OECD Economic Outlook

June 2015



OECD

OECD ECONOMIC OUTLOOK

97

JUNE 2015

OECD
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Please cite this publication as:
OECD (2015), *OECD Economic Outlook, Volume 2015 Issue 1*, OECD Publishing, Paris.
http://dx.doi.org/10.1787/eco_outlook-v2015-1-en

ISBN 978-92-64-22020-1 (print)
ISBN 978-92-64-22022-5 (PDF)

Series: OECD Economic Outlook
ISSN 0474-5574 (print)
ISSN 1609-7408 (online)

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Table of contents

Editorial: The B-Minus World Economy: Investment is Key to Getting a Better Grade . . 9

Chapter 1. **General Assessment of the Macroeconomic Situation** 11
Introduction 12
The outlook in a nutshell 12
Main issues for economic prospects 15
Risks to the outlook 35
Policy requirements 44
Annex 1.1. Indicators of potential financial vulnerabilities 53

Chapter 2. **Developments in Individual OECD Countries and Selected Non-Member Economies** 61

Australia 62
Austria 65
Belgium 68
Brazil 71
Canada 75
Chile 80
China 83
Colombia 87
Czech Republic 90
Denmark 93
Estonia 96
Euro Area 99
Finland 104
France 107
Germany 112
Greece 117
Hungary 120
Iceland 123
India 126
Indonesia 130
Ireland 133
Israel 136
Italy 139
Japan 144
Korea 149
Latvia 152
Luxembourg 155
Mexico 158
Netherlands 161
New Zealand 164
Norway 167
Poland 170
Portugal 173
Russian Federation . . . 176
Slovak Republic 180
Slovenia 183
South Africa 186
Spain 189
Sweden 192
Switzerland 195
Turkey 198
United Kingdom 201
United States 206

Chapter 3. **Lifting Investment for Higher Sustainable Growth** 211
Summary 212
Introduction 213
The evolution of fixed capital investment 213
Forces affecting business investment 229
Forces affecting public/infrastructure investment 248
Implications for policy 251
Annex 3.1. The drivers of business investment in advanced OECD countries 267
Annex 3.2. Testing OECD Structural Indicators on Company Investment Data 273
Annex 3.3. Does the heterogeneity of product market regulations affect foreign direct investment? 276

Statistical Annex 281

Boxes

1.1. Policy and other assumptions underlying the projections 13
1.2. Potential oil price developments in the medium and longer term. 26
1.3. The contribution of weaker investment to slower potential growth 33
1.4. Quantitative easing and household wealth 36
1.5. Challenges to anchoring the public finances in the medium term with the euro area fiscal rules 49
3.1. Capital investment by the foreign affiliates of domestic corporations 218
3.2. The drivers of business investment in advanced OECD countries 230
3.3. The BIAC Business Climate Survey 2015. 233
3.4. The user cost of capital 235
3.5. The effect of PMR heterogeneity on FDI 247
3.6. Overcoming barriers to international investment in clean energy 252
3.7. The Juncker Plan – Investment Plan for Europe. 257

Tables

1.1. The global recovery will gain momentum only slowly 14
1.2. Exchange rate and price developments since mid-2014 in the United States, the euro area and Japan 19
1.3. World trade will strengthen gradually 23
1.4. OECD labour market conditions are likely to improve slowly. 28
1.5. Negative sovereign bond yields have become increasingly common 40
1.6. Fiscal positions will continue to improve. 46
3.1. Gross investment levels remain weak across OECD countries 225
3.2. Significant changes have occurred in non-financial corporate balance sheets since the crisis began 239
3.3. Changes in public spending on health and pensions for selected OECD countries. 245

Figures

1.1. Global growth is set to recover. 15
1.2. Main OECD economies: macroeconomic projections. 16
1.3. Growth will differ markedly across the BRICs. 17
1.4. Many currencies have depreciated against the US dollar 17
1.5. Divergence in monetary policy stances has increased. 18
1.6. Financial conditions and corporate debt flows have been diverging. 18
1.7. Net exports are projected to contribute negatively to growth in the United States in contrast with other areas 20
1.8. Foreign currency borrowing has increased in several EMEs 21
1.9. Net foreign asset valuation effects from a 10% US dollar appreciation. 22
1.10. Commodity prices have fallen 22
1.11. The oil price decline has different effects across country groups 24
1.12. Inflation expectations have picked up 28
1.13. Labour market slack indicators 29
1.14. Labour compensation 29
1.15. Monthly inflation rates 30
1.16. Retail sales 31

1.17. Labour productivity and investment . . . 32
1.18. Real business investment growth has been weak compared with previous cycles . . . 32
1.19. Equity prices have increased . . . 40
1.20. Volatility in bond markets has increased . . . 41
1.21. Financial conditions have converged among euro area members . . . 43
1.22. Government debt dynamics . . . 47
3.1. Evolution of global investment . . . 213
3.2. Real gross investment . . . 214
3.3. Net investment and capital stock growth have been weak following the crisis . . . 215
3.4. Global fixed capital investment has shifted to emerging market economies . . . 215
3.5. FDI flows are increasingly to non-OECD countries . . . 217
3.6. The location of greenfield FDI projects . . . 217
3.7. Domestic tangible capital investment by foreign-owned firms . . . 220
3.8. Changing sectoral composition has affected aggregate investment intensity . . . 222
3.9. Intangibles account for a significant share of investment in most OECD countries . . . 223
3.10. Intangible investment remained strong throughout the crisis . . . 224
3.11. The composition of gross investment shortfalls differs across countries . . . 226
3.12. Global capital spending departure from average for OECD listed companies . . . 227
3.13. Infrastructure investment has been weak across the OECD . . . 228
3.14. A simple accelerator model of business investment . . . 231
3.15. Investment ratios are below benchmark steady-state estimates in most OECD economies . . . 233
3.16. The user cost of capital has declined over time . . . 236
3.17. Bank lending rates have declined but spreads have risen . . . 237
3.18. Credit standards tightened significantly in 2008-09 . . . 237
3.19. Financial factors have constrained investment in recent years . . . 238
3.20. Non-financial corporations' gross bond issuance has recovered . . . 240
3.21. Growth in real corporate profits has been solid in the United States but weaker elsewhere . . . 241
3.22. The implied volatility of share prices has moderated . . . 243
3.23. Measures of policy uncertainty have fallen but remain elevated . . . 244
3.24. Regulatory and taxation issues appear to have added to uncertainty in the United States . . . 244
3.25. Product market regulation has fallen in some but not all countries . . . 246
3.26. Public investment has declined the most in countries with high fiscal consolidation . . . 249
3.27. High levels of fiscal consolidation are associated with larger gross infrastructure investment shortfalls . . . 250

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Conventional signs

$	US dollar	.	Decimal point
¥	Japanese yen	I, II	Calendar half-years
£	Pound sterling	Q1, Q4	Calendar quarters
€	Euro	Billion	Thousand million
mb/d	Million barrels per day	Trillion	Thousand billion
. .	Data not available	s.a.a.r.	Seasonally adjusted at annual rates
0	Nil or negligible	n.s.a.	Not seasonally adjusted
–	Irrelevant		

Summary of projections

	2014	2015	2016	2014 Q3	2014 Q4	2015 Q1	2015 Q2	2015 Q3	2015 Q4	2016 Q1	2016 Q2	2016 Q3	2016 Q4	2014 Q4 / Q4	2015 Q4 / Q4	2016 Q4 / Q4
								Per cent								
Real GDP growth																
United States	2.4	2.0	2.8	5.0	2.2	-0.7	2.0	2.8	2.8	2.9	2.8	2.8	2.7	2.4	1.7	2.8
Euro area	0.9	1.4	2.1	0.7	1.4	1.6	1.7	1.8	2.0	2.1	2.2	2.2	2.3	0.8	1.8	2.2
Japan	-0.1	0.7	1.4	-2.1	1.1	2.4	1.8	1.7	1.5	1.3	1.1	1.3	1.6	-0.8	1.9	1.3
Total OECD	1.8	1.9	2.5	2.5	2.0	1.0	2.1	2.5	2.6	2.6	2.5	2.6	2.6	1.8	2.1	2.6
China	7.4	6.8	6.7											7.2	6.7	6.6
Inflation[1]								year-on-year								
United States	1.3	0.3	1.6	1.5	1.1	0.3	0.1	0.2	0.6	1.5	1.5	1.6	1.7			
Euro area	0.4	0.0	1.3	0.3	0.1	-0.3	-0.1	0.0	0.5	1.2	1.3	1.4	1.4			
Japan	2.7	0.7	1.1	3.3	2.5	2.3	0.1	-0.1	0.3	0.7	0.9	1.2	1.4			
Total OECD	1.5	0.7	1.7	1.5	1.3	0.8	0.5	0.7	0.9	1.5	1.6	1.7	1.8			
China	2.1	1.6	2.0	2.1	1.6	1.4	1.4	1.6	2.1	2.4	2.2	1.9	1.5			
Unemployment rate[2]																
United States	6.2	5.5	5.2	6.1	5.7	5.6	5.6	5.5	5.4	5.3	5.2	5.1	5.1			
Euro area	11.5	11.1	10.5	11.5	11.4	11.3	11.2	11.0	10.8	10.7	10.6	10.4	10.3			
Japan	3.6	3.5	3.3	3.6	3.5	3.5	3.5	3.5	3.5	3.4	3.3	3.3	3.3			
Total OECD	7.3	6.9	6.6	7.3	7.1	7.0	7.0	6.9	6.8	6.7	6.7	6.6	6.5			
World trade growth	3.2	3.9	5.3	5.3	5.0	2.7	3.5	4.4	5.1	5.6	5.8	6.0	6.1	3.6	3.9	5.9
Current account balance[3]																
United States	-2.4	-2.6	-3.0													
Euro area	3.4	3.9	4.1													
Japan	0.5	2.8	3.0													
Total OECD	0.0	0.1	0.1													
China	2.1	2.4	2.1													
Fiscal balance[3]																
United States	-5.0	-4.0	-3.6													
Euro area	-2.4	-2.1	-1.4													
Japan	-7.7	-6.8	-5.8													
Total OECD	-3.7	-3.1	-2.5													
China	-0.3	-1.2	-1.5													
Policy interest rate																
United States	0.3	0.3	1.2	0.3	0.3	0.3	0.3	0.3	0.5	0.7	1.0	1.5	1.8			
Euro area	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1			
Japan	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1			

Note: Real GDP growth and world trade growth (the arithmetic average of world merchandise import and export volumes) are seasonally and working-day adjusted annualised rates. The "fourth quarter" columns are expressed in year-on-year growth rates where appropriate and in levels otherwise. Interest rates are for the United States: the upper bound of the target Federal Funds rate; Japan: the Bank of Japan uncollateralised overnight call rate; euro area: the ECB main refinancing rate.

The cut-off date for information used in the compilation of the projections is 29 May 2015.

1. United States: price index for personal consumption expenditure; Japan and China: consumer price index; the euro area: harmonised index of consumer prices; and the total OECD: private consumption deflator.
2. Per cent of the labour force.
3. Per cent of GDP.

Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933221671

EDITORIAL
THE B-MINUS WORLD ECONOMY: INVESTMENT IS KEY TO GETTING A BETTER GRADE

The economic recovery from the global financial and economic crisis that broke out in 2008 has been unusually weak. Global growth has consistently been slower than the average pace during the dozen or so years before the global financial crisis. The failure to achieve a stronger cyclical upswing has had very real costs in terms of foregone employment, stagnant living standards in advanced economies, less vigorous development in some emerging economies, and rising inequality nearly everywhere.

In this *Economic Outlook* we project that global growth will strengthen gradually to approach its past average pace by late 2016. Growth is expected to be shared more evenly across regions of the world, with external imbalances generally smaller than they were in the run-up to the global crisis. Labour markets are gradually healing in the advanced economies. Risks of deflation have receded. Yet, we give the global economy only the barely passing grade of B-.

Why the dissatisfaction? To begin with, our starting point is inauspicious. The first quarter of 2015 saw the weakest global growth since the crisis. The United States experienced a particularly sharp dip, but a number of other advanced economies shrank during the quarter, and growth in China slowed down more than expected. We see this weakness at the beginning of the year as largely the result of temporary factors. The boost to consumption from lower oil prices is still expected to come through in oil-importing countries, where demand will also be spurred by the widespread monetary easing (often accompanied by currency depreciation) in countries accounting for more than 50% of world GDP. A generally neutral fiscal stance in most large economies will not be a drag on growth, unlike in the previous few years.

But even if we are right about the transitory nature of the latest bout of weak growth, the outlook is not satisfactory. Despite tailwinds and policy actions, real investment has been tepid and productivity growth disappointing. By and large, firms have been unwilling to spend on plant, equipment, technology and services as vigorously as they have done in previous cyclical recoveries. Moreover, many governments postponed infrastructure investments as part of fiscal consolidation.

This *Outlook* takes a detailed look at investment, concluding that the slow rate of private investment is largely explained by subdued (actual and expected) demand, both at home and globally. This demand weakness has hindered investment growth, which in turn has held back employment, wages, and consumption. On the supply side, sluggish investment has undermined the rate of growth of potential output – the capacity of economies to increase

living standards, make good on future obligations to citizens, and repay debt – via a slower rate of increase of the capital stock and a slowdown in the diffusion and embodiment of technical change. The world economy remains stuck in a low-level supply-demand equilibrium environment.

Boosting the performance of the global economy requires jumping to a higher growth equilibrium with more investment, that creates more employment, jobs, and consumption demand, which ratifies the higher rate of investment, leading to the beneficial supply-side outcome. At least some of what we see as needed for such a jump to a high-level equilibrium is in prospect, given macro-policies and global demand balance. In our projections, fixed investment growth in the OECD region picks up to 4% next year, the highest rate since the crisis. But whether investment accelerates in line with our projections is a key question hanging over the improving outlook that we depict. Moreover, even if it does, this would still be insufficient to deliver the strong global growth in the near term needed to increase employment and reduce inequality; potential output growth would still look anaemic compared to past decades.

So, more than demand-oriented macro policies are needed to generate a strong and durable boost to investment. Reducing policy uncertainty would help, such as a tone-down of fiscal brinksmanship in the United States, favourable resolution of Greece's status *vis-à-vis* the euro area, realistic medium-term fiscal path in Japan, and greater transparency of financial systems in emerging economies. Progress on reducing financing constraints in the euro area through attention to non-performing loans could cement more positive business sentiment there. Clear signals this year at COP21 on co-ordinated international action to combat climate change could be an important incentive to underpin a surge in investment, with benefits for demand, innovation and environmental sustainability.

Structural policies have a central role to play to achieve more satisfactory and sustained investment growth. Restrictive product market regulation impedes the growth of the capital stock in OECD economies. FDI restrictiveness (and corruption) affect quantity and quality of cross-border investment. In the European Union, attention to disparities and complexities in regulation of network services industries, as proposed in the Investment Plan for Europe, would support investment to complete the Single Market. In some emerging markets cost-benefit analysis would improve the returns to investment, making it a more sustainable underpinning for growth.

The *Economic Outlook* calls on countries to adopt balanced policy packages with mutually reinforcing monetary, fiscal and structural policies. Collective action with positive spillovers can boost the global economy to the higher-growth equilibrium with stronger investment, more employment, and a greater capacity to improve living standards for all. More robust global growth will make countries and the global economy more resilient to salient risks such as financial instability. Expanding employment and strengthening public finances are pathways to equality of opportunity. The world economy is muddling through with a B-minus average, but if homework is not done and with less than average luck, a failing grade is all too possible. On the other hand, how to get the A is known and within reach.

3rd June 2015



Catherine L. Mann
OECD Chief Economist

OECD Economic Outlook, Volume 2015 Issue 1
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Chapter 1

GENERAL ASSESSMENT OF THE MACROECONOMIC SITUATION

Introduction

Global growth is projected to strengthen in the course of 2015 and 2016, but will remain modest relative to the pre-crisis period and its global distribution will change from that in recent years. The acceleration is underpinned by very supportive monetary conditions, a slower pace of fiscal consolidation, financial repair and lower oil prices. Investment, a crucial component to the outlook, has yet to take off. The appreciation of the US dollar against most currencies has led to a significant realignment in exchange rates since mid-2014. The ensuing relative price effects are shifting global demand more toward Europe, Japan and some emerging market economies (EMEs). Growth in EMEs is slowing due to specific factors in China, Brazil and Russia and it could continue to be weak in the absence of structural reforms to undo bottlenecks.

Ordinary risks to the recovery path are broadly balanced around the central projection but a few extraordinary negative event risks are not taken into account and could shift the global growth path substantially. The projected pick-up in investment could remain elusive, but on the other hand, investment could respond more strongly than anticipated to an upturn in spending, reduced uncertainties and recent structural reforms, particularly in the light of low financing costs, as discussed in Chapter 3. Similarly, compensation could accelerate more than anticipated given the continued improvements of labour market conditions in most large OECD areas, which would support more consumption growth than projected. However, similar expectations have failed to materialise in the past, and this pattern could continue. Sustained quantitative easing in the euro area and Japan may prove less effective at stimulating demand than assumed. Weakness in the first quarter in the United States and in many EMEs may signal more underlying weakness than embedded in the projections. And oil price changes could either reduce some of the recent real income gains that are helping to boost global demand, or add to them.

The extraordinary risks include geopolitical upheavals and severe financial instability brought about by a disorderly exit from the zero interest rate policy in the United States, failure to reach a satisfactory agreement between Greece and its creditors, and a hard landing in China. Avoiding these risks and moving the global economy to a higher and more stable growth path require mutually reinforcing monetary, fiscal and structural policies.

The outlook in a nutshell

Based on OECD assumptions (Box 1.1), growth in both OECD and non-OECD countries is projected to pick up through 2015, after a very weak start to the year (Table 1.1 and Figure 1.1). In 2016 growth is projected to strengthen only slightly in the OECD area, but more so in the non-OECD area (Figures 1.2 and 1.3). After turning slightly negative in early 2015, growth in the United States is projected to recover thanks to supportive, though gradually less accommodative, monetary conditions, the dissipation of fiscal drag, lower energy prices and an ongoing increase in household wealth. However, the pick-up will be

Box 1.1. **Policy and other assumptions underlying the projections**

Fiscal policy settings for 2015 and 2016 are based as closely as possible on legislated tax and spending provisions. Where government plans have been announced but not legislated, they are incorporated if it is deemed clear that they will be implemented in a shape close to that announced. Where there is insufficient information to determine the allocation of budget cuts, the presumption is that they apply equally to the spending and revenue sides, and are spread proportionally across components.

In the United States the general government underlying primary balance is assumed to improve by about ½ per cent of GDP over the 2015-16 period, roughly as implied by current legislation, including the Bipartisan Budget Act and the Budget Control Act.

In Japan the projections incorporate the further 2 percentage point cut in the effective corporate income tax rate in 2015 following the cut from 37% to below 35% in 2014. The FY 2014 supplementary budget is also included. Overall, the underlying primary balance is assumed to improve by between ½ and 1 per cent of GDP in both 2015 and 2016.

In euro area countries, fiscal stances in 2015 and 2016 (measured as the change in the structural primary balance) are based on draft budget laws or, if these are not available, the stated targets in Stability Programmes.

The assumed path of policy-controlled interest rates represents the most likely outcome, conditional upon the OECD projections of activity and inflation, which may differ from those of the monetary authorities.

- In the United States, the upper bound of the target federal funds rate is assumed to be raised gradually between September 2015 and December 2016 from the current level of 0.25% to 2%.
- In the euro area, the main refinancing rate is assumed to be kept at 0.05% throughout the projection period.
- In Japan, the short-term policy interest rate is assumed to be kept at 0.1% for the entire projection period.
- In the United Kingdom, the Bank Rate is assumed to be increased gradually between February 2016 and December 2016 from the current level of 0.5% to 1.5%.

Although their impact is difficult to assess, the following quantitative-easing measures are assumed to be taken over the projection period, implicitly affecting the speed of convergence of long-term interest rates to their reference rates. In the United States and the United Kingdom the stocks of purchased assets are assumed to be maintained unchanged until the end of the projection period. In Japan asset purchases are assumed to continue in line with the stated objective of the monetary authorities to attain the inflation target; this is assumed to keep the long-term interest rate constant until end-2016. In the euro area current programmes of targeted longer-term refinancing operations (TLTROs) and purchases of private securities and sovereign bonds are assumed to last until end-2016, keeping long-term interest rates constant.

In the United States and the United Kingdom, 10-year government bond yields are assumed to converge slowly toward a reference rate (reached only well after the end of the projection period), determined by future projected short-term interest rates, a term premium and an additional fiscal premium. The latter premium is assumed to be 2 basis points per each percentage point of the gross government debt-to-GDP ratio in excess of 75%. The 10-year government bond yield is assumed to remain constant throughout the projection period at 0.36% in both Japan and Germany. Yield spreads with Germany in euro area countries are assumed to remain constant at their recent levels, with the exception of Greece, where they are assumed to decline gradually over the projection period.

Structural reforms that have been implemented or announced for the projection period are taken into account, but no further reforms are assumed to take place.

The projections assume unchanged exchange rates from those prevailing on 12 May 2015, with one US dollar equalling JPY 120.03, EUR 0.89 (or equivalently one euro equals 1.12 dollars) and 6.21 renminbi.

Box 1.1. **Policy and other assumptions underlying the projections** *(cont.)*

The price of a barrel of Brent crude oil is assumed to remain constant at USD 65 throughout the projection period. Non-oil commodity prices are assumed to be constant over the projection period at their average levels of April 2015.

The cut-off date for information used in the projections is 29 May 2015.

