the OECD average, with one in two recent graduates having the proficiency Level 4 or higher. These results are positively correlated with the aboveaverage results of different editions of the PISA test. Moreover, the Netherlands is one of the three leading OECD countries (along with Norway and Sweden) where only less than 7% of 16-65 year olds do not have basic skills to use information and communication technology (ICT). Over the last twenty years, tertiary education has expanded considerably giving solid foundations to the build-up of skills, but the system should also develop courses aimed to raise non-cognitive skills. Good command of cognitive skills enables workers to perform better on their jobs, however many employers value equally workers' ability to analyse, evaluate and synthesise information, instead of simply learning facts and concepts. Complex judgmental skills such as critical thinking and problem solving are valuable because they enable employees to apply their knowledge in new situations and environments. Results of the PIAAC survey for Dutch workers aged 16-29 suggest that they use their problem-solving skills, as well as co-operation, self-organisation and learning at work less frequently than their peers in other OECD countries (OECD, 2013a). The authorities have recently published a strategic agenda for higher education and research over the next decade, in which they acknowledge that the current system is too focused on the acquisition of knowledge. Recent introduction of a new student loan system should release resources to explore ways at creating courses that would encourage graduates to combine their skills more productively.

The Netherlands belongs to the group of innovation-driven economies at the world technology frontier in many sectors, but the supply of science and engineering skills is poor (Figure 2.7). High demand for science, technology, engineering and mathematics (STEM) skills finds its reflection in a very low unemployment rate for this group of workers, well below the national unemployment rate and among the lowest in the European Union (European Parliament, 2015). Despite good employment prospects for STEM graduates, the Netherlands has difficulties to encourage young people to follow scientific, engineering and technical degrees, in particular at the tertiary and doctoral level. Nearly 40% of the population aged 20-29 participate in tertiary education, significantly above the European Union average of slightly more than 30%, but enrolment rates in STEM-related degrees (science, mathematics, computing, engineering, manufacturing and construction) are among the lowest in the European Union (OECD, 2014e).



Figure 2.7. Supply of science and engineering skills is low

As a percentage of first-time new entrants into bachelor's programmes by field of education, 2013

Source: OECD (2015), Education at a Glance 2015.

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The authorities have started to addresses this issue. Different stakeholders have created the Bèta Techniek platform, whose main objective is to improve matching of supply and demand of talented professionals (European Parliament, 2015). The government has also signed a Technology Pact, whose aim is to ensure the supply of STEM-skilled labour in areas of shortage, established instruments to identify skills sought by individual top sectors (Human Capital Agendas), and strengthened technical education (by setting up Centres of Expertise) (OECD, 2014e). The first results of this approach are promising.

The Netherlands should continue efforts to ensure sufficient supply of labour equipped with STEM skills to sustain the development of the Dutch economy. Wellinformed career choices and student counselling might be important elements of improving the attitudes for science (European Parliament, 2015). Addressing gender stereotypes and stimulating confidence of women to follow STEM courses would also improve their graduation rate in STEM, which is below the OECD average (OECD, 2013c).

Using skills more effectively at work

Higher education levels lead to better employment outcomes (Figure 2.8), but educational attainment is only an approximation for skills, which creates a challenge for youth entering the labour market. Moreover, while the overall level of skills is high in the Netherlands, their use at work is relatively low (Figure 2.9). A large number of Dutch enterprises do not hire any employees, which holds back growth and may reflect gaps in skills needed for running larger businesses. Greater mobility on the labour market and better lifelong learning would reduce different forms of labour market mismatches and support a more effective use of skills.



Figure 2.8. **Higher educational attainment enhances employment prospects** Employment rate of 25-64 year-olds by educational attainment, as a percentage of all 25-64 year-olds, 2014¹

1. Data for Chile and France refer to 2013. Source: OECD (2015), Education at a Glance 2015.

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Figure 2.9. Large gap exists between skill use and proficiency in the Netherlands

1. The following tasks are used to construct the measure of numeracy use: calculating prices, costs or budgets; use of fractions, decimals or percentages; use of calculators; preparing graphs or tables; use of algebra or formulas; use of advanced math or statistics (calculus, trigonometry, regressions). For each task, a value of 1 indicates that the task is never carried out at work; a value of 2 indicates that it is carried out less than once a month; a value of 3 indicates that it is carried out less than once a week but at least once a month; a value of 4 indicates that it is carried out at least once a week but not every day; and a value of 5 indicates that it is carried out every day. Data for Belgium refers to Flanders. Data for the United Kingdom refer to England and Northern Ireland.