Table 1.1. **The global recovery will gain momentum only slowly**

OECD area, unless noted otherwise

	Average 2002-2011	2012	2013	2014	2015	2016	2014	2015 Q4 / Q4	2016
	Per cent								
Real GDP growth[1]									
World[2]	3.9	3.3	3.3	3.3	3.1	3.8	3.3	3.2	3.9
OECD[2]	1.7	1.3	1.4	1.8	1.9	2.5	1.8	2.1	2.6
United States	1.7	2.3	2.2	2.4	2.0	2.8	2.4	1.7	2.8
Euro area	1.1	-0.8	-0.3	0.9	1.4	2.1	0.8	1.8	2.2
Japan	0.7	1.7	1.6	-0.1	0.7	1.4	-0.8	1.9	1.3
Non-OECD[2]	6.7	5.2	5.1	4.7	4.2	4.9	4.6	4.3	5.0
China	10.6	7.7	7.7	7.4	6.8	6.7	7.2	6.7	6.6
Output gap[3]	0.1	-2.1	-2.2	-2.0	-1.9	-1.2			
Unemployment rate[4]	6.9	7.9	7.9	7.3	6.9	6.6	7.1	6.8	6.5
Inflation[5]	2.1	1.9	1.3	1.5	0.7	1.7	1.3	0.9	1.8
Fiscal balance[6]	-4.4	-5.8	-4.2	-3.7	-3.1	-2.5			
Memorandum Items									
World real trade growth	5.6	3.1	3.3	3.2	3.9	5.3	3.6	3.9	5.9

1. Year-on-year increase; last three columns show the increase over a year earlier.
2. Moving nominal GDP weights, using purchasing power parities.
3. Per cent of potential GDP.
4. Per cent of labour force.
5. Private consumption deflator. Year-on-year increase; last 3 columns show the increase over a year earlier.
6. Per cent of GDP.

Source: OECD Economic Outlook 97 database.

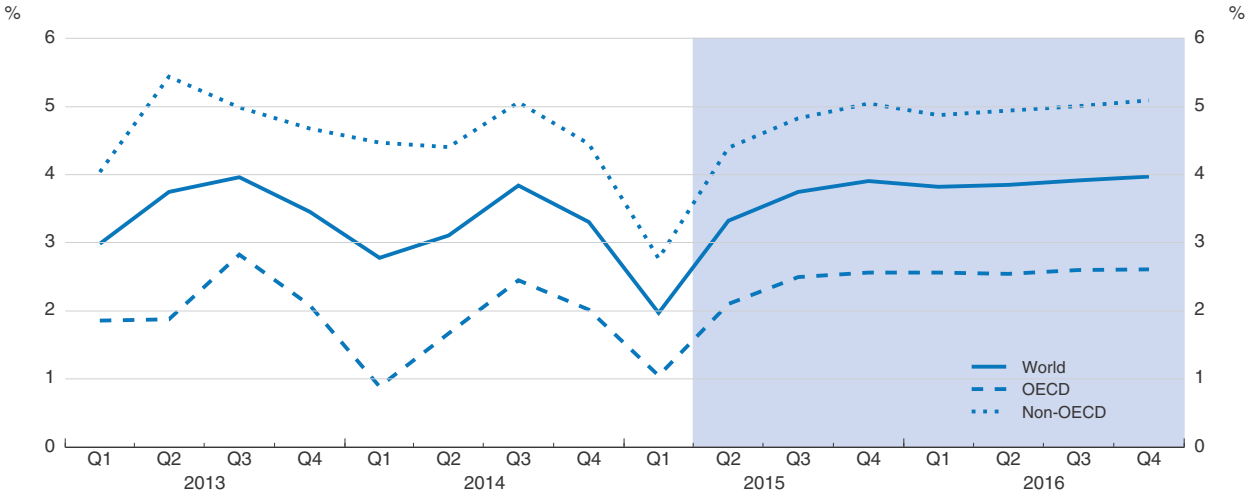
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tempered by the stronger dollar and falling investment in the energy sector. In the euro area and Japan activity will be supported by lower oil prices, currency depreciation and monetary policy stimulus. Fiscal adjustment is expected to be slower in Japan and pause in the euro area, which will also support growth. In China growth is projected to edge down as the restructuring of the economy progresses, with services taking over from investment and real estate as the main driver of economic growth. In contrast, growth is set to pick up in the other main EMEs: the recessions in Russia and Brazil are projected to give way to low but positive growth in 2016; growth in India will remain broadly stable in 2015 and 2016; and Indonesia's growth is projected to rise over the remainder of 2015 and in 2016.

The weakness of the projected pick-up is in part due to continued subdued investment. Growth in gross fixed capital formation in the OECD area is projected to be only 2⅓ per cent in 2015, before accelerating to 4% in 2016. The main reason for the

Figure 1.1. **Global growth is set to recover**

Quarter-on-quarter percentage changes at annual rates



Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933220579

weakness in investment is the weak recovery itself and doubts over the prospects for stronger growth. There are also specific reasons for individual countries: still tight lending conditions in parts of Europe, lower oil prices in North America, past investment excesses in China and continued adjustment in housing in much of the OECD. Chapter 3 analyses the determinants of capital spending.

The unemployment rate in the OECD area has fallen by a little over 1 percentage point from its 2010 high and is projected to fall further to 6½ per cent by end-2016. Even then, 40 million people will still be out of work, 7½ million more than immediately before the crisis. Labour market improvement has been much stronger in the United States and Japan than in the euro area where the unemployment rate is still very high. While the German labour market is strong, unemployment is 11.2% in the euro area and 13.5% outside of Germany.

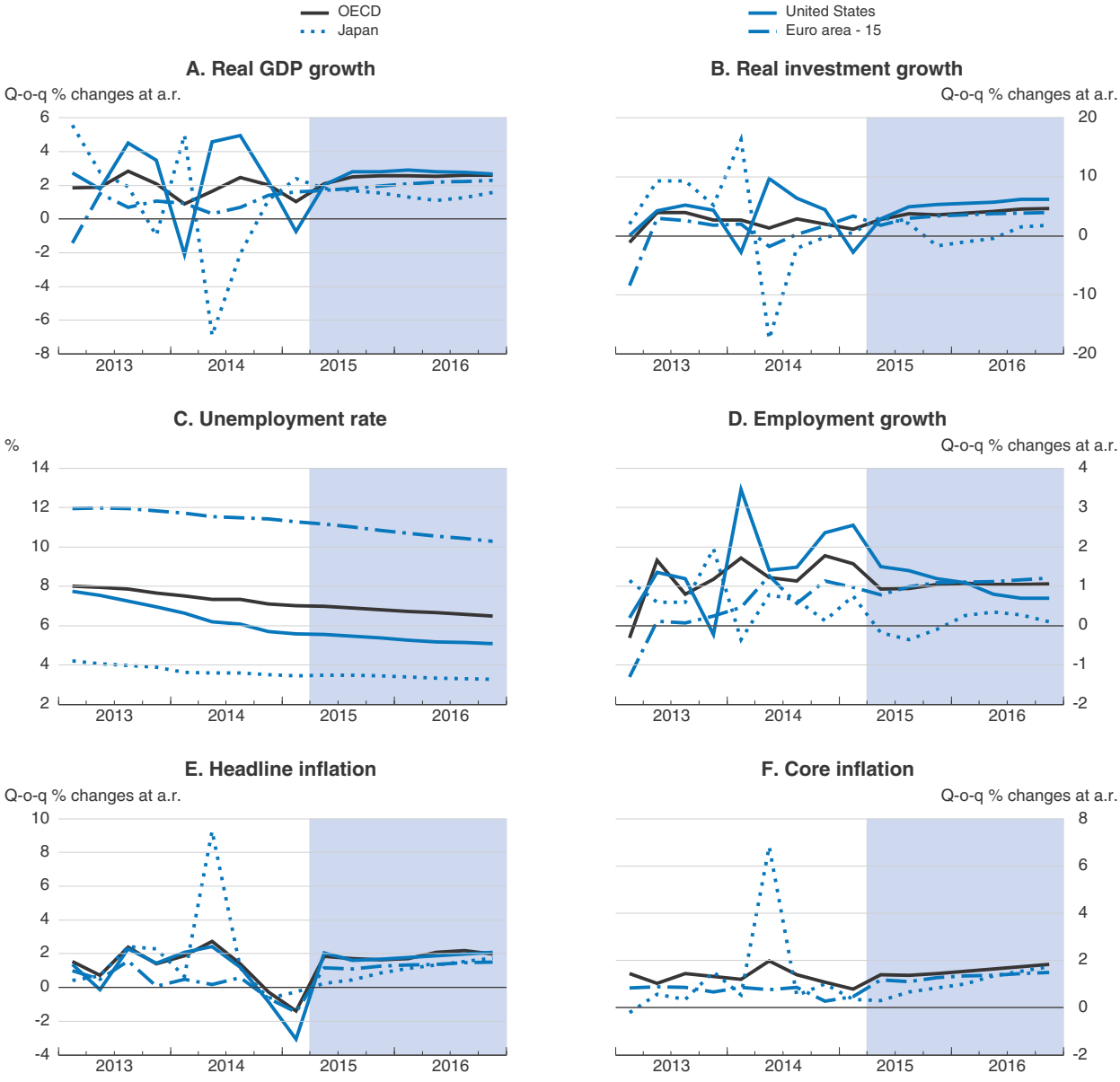
Stronger growth and tightening labour markets are projected to gradually push up inflation on the assumption that exchange rates and the oil price stabilise and that inflation expectations remain well anchored. The effects of the recent oil price decline have mostly passed into prices and quarterly inflation rates have already turned positive in most countries. In the OECD area as a whole, inflation is projected to rise from a recent low of -1.4% in the first quarter of 2015 to 2% by end-2016. In the United States inflation is projected to near the 2% medium-term target by end-2016, but in the euro area and Japan it will remain well below targets.

Main issues for economic prospects

Major exchange rate realignments affect macroeconomic conditions

The currencies of many advanced countries and large EMEs have depreciated noticeably against the US dollar since mid-2014, to a similar extent as in 2008-09, despite some reversal since mid-April 2015 (Figure 1.4). In a number of economies, the depreciation *vis-à-vis* the dollar has been in excess of 15%, though in nominal and real effective terms the adjustment has been less pronounced, and some countries' currencies have even

Figure 1.2. **Main OECD economies: macroeconomic projections**



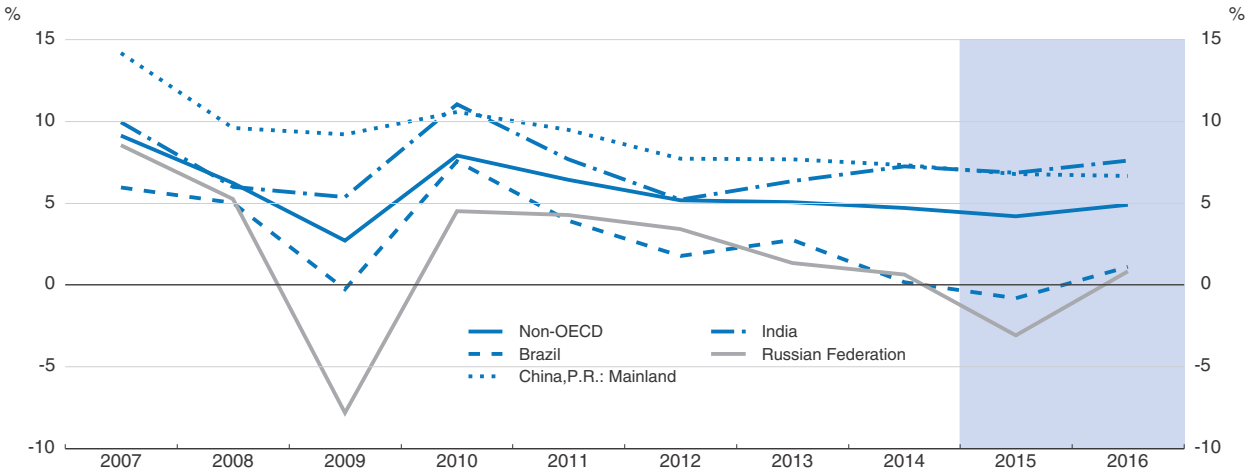
Source: OECD Economic Outlook 97 database.