Source: OECD (2015), OECD Employment Outlook 2015.

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Improving the transition from school to work to foster the benefits of youth skills

The transition of Dutch young people to employment is smooth, which notably suggests adequate skills, but youth could gain further capabilities through internships. The gap between the unemployment rates of youth (15-29) and prime-age (30-54) workers is among the lowest in the OECD and it declined between 2007 and 2013 despite subdued gross domestic product (GDP) growth. The employment rate of youth aged between 25 and 29 exceeds 80% and is the second-highest in the OECD after Switzerland. Internships during formal education are well developed, but less so after the end of the studies as close to 80% of students report not having completed any and only 5% one, the respective European Union averages being just below 65% and just above 20% (European Commission, 2013a). This compares with nearly 80% of Dutch considering traineeships to be helpful for finding a regular job, and a third who are offered an employment contract at the end of an internship. However, post-education internships need to be well regulated, in particular regarding adequate remuneration, maximum length of trial periods and inclusion of learning content (OECD, 2015f). Promoting internships abroad, which are weakly developed in the Netherlands and the rest of the European Union, would also improve language skills of youth.

Temporary contracts lead to less intensive skill use, which matters when entering the labour market. Over a half of Dutch youth joining employment are offered temporary contracts, surpassing in this respect a number of OECD countries (Figure 2.10, Panel A). Some youth could work part-time on fixed-term contract while studying, but temporary contracts are also comparatively high for prime-age workers (Figure 2.10, Panel B). While a temporary job might be a stepping-stone in youth's career, recent estimates indicate that less than a fifth of Dutch workers on temporary contracts in 2008 moved on a full-time permanent



Figure 2.10. Temporary employment is common in the Netherlands

Temporary employment as a percentage of total employment by age group, 2014^1

A. Youth workers (15-24 year-olds)





1. 2013 for Australia.

Source: OECD (2015), OECD Employment and Labour Market Statistics (database), November.

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contract three years later. This was the lowest transition rate in the OECD (Figure 2.11), although it could partly be explained by the high prevalence of part-time work in the Netherlands and weak growth prospects of the Dutch economy in 2011. Earlier OECD studies (OECD 2013a) and results of the PIAAC survey suggest that temporary contracts are associated with a lower use of cognitive skills relative to permanent contracts. In the Netherlands, this difference is higher than the OECD average, in particular for the use of reading and writing (OECD, 2015f). In addition, temporary employment creates less possibilities of employer-sponsored training, which might further hold back skill development and trap workers in fixed-term contracts (OECD, 2006).

The Netherlands should further decrease asymmetries in employment protection legislation that apply to permanent and fixed-term contracts, which are high as discussed in Chapter 2 of the 2014 *Economic Survey* (OECD, 2014f), which would be beneficial for skill development by making it more affordable for firms to opt for permanent contracts. The government has implemented welcome reforms by reducing the duration of consecutive



Figure 2.11. Few temporary workers move to permanent full-time jobs

Source: OECD (2014), OECD Employment Outlook 2014.

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temporary contracts from 3 to 2 years and by extending the period between two consecutive contracts from 3 to 6 months. Regarding permanent contracts, the government has capped severance payments (at EUR 75 000 or a year's salary, whichever is higher) and linked them to tenure rather than age, which is an important step forward. However, the cap could be further reduced. The dismissal system has been simplified, which is also a commendable step forward, but it is important that the new system ensures swift decision-making.

Strengthening entrepreneurial skills

The Netherlands has a high potential to develop its enterprise sector, but poor entrepreneurial skills could be a barrier in starting a business. Attitudes towards entrepreneurship are strong, as nearly 80% of people view starting a business as a desirable career choice and slightly more than two-thirds consider that successful entrepreneurs receive high status (OECD, 2015g). However, less than 10% expect to start a business within three years (GEM, 2015). Self-employed are less taxed than employees, but financial incentives to move from inactivity to self-employment are low as the marginal implicit tax rate is high, with nearly 80% of the earnings increase being taken away essentially by lower benefits (OECD, 2015a). Beyond also access to finance issues (OECD, 2014f; see Chapter 2), lack of adequate capabilities could be another impediment. For 15% of adults self-employment is difficult owing to a lack of relevant entrepreneurship skills, almost twice as much as in the European Union (European Commission, 2013b). Around 45% of 18-64 years old report to have the skills and knowledge required to start a business, less than in the best-performing OECD countries including the United States, Canada and Austria (GEM, 2015).

Micro-enterprises with less than ten employees are predominant as in most countries, and almost 80% of businesses in the Netherlands (including self-employed) do not have any employees, the second-highest percentage in the OECD after Poland (OECD, 2015g). Business entry and exit rates are low, resulting in the lowest churn rate of employer enterprises across industry, services and construction sectors in the OECD. Yet, firms become more growth-oriented when their size rises. The number of high-growth enterprises (annual growth in employment or turnover greater than 20% a year) as a percentage of enterprises with ten or more employees is high among OECD countries, in particular high-income ones (Figure 2.12).

Enterprise policy is very supportive in the Netherlands (Government, 2014; OECD, 2014f), but the quality of entrepreneurship education could be improved. At about 35%, the take-up rate of entrepreneurship courses is among the highest in the European Union (European Commission, 2013b). Also, Dutch experts are very positive about the way the education system encourages entrepreneurial skills (Panteia, 2014). The percentage of adults reporting that school education equipped them with competences and know-how necessary for running a business is only about the European Union average (European Commission, 2013b), but this may not fully reflect recent changes in policies. Between 2008 and 2013, the government was implementing a programme "Education and Entrepreneurship" with the aim to stimulate entrepreneurial attitudes among students and recent graduates. The effectiveness of the programme has been assessed and the main conclusions have been used for designing new evidence-based educational initiatives or amending ongoing ones, such as the "Foundation for Young Entrepreneurship", which should be continued.

There are several avenues to foster the development of entrepreneurial skills (OECD, 2014g). Beyond offering entrepreneurship courses, schools could also rely on interactive and hands-on methods such as role playing and business simulations, which could become more complex and realistic at higher education levels. Outside of formal education system, creating online stand-alone programmes through web-based platforms would be a flexible way to deliver training at a low marginal cost to potential or existing



Figure 2.12. Proportion of high-growth enterprises is significant once a critical size is reached

1. 2011 for Denmark, Luxembourg and Slovenia. 2012 for Spain. 2013 for Israel and Korea. High-growth enterprises, as measured by employment (or turnover), are enterprises with average annualised growth in employees (or turnover) greater than 20% a year, over a three-year period, and with ten or more employees at the beginning of the observation period. Data are calculated by taking the unweighted average of sectoral figures (i.e. industry, services and construction). Data for the United States are calculated as the unweighted average on only industry and construction.

Source: OECD (2015), Entrepreneurship at a Glance 2015.

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business owners. Business development would also be strengthened by using experienced entrepreneurs for peer-to-peer learning – involving counselling, coaching and mentoring – while applying selection criteria for participants to control costs. To be more effective, training programmes could also be integrated within broader support packages, including finance and counselling as the firm develops. Tailoring training programmes to local needs would improve targeting to groups under-represented or disadvantaged in entrepreneurship, such as the "Work for Yourself" scheme in Amsterdam designed for unemployed people to become self-employed.

Reducing labour market mismatches

The prevalence of the field-of-study mismatch is comparatively small, but reducing saturation (there are more graduates than workers) in some fields and promoting skill transferability would help to lower it further. Around 35% of Dutch workers work in a different field than their original specialisation, which is below the OECD average of close to 40%, but this is almost ten percentage points higher than in best-performing Finland. For almost 60% workers the field-of-study mismatch is independent of other forms of mismatches, but for a third of workers it is associated with a mismatch in qualifications (Montt, 2015). Therefore, the field-of-study mismatch is mainly driven by saturation, followed by poor skill transferability (workers are working in a different field and they are mismatched in terms of skills or qualifications). Robust anticipation systems of future vacancies and comprehensive information provided to students help to reduce saturation effects (Quintini, 2011), and the Netherlands has developed high-quality databases which could be made available more widely. In parallel, greater employers' recognition that some skills are moveable across fields would improve skill transferability.

Adult learning is well developed in the Netherlands, but training courses are short and provide training within the sector, which may limit cross-sectoral mobility. Overall participation in adult learning is one the highest in the OECD, especially among young employees with high proficiency levels (OECD, 2014b). In 2016, the authorities plan to launch a pilot programme to foster lifelong learning in higher education and to counter falling participation in courses leading to diploma in part-time education (European Commission, 2015). But higher participation is needed among workers who could face the greatest difficulties to adapt throughout their working life, including older workers, and people with low educational attainment and skills (as measured by the PIAAC survey). Strengthening lifelong learning for disadvantaged workers would require increasing public support for employers to provide training, and promoting cooperation between the education system and the business sector, especially in tertiary education. Since July 2015, the civil code requests an employer to provide training for the current job, the continuation of employment contract or when the worker is made redundant. An employer can subtract incurred training costs from the dismissal compensation of a redundant worker, but only if the latter agrees on this and the training has broadened skills beyond what is needed for the current job. Supporting older workers' skills through lifelong learning to ensure a better alignment of their wages and productivity would lift another barrier to mobility.