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appreciated in effective terms. Consequently, the real effective exchange rate of the US dollar has appreciated by nearly 10% since mid-2014 and slightly more in nominal terms. Smaller effective exchange rate adjustments than bilateral changes potentially imply muted trade effects relative to financial effects.

These currency movements have been driven by differences in monetary policy stances around the world. Markets have been expecting a gradual tightening of monetary policy in the United States but easing in the euro area and Japan, leading to growing interest rate differentials (Figure 1.5). As a result of the decision by the Bank of Japan to expand quantitative and qualitative easing and a series of measures by the European

Figure 1.3. **Growth will differ markedly across the BRICs**



Source: OECD Economic Outlook 97 database.

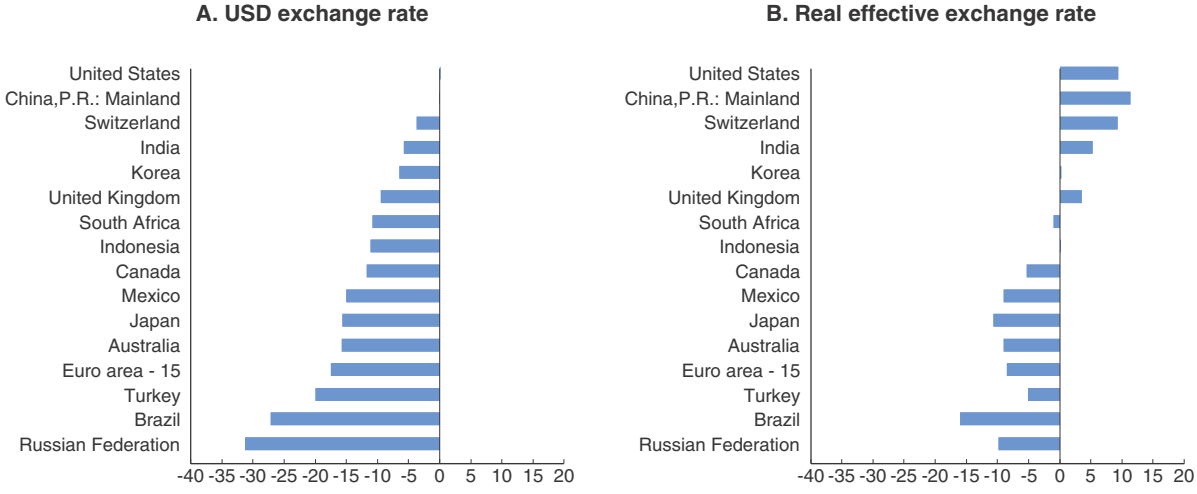
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Central Bank, including the decision to purchase sovereign bonds, total assets of the major OECD central banks have continued to expand rapidly. In addition, several central banks have reduced policy rates due to easing inflationary pressures and a weakening economy.

The exchange rate changes have affected financial conditions. The US dollar appreciation has contributed to a tightening of financial conditions in the United States, while the opposite holds in the euro area and Japan (Figure 1.6). In all three areas, bond and equity prices have increased, helped by monetary policy support, boosting household wealth and lowering financing costs for corporations. Indeed, bond prices rose to record highs in the euro area in mid-April, after which they fell abruptly, with the associated

Figure 1.4. **Many currencies have depreciated against the US dollar**

Per cent depreciation between July 2014 and May 2015



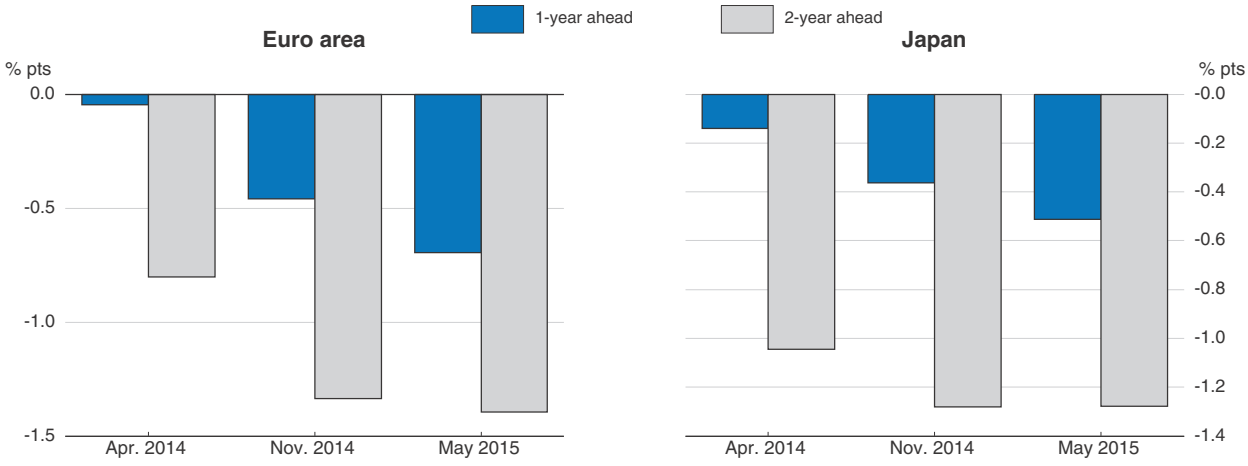
Note: A negative number implies a depreciation of the indicated country's currency against the US dollar (USD) and against a trade-weighted basket of currencies deflected with consumer prices (real effective exchange rate).

Source: OECD Economic Outlook 97 database; Datastream; and OECD calculations.

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Figure 1.5. **Divergence in monetary policy stances has increased**

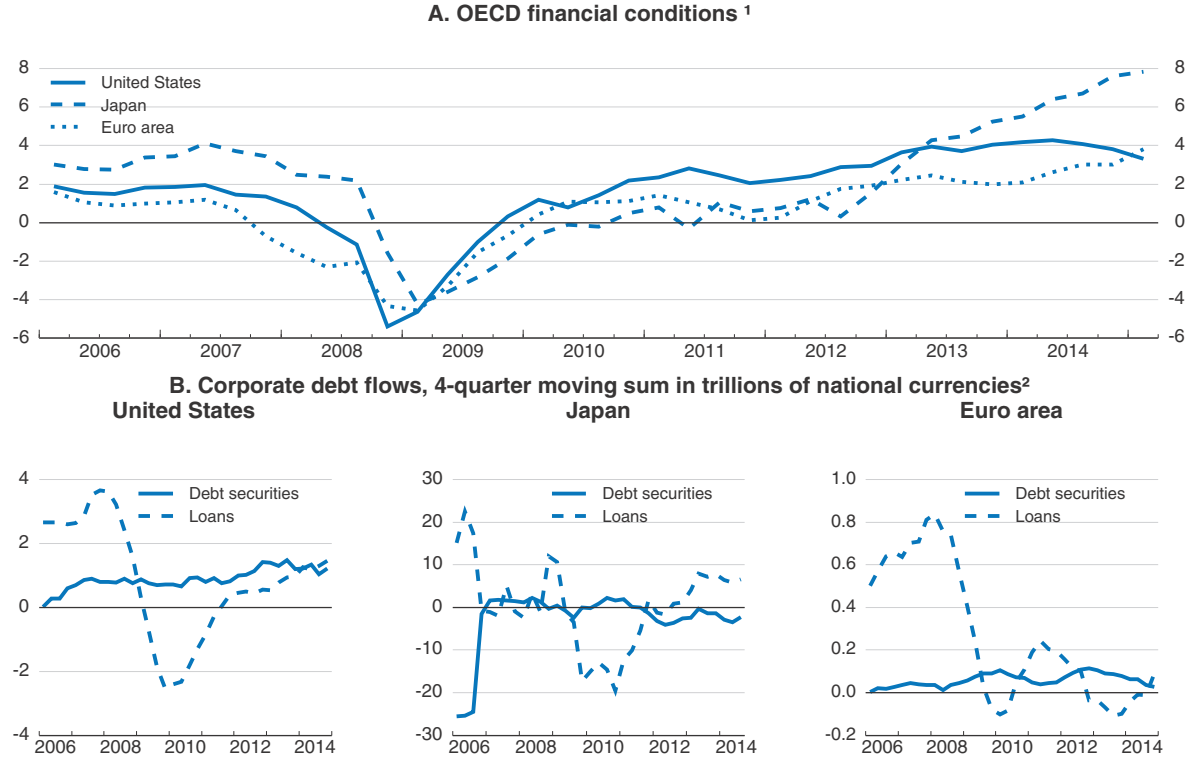
Differences in 1 and 2-year ahead expected overnight interest rates *vis-à-vis* the United States



Note: Average differences for the months indicated.
Source: Bloomberg; and OECD calculations.

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Figure 1.6. **Financial conditions and corporate debt flows have been diverging**



1. A unit increase (decline) in the index implies an easing (tightening) in financial conditions sufficient to produce an average increase (reduction) in the level of GDP of ½ to 1% after four to six quarters. See details in Guichard et al. (2009). Based on available information up to 29 May 2015.
2. Non-financial corporations.

Source: *OECD Economic Outlook 97 database*; *OECD Quarterly National Accounts Database*; Datastream; and OECD calculations.

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Table 1.2. **Exchange rate and price developments since mid-2014 in the United States, the euro area and Japan**

	Nominal effective exchange rate	Core CPI	Exchange rate contribution
	Per cent chamge between 2014Q2 and 2015Q2		(pcp)
United States	12.2	1.1	-0.3
Euro area	-8.2	0.7	0.6
Japan	-8.6	0.3	0.2

Note: The exchange rate contribution is derived by using estimated exchange rate pass-trough to import prices (Morin and Schwellnus, 2015) and the quarterly evolution of exchange rates, together with the import intensity of household consumption. The import intensity for the United States and Japan is based on the OECD Intercountry Input-Output Database and refers to 2009 (OECD, 2013). In the absence of import intensity excluding intra-area imports for the euro area, the average for the United States and Japan has been used.

Source: OECD calculations.