Better recognition of foreign qualifications would decrease related mismatches among first-generation immigrants. Lack of formal assessment and validation of foreign diplomas increases the risk of over-qualification (OECD, 2014c). The over-qualification rate of highly educated immigrants at just below 25% is not high as compared to other OECD countries, although it has increased more than the rate for the native-born (OECD, 2015e). The underutilisation of relevant qualifications is more of a recent phenomenon related mostly to recent migrants from the European Union (SER, 2014). The percentage of immigrants applying for accreditation of their foreign qualification is low partly as a result of the lack of awareness regarding the possibility of such recognition procedures (OECD, 2014c). In order to encourage immigrants to apply for recognition of their foreign qualifications, the Netherlands has recently set up a one-stop shop for processing all applications, which is welcome. Improving matching of migrants who have the right qualifications with existing labour shortages in technical fields would be a further step forward (SER, 2014).

Recognizing informal skills of immigrants without fully recognized qualifications or without formal qualifications would support a better use of their skills. A special procedure validating immigrants' informal competencies and making this information available to potential employers would be an important step forward. In the Netherlands, public employment services assess and validate informal skills of foreign-born, but they do not have an immigrant specific tool such as Denmark's "Competence Card". In Denmark, immigrants' professional, linguistic and general skills are registered on a digital competence card, thus helping to connect employers and migrants (OECD, 2014c).

Acquiring skills through work

There remains an important potential to support people's skills by facilitating their transition into work or to work longer, which favours informal on-the-job learning (Figure 2.13). This type of learning could represent as much as around 95% of learning according to recent studies (Borghans et al., 2014). This requires stronger active labour market policies to help inactive youth, immigrants and long-term unemployed; to create better conditions for avoiding sickness and disability; to reduce disincentives for women to work longer; and to support older workers' attachment to the labour market.



Figure 2.13. Informal on-the-job learning is dominant after the age of 25

Average hours spent per day¹ on learning by age, 2000

1. Including all days (i.e. weekends, holidays) of the year.

Source: Lex Borghans (2007), "Zonde van de tijd; Leren in Nederland vanuit een economisch perspectief" (Pity of the time: Learning in the Netherlands from an economic perspective), TPEdigitaal 1(1), 2007, pp. 95-118.

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Putting the skills of youth lagging behind into action

Young people failing to enter the job market gradually lose skills that they do not use, hence becoming less employable and risking to move into unemployment or inactivity. In the Netherlands, this risk is low when considering the overall population of young people. At just below 10%, the proportion of youth aged 15-29 who are neither in employment nor in education or training (NEET) is lower than the OECD average of 15%, although it is slightly higher than in best-performing Luxembourg, Japan and Iceland. However, the proportion of youth immigrants aged 15-24 who are NEET is more than double than for the same cohort of natives (Figure 2.14). The same is true for youth unemployment as immigrants are much more likely to be unemployed as compared to Dutch natives (OECD, 2015e).





1. Data refer to Q1-Q3 2014. NEET: not in employment, education or training. The results for NEET in European countries are overestimated because they are based on three quarters, including summertime, when under-declaration of school enrolment of students is commonly observed.

Source: OECD (2015), International Migration Outlook 2015.

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Increasing the level of educational attainment and cognitive skills would further reduce the likelihood of becoming NEET, but this is not a perfect guarantee. The results of the PIAAC survey show that in all OECD countries except Japan, the lower the level of literacy and numeracy skills, the higher the NEET rate. In the Netherlands, the NEET rates of high- and medium-skilled youth are quite similar, respectively at about 3.5% and 5% both for literacy and numeracy. Simultaneously, low-skilled youth are significantly more at risk of becoming NEET, as the NEET rate is almost 20% for low literacy skills and slightly more than 15% for low numeracy skills (OECD, 2015f). However, barriers to youth employment exist independently of the level of educational attainment. While the largest group of Dutch NEET people (around 45%) has not attained upper secondary education, many of them have an upper secondary or post-secondary non-tertiary degree (nearly 45%) and some have even completed tertiary education (just below 15%). In some cases, the NEET status can reflect personal choice, for instance young women who decide to have and look after children.

Bolder active labour market policies are needed to help Dutch youth who are NEET to put their skills to work and/or to upgrade them. Around 60% of them are inactive and do

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not seek employment (OECD, 2015f). Spells of unemployment and inactivity may send negative signals to employers, but also weaken labour supply through skill erosion and lower self-confidence. Dutch NEETs who did not participate in education or training in the 12 months prior to the PIAAC survey had significantly lower literacy skills than those who did, and this gap was larger than in other OECD countries (Figure 2.15). As a result, Dutch inactive youth can lag even further behind active and outstandingly performing Dutch adults. Therefore, it is important that access to social benefits remains conditional on active job-search, and the participation in further education and training (OECD, 2015f). Yet, the type of obligation should depend on an assessment of individuals' skills and specific labour market barriers.



Figure 2.15. Skills of young NEETs are responsive to training

Gap between average literacy skill scores of NEETs aged 16-29 year-olds who did and did not participate in education or training in the 12 months prior to the survey, 2012¹

 NEET: not in employment, education or training. Data for Belgium refers to Flanders. Data for the United Kingdom refer to England and Northern Ireland. The OECD aggregate is calculated as the unweighted average of the data shown.
Source: OECD (2015), OECD Skills Outlook 2015: Youth, Skills and Employability.

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Reducing disincentives for women's full-time work

In the Netherlands, part-time employment is significant. As a proportion of total employment of persons aged 15 and over, men's part-time employment represents 20%, two times the OECD average, and women's part-time employment is 60%, almost two and a half times the OECD average (OECD, 2015h). Women's share in part-time employment exceeds 70%. Large prevalence of part-time work could reflect social preferences and work-life balance choices. While many young men and women combine part-time work and study, women work part time nearly twice as much as men when they leave the education system and are singles (Figure 2.16). However, women's greater propensity to work part-time is one of the factors lowering their pensions relative to men, contributing to a sizeable gender gap in pension. At about 40%, this gap is in the Netherlands among the highest in the European Union (Burkevica et al., 2015). Also, there are fewer women than men in management positions, but full-time working mothers have managerial responsibilities nearly as often as full-time working fathers (Figure 2.17).




Share of part-time workers in total employment, percentage, 2014

Source: Statistics Netherlands (2015), "Arbeid en sociale zekerheid" (Labor and social security), Statline, December.
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Figure 2.17. Women are less likely than men to be managers, except for full-time working mothers

Managers by gender, working hours and household situation, as a percentage of working age population (aged 15-74), 2014



Source: Statistics Netherlands (2015), "Full-time working mothers as often employed at managerial level as full-time working fathers", Press release, March.

It is important to minimize the influence of the tax and benefit system on the decision to work part time. Self-reported difficulties to find full-time work can explain only around 13% of the total part-time work, against an OECD average of about 20%, which indicates that involuntary part-time work is low. However, financial disincentives for moving from part-time work to full-time work are high. The combined effect of taxes and lost benefits results in 65% of extra earnings being taken away (Figure 2.18). Recent tax changes that penalise extra work less are a step forward.

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Figure 2.18. Financial disincentives to move from part-time to full-time work are significant

Transition tax rates for part-time employee to move to full-time employment, decomposed by taxes and benefits, 2010¹

1. Transition tax rates for part-time employee (working 20 hours) moving into full-time work (working 40 hours). Social benefits include family, housing and in-work benefits as well as social assistance. The results are computed as the average of four sets of typical families: single adult living alone, single-earner couple without children, single parent with two children, single-earner couple with two children. The OECD aggregate is calculated as the unweighted average of the data shown.

Source: OECD (2015), In It Together: Why Less Inequality Benefits All.

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Additional policies are needed to make the choice between full-time and part-time work more neutral, which would enhance skill utilisation. Childcare facilities are well developed but are open for a limited number of hours, which leads to an extensive use of informal childcare (European Commission, 2014). Nearly 50% of women and slightly more than 10% of men report having reduced their working hours to take care of the youngest child in the family (Janta, 2014). Also, the proportion of women working part time increases significantly as the family expands (Figure 2.18). Extending the opening hours of childcare facilities would remove one barrier to full-time work. Also, training for part-time workers could be less frequent because the expected return could be lower than for full-time workers, which can reduce women's accumulation of skills and their ability to change jobs.

Sustaining older workers' skills by fostering work incentives

The labour force participation rate of 55-64 olds rose by nearly fifteen percentage points between 2007 and 2014, which is a major progress. At about 65%, the participation rate is above the OECD average of close to 60%, but it remains below the level in best-performing OECD countries where it is around or above 75% (Switzerland, Norway, Sweden and New Zealand). Progress in lifting the employment rate was less significant, as the unemployment rate doubled over the crisis to almost 8% in 2014. At 60%, the employment rate for those between the age 55 and 64 is somewhat above the OECD average, but it lags behind for those between 65 and 69. The full-time equivalent employment rate of 55-64 is also below the OECD average given the high incidence of part-time work, in particular for women (OECD, 2014h).