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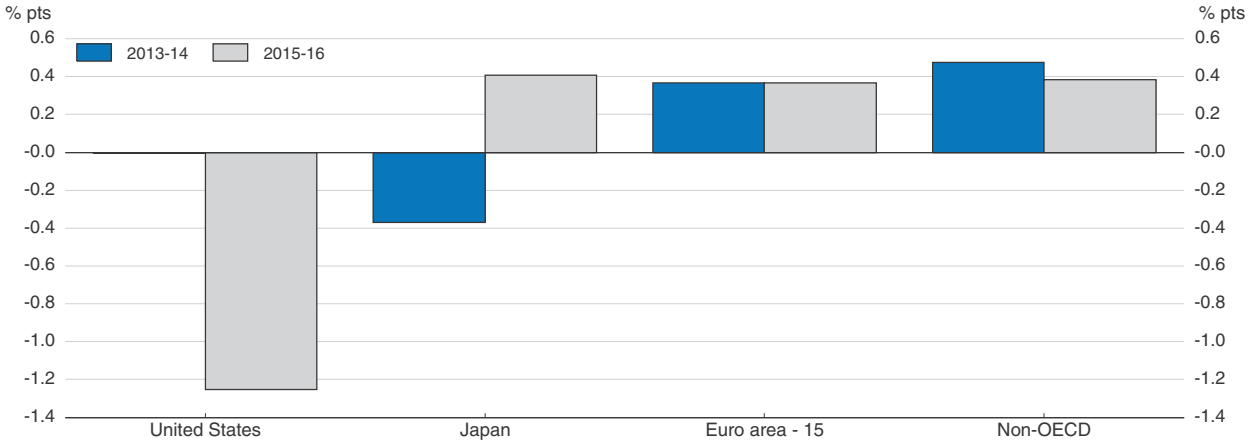
increase in yields (by around 50 basis points), although bond prices still remain high. Nevertheless, corporate debt flows from all sectors have been subdued in the euro area, although loan flows now seem to be picking up, and in Japan. In contrast, debt flows have been rising in the United States.

The currency movements that have taken place since mid-2014 have had a marked impact on domestic inflation. This is especially the case in the euro area where the pass-through of exchange rates to inflation is estimated to be stronger than in the United States and Japan (Morin and Schwellnus, 2014). Taking into account the estimated pass-through rate and the import intensity of demand, the effective nominal depreciation of the euro since mid-2014 could directly account for the bulk of the increase in the core consumer price level in the area since then (Table 1.2). Also, the yen depreciation over the same period could have contributed somewhat to the increase in core consumer prices in Japan. By contrast, the appreciation of the US dollar may on its own have held back the recovery in US inflation.

The recent exchange rate changes will affect the volume of exports and imports and reallocate demand from the United States to the euro area and Japan. The extent of the impact depends on the pass-through of currency changes into export and import prices and price elasticities of exports and imports. The pass-through is estimated to be very weak in the United States for both exports and imports compared with the euro area, and export and import price elasticities vary significantly across countries. For the United States, the dollar's appreciation is projected to result in losses in market shares of US exporters and an increase in import penetration. Consequently, a cumulative negative net export contribution to growth over 2015 and 2016 of around 1¼ percentage point is projected. For the euro area and Japan, the opposite holds, with a positive cumulative net export contribution to growth of around ½. The contribution of net exports to growth in non-OECD economies is projected to be just below ½ percentage point (Figure 1.7).

Figure 1.7. **Net exports are projected to contribute negatively to growth in the United States in contrast with other areas**

Sum of contribution of net exports to annual GDP growth for indicated periods



Source: OECD Economic Outlook 97 database.

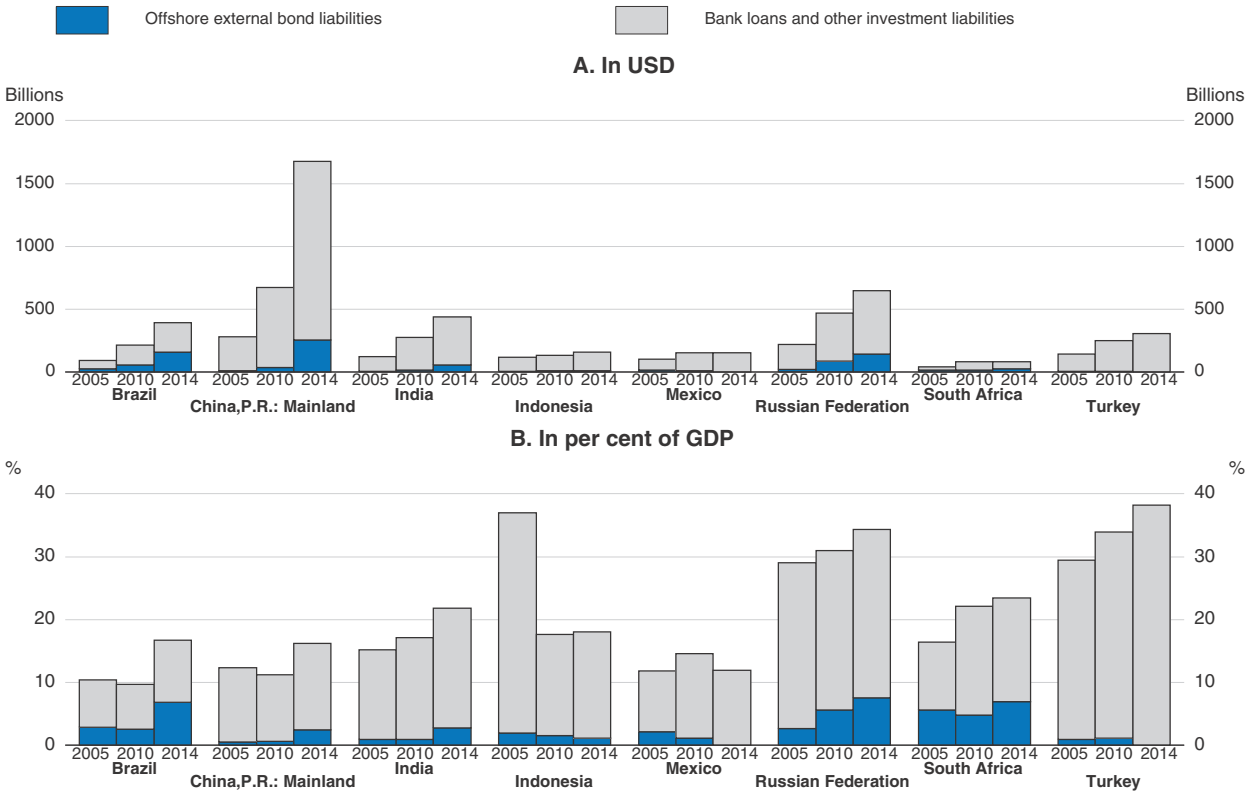
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Currency movements also have financial implications stemming from international exposures:

- In EMEs depreciating domestic currencies have been increasing the servicing cost of debt denominated in foreign currencies. Foreign currency debt has risen in several large EMEs over recent years, though such exposures appear to be lower relative to GDP than they were before the Asian crisis in 1997 (Figure 1.8; Ollivaud et al., 2015). In particular, companies in many EMEs have increased their foreign currency borrowing (Chui et al., 2014). The impact of a US dollar appreciation on corporate balance sheets will depend on the extent to which loans are denominated in US dollars and whether these currency risks are hedged. The lack of comprehensive data precludes the drawing of firm conclusions, though in several Asian EMEs foreign liabilities are primarily denominated in US dollars. Higher debt servicing costs may not be a problem for companies with revenues primarily in foreign currencies, as is the case with many commodity exporters. However, the recent decline in global commodity prices has hit commodity producers' revenues. Debt servicing strains would be aggravated if investors become excessively risk averse, intensifying capital outflows. However, portfolio capital continued to flow into EMEs until April (IIF, 2015), though this has reversed somewhat in May, and no significant corrections in equity and debt markets in major EMEs have been observed.[1] Indeed, in China, the equity market has actually surged by more than 30% since the start of the year, following 60% gains in the second half of 2014, despite evidence of weakness in the economy.
- The stronger dollar has lowered US investors' returns from foreign assets as most of them are denominated in foreign currencies. For instance, in April the annual return on

1. Debt servicing strains have also risen in Central and Eastern European countries. Their currencies depreciated strongly against the Swiss franc following the decision of the Swiss National Bank to abandon the minimum exchange rate against the euro in mid-January. Banks and households still have nonnegligible liabilities denominated in Swiss francs, which are unlikely to be hedged by households.

Figure 1.8. **Foreign currency borrowing has increased in several EMEs**



Note: Offshore liabilities are computed as the difference between debt securities by nationality of the issuer and by residence of the issuer and are set to zero when the difference is negative (Mexico and Turkey in 2014). 2014 denotes 2013 for South Africa.
Source: OECD Economic Outlook 97 database; BIS, *Debt Securities Statistics*; and IMF, *Balance of Payment Database* (for bank loans and other investment liabilities).

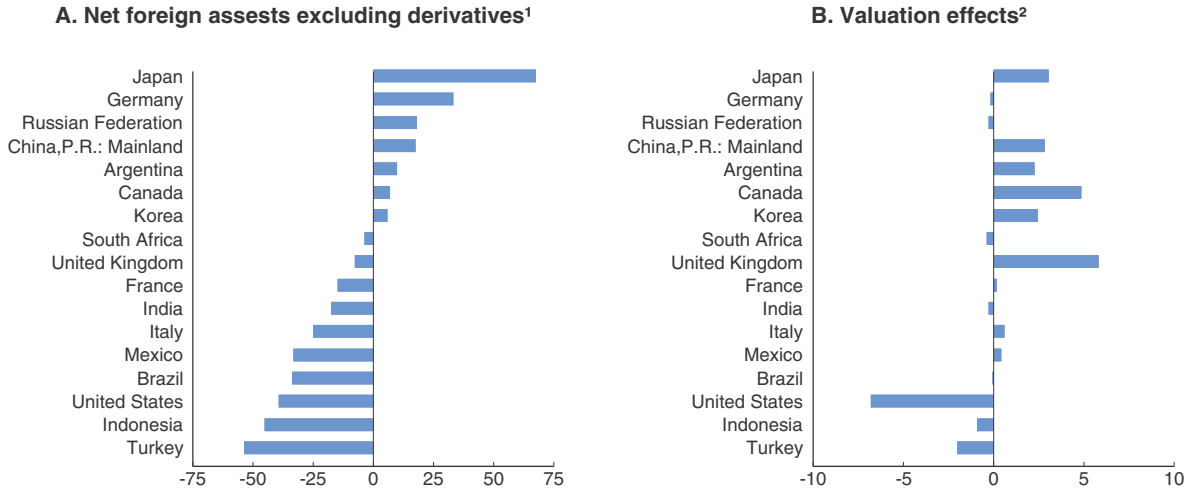
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world equities in local currencies was around 8 percentage points higher than in US dollars. The appreciating US dollar has also damped the earnings of US companies with large foreign operations, with implications for their equity prices. Nearly 40% of the total profits of S&P 500 companies come from abroad.

- In contrast, euro area and Japanese investors' returns on foreign assets have been boosted in domestic currency terms. For instance, in April the annual return on world equities in the euro area and Japan was respectively around 20 and 10 percentage points higher in domestic currencies than in local currencies.
- The US dollar appreciation has important valuation effects on net foreign assets. The magnitude and direction of valuation effects depend on the relative size of assets and liabilities and their currency composition. These effects can be illustrated by estimating changes in net asset valuations (excluding derivative positions) due to a 10% appreciation of the US dollar against all currencies, assuming the currency structure of foreign assets and liabilities as estimated by Bénétrix et al. (2014) (Figure 1.9). In the United States net foreign liabilities would deteriorate by nearly 7% of GDP as foreign assets are predominantly denominated in foreign currencies. Also, in Turkey and Indonesia, with large net dollar liabilities, net foreign liabilities would deteriorate by 2% and 1% of GDP, respectively, increasing their external vulnerability. In several other economies, primarily with net foreign assets, the external positions would improve by

Figure 1.9. **Net foreign asset valuation effects from a 10% US dollar appreciation**

In per cent of GDP



1. Latest available.
2. After a 10% appreciation of the US dollar based on the currency composition of assets and liabilities estimated by Bénétrix et al. (2014).