Significant pension reforms have raised the use of skills at an older age and should be implemented as scheduled. The statutory retirement age has been creeping up, and was 65 and two months in the state pension system in 2014 (OECD, 2015i). It will be raised to

66 years in 2018, and to 67 in 2021, and subsequently be linked to life expectancy, which is commendable. As from 2014, the statutory retirement age for occupational (second-pillar) pensions has been increased to 67 and, from 2015, linked to life expectancy at the age of 65.

More than 40% of the long-term unemployed are over the age of 50, but important reforms have aimed to address this barrier to effective skill use. In part, this high rate is explained by labour institutions (Graaf-Zijl et al., 2015). Beyond improving the efficiency of public employment services and lowering the cap on severance payments, further benefit reforms are needed. Older workers over the age of 60 and who become unemployed can benefit, at least until 2020, from an income allowance (once the regular unemployment benefit insurance has expired) which can be extended to retirement age. The allowance should be coupled with activation policies to make re-entry to work a credible option and by linking training to skills needed in a specific job (OECD, 2014h).

Avoiding skill depreciation due to unemployment and health problems

Important reforms have helped to contain the incidence of sickness, disability and mental disorders in the Netherlands, but the costs of these problems remain large. Sickness absence has fallen considerably over time, but at more than 3% in 2013 it remained above the OECD average of around 2.5%. Disability benefits had been used as a major pathway to early retirement, until the deployment of a major reassessment programme in 2004-09. Since then, targeted reassessments occur on a random basis. As a result, inflows into disability benefits have been reduced, but almost 10% of the working-age population received a disability benefit in 2012, compared with an OECD average of just above 5%. The employment rate of people with mental health problems is comparatively strong in the Netherlands, but it is nearly 15 points lower than the employment rate of those without such problems (OECD, 2014i). The cost of mental health disorders is around 3% of GDP in the Netherlands, with more than half of these costs due to lost employment, poor productivity and benefit spending rather than direct health care costs.

Further policy steps are needed to limit the impact of different forms of illness on skills. Employers have strong financial incentives to prevent sickness absence, being legally obliged to pay a sick leave at 70% of the salary for two years (often topped up to 100% in the first year). The introduction of a collective insurance for the second year, currently under discussion, should lower this incentive, but on the other hand it should support the development of businesses, in particular of those with no employees. An additional step forward would be to develop early interventions, for instance by providing workers with the possibility for preventive consultation with their occupational health care providers (OECD, 2014i). On the beneficiary side, high benefits payment levels would need to be reduced as they could lead to moral hazard. The initial replacement rate could be lowered and then phased out over time to ensure the right balance between income security during sickness absence and return-to-work incentives. Addressing the issue of sickness absence is important as after two years people can apply for disability benefits, which raises the risk of skill depreciation by increasing distance from the job market.

Further progress in reforming disability benefits would contribute to re-activate existing skills, but stimulating labour demand is also needed. Since 2015, access of nonworking youth to disability benefits has been closed for new applicants with remaining work capacity, who can instead apply for social assistance. Employees who have been sick for two years and have an earnings capacity loss of more than 35% are eligible for schemes for partially and fully disabled, but only one-fourth of beneficiaries are significantly incentivised financially to resume regular work (OECD, 2014i). Disability reassessments are targeted at those under the age of 50 and the authorities have started to reassess the work capacity of 60 000 young people, and if they can work their disability benefits will be reduced to raise work incentives. A more generic reassessment of the eligibility to disability benefits should be considered, especially for those over 50, which would help to avoid losing valuable competences by increasing re-entry to work for this group. Incentives to re-use skills by older partially disabled employees are also diminished by an income allowance introduced in 2006, which can be extended to retirement age. However, insufficient labour demand for disabled workers' skills could be an important barrier, and different stakeholders have recently committed to create 100 000 jobs in the private sector and 25 000 in the public sector until 2026. Missing these targets will result in quotas being imposed on firms with at least 25 employees.