Source: International Monetary Fund; Bénétrix et al. (2014); and OECD calculations.

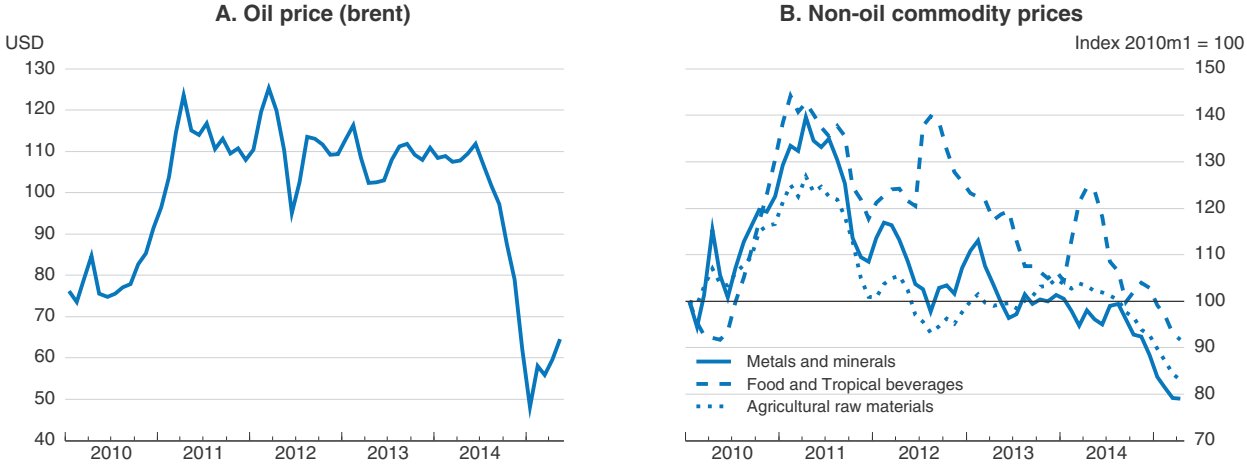
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between 2% and 6% of GDP, with beneficial wealth and income effects for domestic firms and households.

The oil price fall is boosting global growth and no longer depressing inflation

Following four years of broad stability at around USD 105 per barrel, oil prices have declined sharply since June 2014 and have been trading in the USD 50 to USD 70 range since the beginning of 2015 (Figure 1.10). While much of the recent price decline seems attributable to supply factors, the simultaneous decline in the price of many other commodities, though generally by less than oil prices, suggests that demand factors also played a role. In 2014 global food prices fell to their lowest level in four years, while

Figure 1.10. **Commodity prices have fallen**



Source: *OECD Economic Outlook 97 database*; and Datastream.

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agricultural commodities and metals and minerals prices are also down more than 15% since last June.

The fall in oil prices reallocates income between oil producers and consumers, both within countries that produce oil and between net oil-exporting and net oil-importing countries. This is reflected in major changes in current account balances (Table 1.3). The net impact of these transfers on global activity should in itself be positive given that consumers typically have a higher spending propensity than producers. The resulting boost in global demand is a positive development in the context of an overall deficiency of demand. The growth benefits to net oil-importing countries will be offset to some extent by lower exports to oil producers, as these countries have less income.[2] At an oil price of

Table 1.3. **World trade will strengthen gradually**

Goods and services trade

	2012	2013	2014	2015	2016
	Percentage change from previous period				
World trade[1]	3.1	3.3	3.2	3.9	5.3
OECD exports	2.8	2.7	3.7	3.8	5.3
OECD imports	1.3	1.9	3.5	4.6	5.3
Trade prices[2]					
OECD exports	-3.6	0.3	-1.2	-11.6	1.2
OECD imports	-2.7	-0.6	-1.5	-12.7	1.0
Non-OECD exports	0.3	-2.0	-2.7	-7.4	2.5
Non-OECD imports	-0.7	-0.9	-1.9	-3.7	2.9
Current account balances			Per cent of GDP		
United States	-2.9	-2.4	-2.4	-2.6	-3.0
Japan	1.0	0.8	0.5	2.8	3.0
Euro area	2.2	2.8	3.4	3.9	4.1
OECD	-0.4	-0.1	0.0	0.1	0.1
China	2.5	1.6	2.1	2.4	2.1
			$ billion		
OECD	-213	-55	-18	40	44
United States	-461	-400	-411	-475	-557
Japan	62	40	23	116	130
Euro area	274	362	445	451	489
Non-OECD	548	373	408	281	310
China	215	148	220	267	250
Major oil producers	566	440	332	121	153
Rest of the world	-233	-215	-144	-106	-93
World	335	319	390	322	354

Note: Regional aggregates include intra-regional trade.
1. Growth rates of the arithmetic average of import volumes and export volumes.
2. Average unit values in dollars.
Source: OECD Economic Outlook 97 database.

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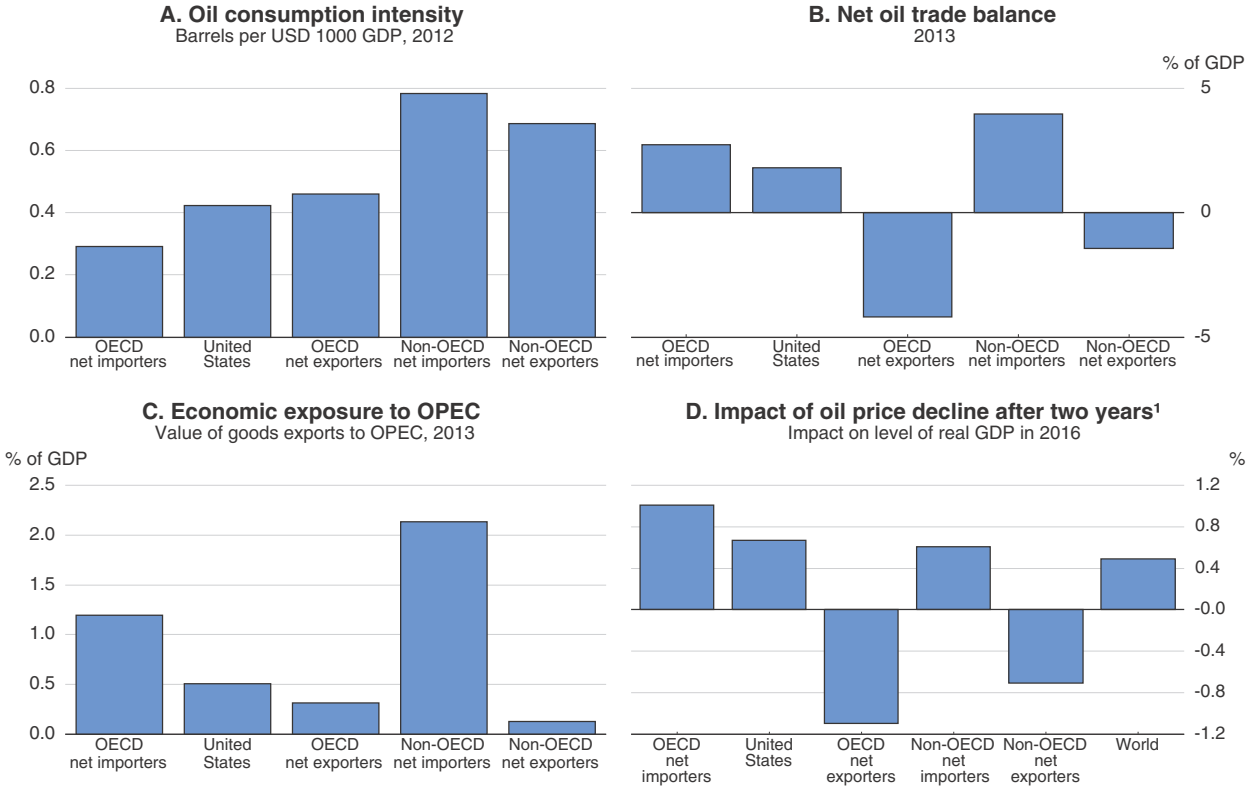
2. In the 2002-08 period, re-spending rates of higher oil revenues by oil exporters are estimated to have been around 40% for the OECD area as a whole (Wurzel et al., 2009). However, this differed significantly across economies, with relatively low rates in the United States and Japan and relatively high ones in the euro area countries (up to 80% in Germany).

USD 65 a barrel, the top ten net oil exporters are projected to lose around USD 450 billion in export earnings this year compared with 2014. The spending boost may take time to be realised, whereas the producer response through lowered investment has taken place more quickly, leaving the net effect of the oil price decline somewhat muted in the near term.

Lower oil prices will add about ¼ percentage point to both global and OECD growth in each of 2015 and 2016. The impact is estimated to be larger in Japan (about 0.6 percentage point per year) and in the United States (about 0.4 percentage point per year including investment effects) than in the euro area (about 0.2 percentage point per year). Despite the positive global impact, countries differ greatly in the extent to which they are affected, given different oil consumption intensities, net oil balances and trade exposures to energy producers (Figure 1.11).

- OECD oil-importing economies with little or no oil production, such as the euro area and Japan, receive a real income boost similar in effect to a tax cut.

Figure 1.11. **The oil price decline has different effects across country groups**



Note: The OECD net importers group includes the Euro area, Australia, Czech Republic, Hungary, Japan, Korea, New Zealand, Poland, Sweden, Switzerland and United Kingdom. The OECD net exporters group includes Canada, Denmark, Mexico and Norway. The non-OECD net importers group includes China, India, Indonesia, Singapore, South Africa, Taiwan and a few other small countries depending on the panel, mostly in East Asia. The non-OECD net exporters group includes Russia as well as African and Middle Eastern producer countries, the precise list varying slightly between panels.

1. The results are from simulations on the National Institute of Economic and Social Research's NiGEM model, except OECD net exporters and the United States which are OECD estimates. The simulations use the observed oil price up to the end of 2015 Q1 and assume USD 65 per barrel as of 2015 Q2. The world effect is a weighted average of the five other groups.

Source: International Energy Agency; International Monetary Fund; and OECD calculations.

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- In the United States, still a net oil importer, the growth benefits will accrue gradually over this and next year, but are tempered in the short term by a fall in oil sector investment.
- For net oil-exporting OECD economies – such as Canada, Norway and Mexico – lower oil prices are weighing on growth through significant losses in export and fiscal revenues and lower investment. But currency depreciation and energy cost savings to consumers provide a partial offset.
- In non-OECD net oil-exporting economies, in particular Russia but also some Latin American countries, the fall in oil prices is dragging growth down substantially with associated currency weakness. Declining import demand provides some offset to growth, as does the income gain to energy consumers, given that these countries typically have relatively high oil consumption intensities.
- Non-OECD net oil-importing economies, especially those in Asia such as India and Indonesia, may be the greatest beneficiaries from lower oil prices as energy figures more prominently in consumption baskets and production methods and negative net oil balances are thus relatively large. This is also true of China, which makes greater use of coal, whose price also tumbled.

Looking ahead, even if oil prices may come under renewed downward pressure in the short term, supply-demand projections from the International Energy Agency suggest that prices are likely to rise in the longer term, although remain below USD 100 (Box 1.2).

The direct impact of oil price movements on global inflation is estimated to be essentially a one-off, peaking after three to five months, before fading gradually. In light of the arrest to the very large fall in commodity prices that took place in the second half of 2014 and early 2015, and the partial rebound in oil prices since March, this implies that headline inflation rates have already troughed. Indeed, monthly global consumer price inflation has picked up to 0.2-0.3% in recent months. The second-round effects, via wages or the use of oil as an input into the production of other goods and services, of the oil price drop appear to have been modest so far. Medium-term inflation expectations have either been little affected, particularly in the case of survey-based measures, or their initial decline after the beginning of the oil price fall has since partly reversed, notably those based on the prices of financial instruments in Japan (Figure 1.12).

Labour markets are gradually healing

Conventional indicators suggest that slack in labour markets in advanced economies is diminishing (Table 1.4 and Figure 1.13). At the level of the OECD as a whole, the unemployment rate has fallen to 7%, a level not seen since 2008 and close to the estimated structural rate. This is particularly true in the United States and Japan, although in the United States involuntary part-time work is still high and some of those now out of the labour force might return if job prospects improve. In the euro area, by contrast, unemployment is still quite high, with the notable exception of Germany, and involuntary part-time work is pervasive. Narrowing gaps between actual and trend participation rates in many countries, partly reflecting population ageing, which pushes down trend rates, is another sign of lower labour market slack.[3]

3. Pension reform in a number of countries may offset the effect of ageing on trend participation rates to some extent. Already legislated reforms are taken into account in OECD long-term projections of participation rates (see Box 4.6 in OECD, 2014a) although the offsets may be stronger than projected and more reforms may occur.

Box 1.2. **Potential oil price developments in the medium and longer term**[1]

The 60% oil price drop in the second half of 2014 was not unprecedented, as similar drops happened in 1986, 1998 and 2008 (Figure below). The recent decline was both supply and demand-driven and it took place while energy markets have been undergoing fundamental changes. The International Energy Agency (IEA) expects the market rebalancing to be quite swift, but relatively limited in scope. Oil prices are expected to stabilise above current levels, but substantially below the average price of USD 110 per barrel seen in the three years preceding the drop, under the assumption that no unexpected supply disruption or major policy change takes place.

The major factors behind these price development expectations are the following:

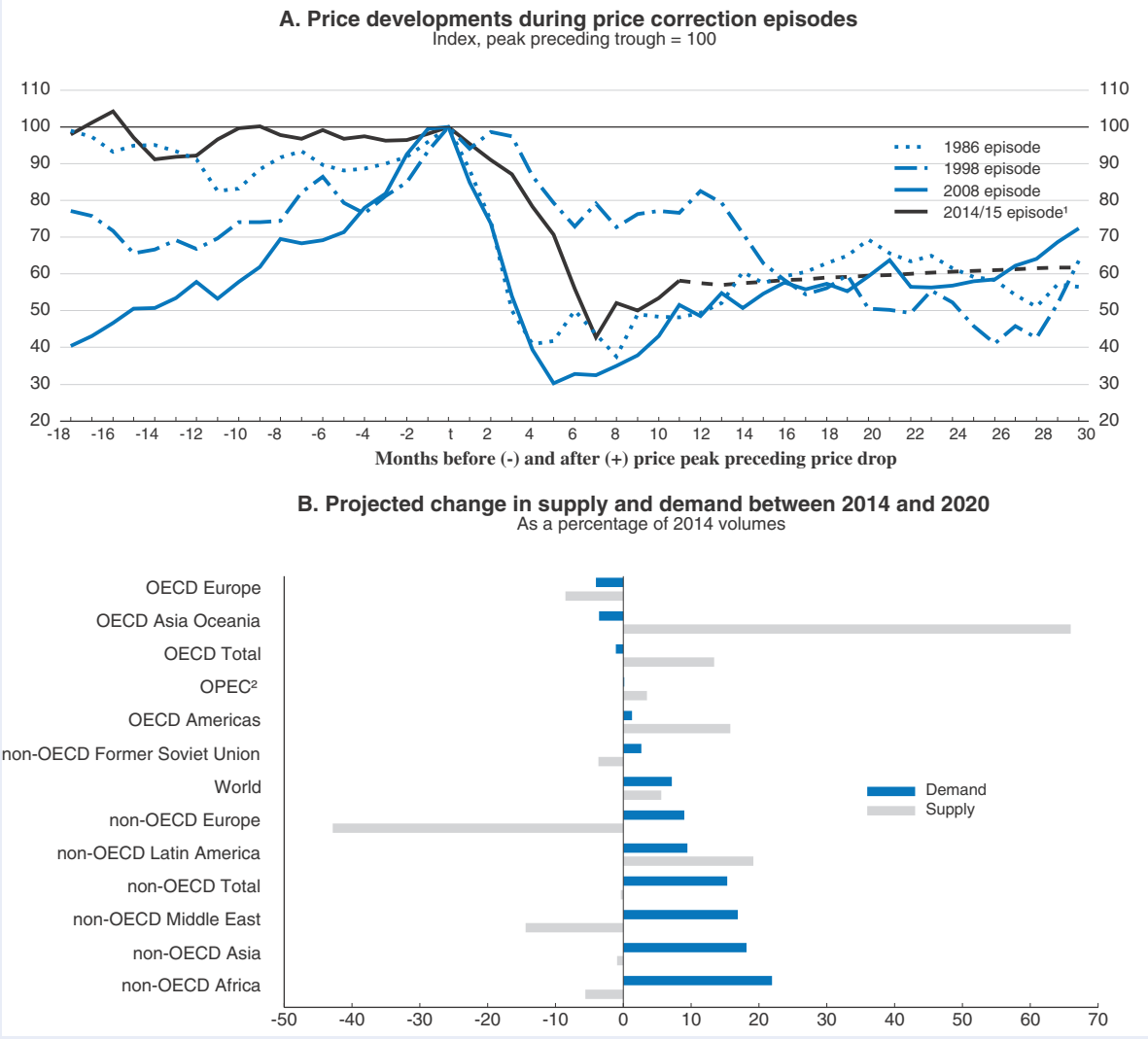
- Demand growth is expected to outpace the growth of supply over the next six years (Figure below). Oil demand is expected to grow by 1.1 mb/d per year by 2020 (an increase of about 1.1% per annum), but this is a much slower pace compared with the pre-crisis period (by about 0.2 percentage point) as the global economy has been gradually becoming less oil intensive. This trend is also spreading to EMEs, with the oil intensity of China projected to fall 20% by 2020. China's oil demand will grow at a similar pace as the aggregate of non-OECD economies (2.4% p.a.). India stands out with annual growth of 3.4%, reflecting its rapid population and economic growth. Nevertheless, the EMEs aggregate will no longer provide as big an offset to the projected decline of demand of the OECD economies (by 0.2% p.a.) as was the case before the crisis. Among the OECD economies, the United States is the only country for which demand growth is projected (0.3% p.a.), while Japanese demand is projected to decline by 1.4% p.a. and that of OECD Europe by 0.7% p.a. in the medium term. Across all economies, fuel switching to natural gas, nuclear, coal and renewables is expected to cut global oil demand by about 2% by 2020.
- Supply capacity is projected to increase by 0.86 mb/d by 2020 (about 0.9% p.a.), but at a slower pace than in the past and compared with demand, mainly due to the scaling back of investment following the drop in prices. Despite OPEC's decision to defend its market share, almost all of its production growth by 2020 (0.5% p.a.) is projected to come from Iraq, despite security risks, reflecting its high endowment with resources. The capacity of the United Arab Emirates and Libya is also projected to grow (by about 2% p.a.) but other OPEC producers with higher costs, lower financial reserves, and social and budgetary pressures will see stagnation or even declines. Among non-OPEC countries, the United States will remain the top source of global supply growth in barrel terms. Supply is projected to grow around 3% p.a. in the United States and Canada and 5% p.a. in Brazil. Russia's output is expected to decline by about 0.9% p.a. by 2020, as low prices, international sanctions and a depreciating currency exacerbate the effect of natural declines at the country's brownfields. Several other smaller producer countries – including Norway, Egypt, Colombia and Indonesia – are also expected to see declines in production over the medium term.
- Over a shorter term, the timing of a lifting of sanctions on Iran will affect market rebalancing. Iran would be able to restore its full supply capacity quickly and then raise it, to about 4 mb/d by 2020 from the current 2.8 mb/d. Moreover, other producers might lift their supply as well, in an attempt to preserve market share. This would lead to a considerably less tight market which would probably rebalance at an even lower price.

In addition, the following factors could affect the volatility of the oil price over the short to medium term:

- Non-OPEC supply has become more price elastic. North American Light Tight Oil (LTO) has become the single largest source of global supply growth, with projected growth of about 0.3 mb/d (6%) p.a. by 2020. OPEC's decision not to cut production in November 2014 has turned LTO into a critical market-balancing factor. LTO is more responsive both to higher and lower prices, with short lead times, faster payback and lower upfront costs, and will thus limit global under and overshooting of market corrections.
- On the other hand, North America's growing supply means that an increasing portion of its demand will be sourced locally. This will contribute to the decline in international crude trade, in particular inter-regional trade, which will also be affected by increasing volumes of crude being refined locally before being exported. Global oil trade will thus shift from crude oil to oil products, with a contraction and fragmentation in crude markets mirrored by expansion and globalisation in oil product markets. This might add to crude price volatility over the short to medium term.

Box 1.2. **Potential oil price developments in the medium and longer term**[1] *(cont.)*

Past and projected developments in the oil market



1. Values for 2014 episode from June 2015 onwards are Brent futures as of 27 May 2015. Futures prices are not price projections.
2. OPEC is not included in the non-OECD supply aggregate.

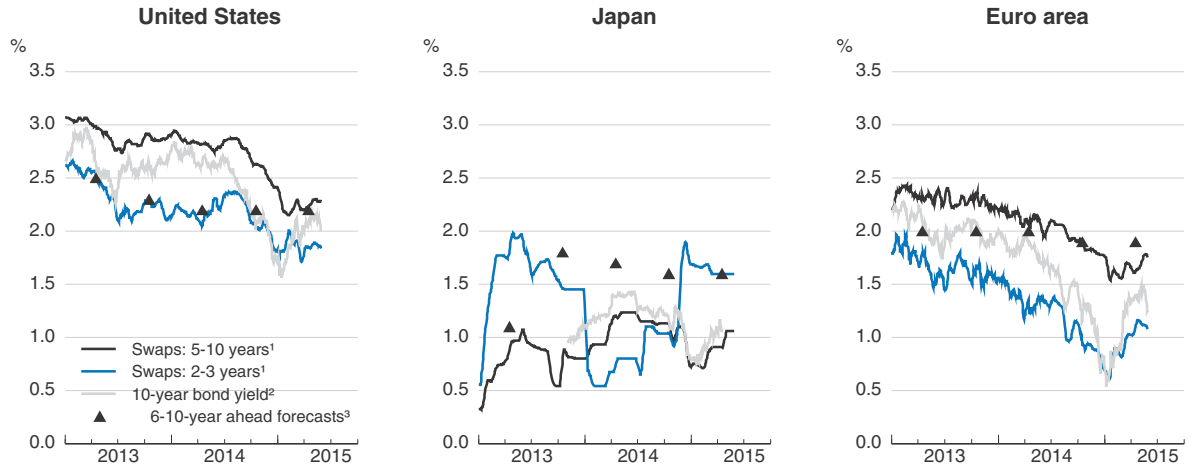
Source: OECD National Accounts Database; International Energy Agency; Wall Street Journal Markets Data Center; and OECD calculations.