The Netherlands has started important reforms with a view to digitalise public employment services (PES), and to devolve greater responsibilities to municipalities for benefit provision and labour market integration. To prevent that unemployment and sickness absence morph into disability and mental health problems, the PES could play a greater role. In 2012, the PES was involved in finding a job only in about 5% of cases (against an average of nearly 10% in the OECD) and its services were used by half of the unemployed (against by two-thirds in other OECD countries), despite spending around 0.4% of GDP more on labour market programmes and PES administration than in the OECD (OECD, 2015h). In parallel, the number of job seekers per PES staff member was relatively high compared to other OECD countries, estimated at 125 in 2011, against between 20 and 55 in the United Kingdom, Denmark, Belgium, Austria and Germany (OECD, 2014j). However, the unemployment rate has increased significantly since then and, between 2011 and 2015, the budget of the PES was halved as a result of fiscal consolidation (OECD, 2015h).

Currently, re-integration services are not provided in the first three months of unemployment insurance benefits, which saves costs because many of those who are recently unemployed find jobs anyway, but also creates risks of skill depreciation and reduced employability for workers, in particular those who turn out to have poor job prospects. Only 10% of most disadvantaged unemployed can benefit from intensive support from month four onwards (OECD, 2015h). Nevertheless, retraining possibilities have been stepped up to improve job transition for the unemployed since March 2015, which is welcome. The experience of OECD countries suggests that best-practice PES include job-search verification, early and high-intensity personalised counselling interventions, programmes developing work experience and labour market training for long-term unemployed, liaising with employers to both fill vacancies and improve the matching of jobs with skills, and performance management and evaluation of instruments to ensure that PES interventions are cost effective (OECD, 2015h).

Rapid identification of unemployed with psychological problems, the development of work plans in the early stage of sickness absence, and the introduction of financial incentives to improve the effectiveness of activation policies by the PES would be additional steps in the right direction (OECD, 2014i). Also, municipalities should have sufficient means and knowledge to activate people with skills detached from the labour market.

Enhancing immigrants' labour market integration

Immigrants constitute an important part of the Dutch workforce, but their labour market integration is weak. Both the share of foreign-born population and the combined proportion of first- and second-generation immigrants stand close to the OECD average, respectively at about 10% and 20% of total population. As result of the recent surge in the number of asylum seekers, which more than tripled between 2013 and 2015 reaching nearly 60 000 asylum requests in 2015, the share of immigrants in the labour force is expected to increase. The gap in employment rates between immigrants and native-born in the Netherlands is the largest in the OECD. The employment rate for foreign-born population was slightly below 65%, which resulted in a gap of almost 15% as compared to natives (Figure 2.19). The employment gap for women and the lower educated is even larger (OECD, 2015e). The participation rate among immigrants is around 70%, which is not

Figure 2.19. **Employment and participation rates of foreign-born are relatively low** Working-age population, 2014¹



A. Employment and participation rates of foreign-born population





1. 2013 for the OECD aggregate and Chile. 2011 for Israel. Working-age population refers to those aged between 15 and 64. Source: OECD (2015), "Employment, unemployment and participation rates by sex and place of birth", OECD International Migration Statistics (database), October.

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the lowest rate relative to other OECD countries, but it is almost ten percentage points lower than for natives and represents the most important difference in the OECD (Figure 2.19). Immigrants are overrepresented among the low-educated working-age population, whereas the reverse is true for the highly educated. Results of the PIAAC survey also show a wide skill gap between foreign- and native-born adults (Figure 2.20).





and foreign-born and foreign language adults, 2012¹

 Only statistically significant differences are shown. The differences between the two categories are adjusted for differences associated with all of the following variables: age, gender, education, socio-economic background, and type of occupation. Countries are ranked in ascending order of difference in numeracy scores (native-born and native language minus foreign-born and foreign language adults). Data for Belgium refers to Flanders. Data for the United Kingdom refer to England and Northern Ireland. Source: OECD (2013), OECD Skills Outlook 2013: First Results from the Survey of Adult Skills.

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Stronger efforts to upgrade the skill set of first-generation immigrants would facilitate their labour market entry. Organising work schemes, especially for those with low or no qualifications, would help immigrants to demonstrate their informal competencies. The most successful work schemes are those that combine work experience (in the form of wage subsidies and/or work placements) with on-the-job training and language courses (OECD, 2014c). Effective language training is essential since the language deficit is considered as one of the main barriers to immigrants' labour market integration (OECD/ European Union, 2014). For instance, Denmark's "Step model" successfully combines language training, state-financed work placement and wage subsidy (OECD, 2014c). However, immigrants in the Netherlands tend to be underrepresented in active labour market policies and are more likely to stay away from job-related training as compared to natives (OECD, 2014c, OECD, 2015e).

Beyond reducing the extent of labour market dualism which more negatively affects foreign-born than natives, reforming the tax and benefit system would also favour putting immigrants' skills into work. The combination of high unemployment benefits as well as other social benefits and high taxes on wages can reduce work incentives, especially for those expecting to earn low wages. The OECD database with results of tax-benefit models shows that potential earning gains from taking up a low-paid job are small in the Netherlands. Since immigrants are mainly overrepresented among the low-skilled low-wage earner segment of the labour force, they are more likely to fall into unemployment and inactivity traps than natives (OECD, 2014c). The government has recently adopted a raise in the earned income tax credit for lower income-earners, which is a welcome step.

Discrimination is another obstacle to greater skill mobilisation of immigrants, and reintroducing equal employment policies would help to tackle it. Despite measurement issues, there is compelling evidence that discrimination on the basis of race or ethnicity is a barrier to jobs (OECD, 2008a; OECD, 2013d). With identical curriculum vitae but different names, immigrant applicants in the Netherlands have around 15% less chance of being invited for a job interview and this gap increases to 20% for low-educated candidates (Andriessen et al., 2012). Self-reported discrimination is considerable for the working-age population, and even higher for native-born offspring of immigrants between the age of 15 and 34 (OECD, 2015e; Andriessen et al., 2014). However, anti-discrimination laws without strong enforcement mechanisms are usually not sufficient in addressing discrimination (OECD, 2014c).

Instead, equal employment policies, which address non-intentional and indirect discrimination and are underpinned by robust monitoring and reporting systems, are more effective in ensuring equal opportunities, as shown by Canada, the UK and the US (OECD, 2013d). Between 1994 and 2003, the Netherlands required employers to register and publish the number of immigrants employed (*Samen Act*), but this practice was ended amid improving labour market outcomes for immigrants and employers' objections. In 2014, the government introduced various measures to combat discrimination, such as creating a diversity charter for employers, starting an information campaign against discrimination. Furthermore, The Hague police are introducing a quota system to get more immigrant officers into the service in order to stimulate diversity and combat discrimination. Nevertheless, reinstating an equal employment policy would help achieve the proportional labour market representation of immigrants.

International students graduating from Dutch universities constitute an ideal pool of highly skilled immigrants as they are already exposed to Dutch culture and language (OECD, 2008b). The policies in place to attract and retain international students focus on the provision of courses in English, the development of Dutch language skills, better information on study and career opportunities, as well as improved integration with Dutch students. Recently, a scholarship (Holland Scholarship) has been created for students from outside the European Economic Area. As a result, the number of international students enrolled in Dutch higher education has increased by around 50% between 2008 and 2013, reaching 9% of all students in higher education (OECD, 2015j). The authorities also offer one year job-search visas for recent graduates from Dutch universities and for those acquiring a Master's degree or a PhD from an internationally highly-ranked university. However, the proportion of those who find a suitable job is low (OECD, 2014c), which would require extending the duration of job-search visas beyond one year and automatically attributing a work permit if a job contract is concluded (Gerritsen and Hoj, 2013).

Recommendations to boost skills for all

Developing skills at school

- Raise the educational and pedagogical quality of early childhood education and care further.
- Further raise teachers' qualification, in particular in disadvantaged schools, and subsequently their wages. Foster pupils' mobility between secondary tracks.
- Continue to improve vocational education and training by ensuring stronger formation of generic skills, without undermining the development of professional skills, and by expanding the range and quality of post-secondary qualifications.

Using skills more efficiently at work

- To ensure higher prevalence of permanent contracts while enhancing resource allocation in the economy, further ease employment protection legislation on permanent contracts by continuing to reduce the cap on severance payments.
- Enhance entrepreneurial skills by continuing the evaluation of the effectiveness of programmes in formal education, developing online stand-alone training programmes, and promoting peer-to-peer learning.
- Reduce the incidence of qualification and field-of-study mismatches by enhancing career guidance and strengthening general lifelong learning.

Acquiring skills through work

- Strengthen participation in upskilling for the unemployed and inactive youth who are neither in employment nor in education or training to encourage their labour market integration.
- Cut disincentives for women's full-time work by lowering income taxes for longer working hours as planned, and by raising opening hours of childcare facilities.
- Recognise informal skills of immigrants on a digital competence card for employers, and offer work schemes, especially for immigrants with low or no qualifications, combining wage subsidies and/or work placements and on-the-job training as well as language courses.
- Lower sickness and disability by encouraging preventive consultations and extending disability reassessments to workers above 50.

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ISSN 0376-6438 2016 SUBSCRIPTION (18 ISSUES) ISBN 978-92-64-25194-6 10 2016 07 1 P 9