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1. This box is based on IEA (2015) and monthly *IEA Oil Market Reports* from 2015.

The improvement in labour markets has so far not been accompanied by a significant pick-up in wage growth (Figure 1.14). Subdued wage growth has encouraged producers to use more labour, but has also pushed up the profit share in some economies, including the United States. With labour markets now getting tighter, the pendulum seems set to swing gradually away from profits and toward wages. In the United States, compensation growth

Figure 1.12. **Inflation expectations have picked up**



1. Expected average annual inflation based on inflation swaps. For instance, for 5-10 years ahead, this is the difference between 5-year and 10-year inflation swaps.
2. Expected inflation implied by the yield differential between 10-year government benchmark bonds and 10-year inflation-indexed bonds.
3. Average of 6-10-year ahead inflation forecast by professional forecasters from Consensus Economics.

Source: Datastream; FactSet; and Consensus Economics.

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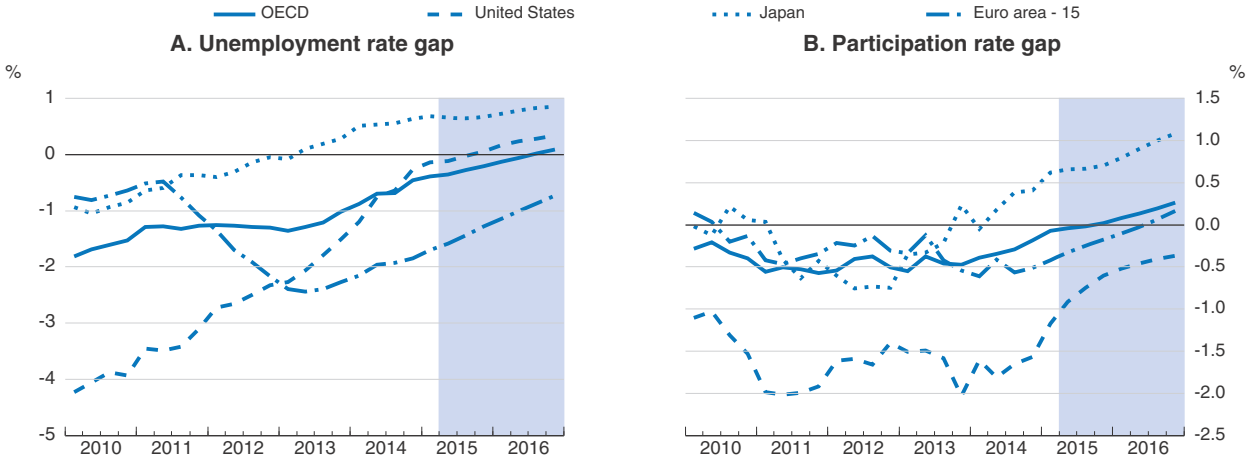
Table 1.4. **OECD labour market conditions are likely to improve slowly**

	2011	2012	2013	2014	2015	2016
	Percentage change from previous period					
Employment						
United States	0.6	1.8	1.0	1.6	1.9	1.0
Euro area	0.2	-0.6	-0.6	0.6	0.9	1.1
Japan	-0.1	-0.3	0.7	0.6	0.3	0.1
OECD	1.0	1.0	0.7	1.3	1.3	1.0
Labour force						
United States	-0.2	0.9	0.3	0.3	1.2	0.7
Euro area	0.3	0.7	0.2	0.1	0.4	0.4
Japan	-0.6	-0.6	0.3	0.2	0.1	0.0
OECD	0.6	1.0	0.6	0.7	0.9	0.7
Unemployment rate	Per cent of labour force					
United States	8.9	8.1	7.4	6.2	5.5	5.2
Euro area	10.1	11.3	11.9	11.5	11.1	10.5
Japan	4.6	4.3	4.0	3.6	3.5	3.3
OECD	7.9	7.9	7.9	7.3	6.9	6.6

Source: OECD Economic Outlook 97 database.

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Figure 1.13. **Labour market slack indicators**

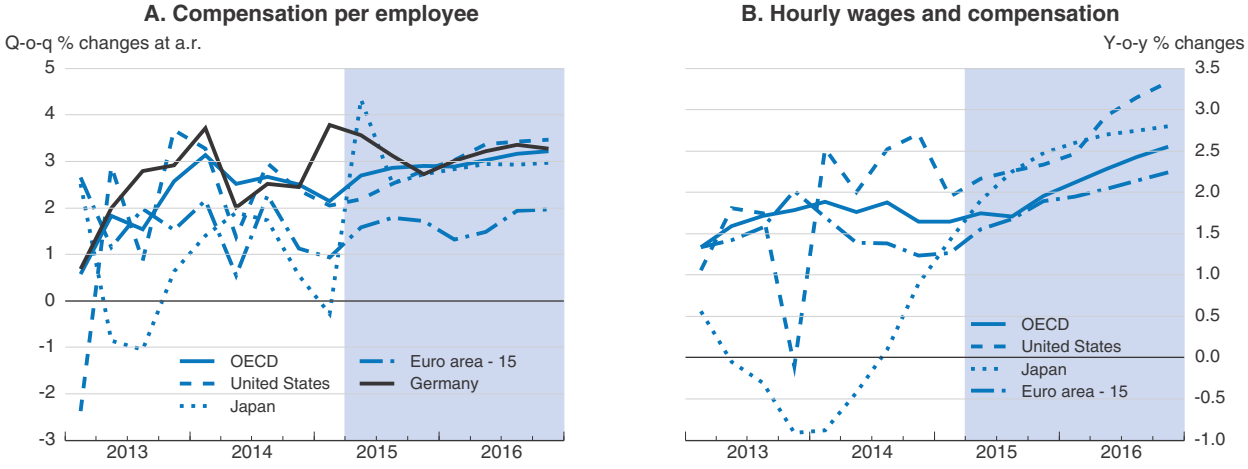


Note: The unemployment rate gap is the difference between the actual and estimates structural unemployment rates. The participation rate gap is the difference between actual and estimated trend participation rates.
Source: OECD Economic Outlook 97 database.

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is projected to rise from about 2½ per cent now to 3⅓ per cent by end-2016. Surveys show expectations of increasing compensation, a few high-profile and large employers have announced wage increases, and minimum wages have been raised in some states. In Japan the annual spring negotiations point to rising base pay, and wages are projected to be rising 2¾ per cent by end-2016, a rapid rate by Japanese standards. In Europe, however, persistently high unemployment will prevent wages from accelerating markedly. An exception is Germany where wages are already rising at a healthy clip and recent wage negotiations point to continued increases.

Figure 1.14. **Labour compensation**



Source: OECD Economic Outlook 97 database.

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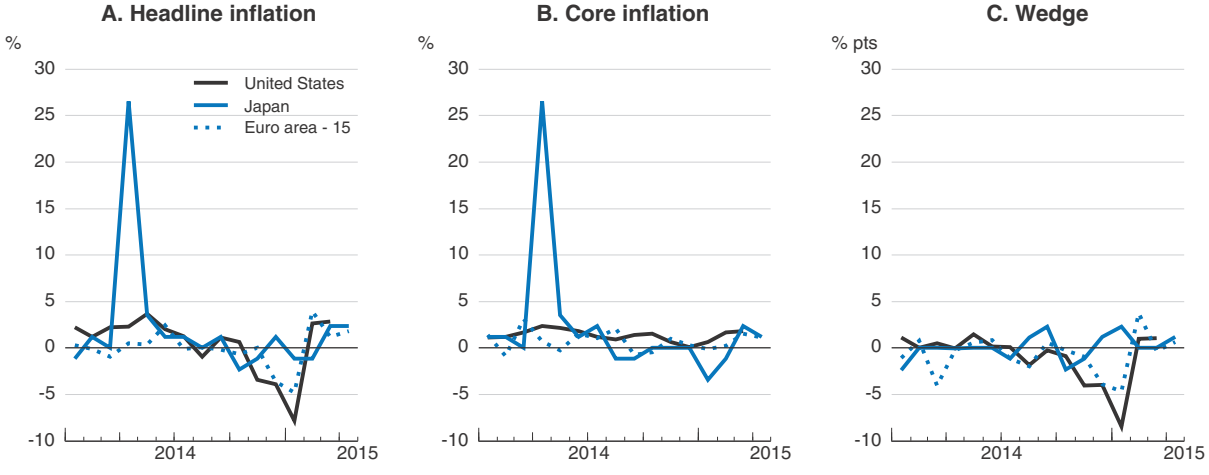
Gains in real disposable income have had a limited impact on personal consumption

Despite tepid nominal wage growth up to now, real disposable income received a fillip from the collapse in oil and other commodity prices, which produced a large but temporary disinflationary impulse in the global economy. From July 2014 to January 2015, the average monthly change in the global CPI was zero. Consumer prices in advanced countries even saw outright declines in November and December 2014 and January 2015 (Figure 1.15). Together with slowly improving labour markets, this negative price impulse inflated real wages and real disposable income. In the United States modest and stable average hourly wage growth of around 2% at the turn of the year still translated into an acceleration in real wages. By March 2015 real personal disposable income was up 3.3% from a year ago. The benefit to US consumers from lower energy prices is estimated to be equivalent to a tax cut in excess of USD 500 per household, with the impact concentrated on lower-income households, who have a higher marginal propensity to consume. The purchasing power lift to euro area or Japanese households is more modest than in the United States, given euro and yen weakness and lower oil consumption intensity, but it is still significant.

Consumers have responded unevenly to their increased purchasing power. A strong consumer response began to build in the last quarter of 2014, with global retail sales volumes jumping 6.6% at an annualised pace in the three months to December, including more than 3% in the euro area (Figure 1.16). Strong consumer spending in the euro area was also supported by a surge in consumer confidence, lower bank lending rates for households and an easing in credit conditions. In the United States real consumer spending growth also accelerated strongly in the second half of 2014 to an annual rate above 4%. But while retail sales volumes in the euro area look set to post a similar 3% annualised gain in the first quarter of 2015, globally they have decelerated sharply, with barely any growth estimated in the first quarter of 2015. In the United States real consumer spending grew only 1.8% on an annualised basis in the first quarter despite a 5.3% gain in real disposable income. Some of the early-year weakness in the United States can probably

Figure 1.15. **Monthly inflation rates**

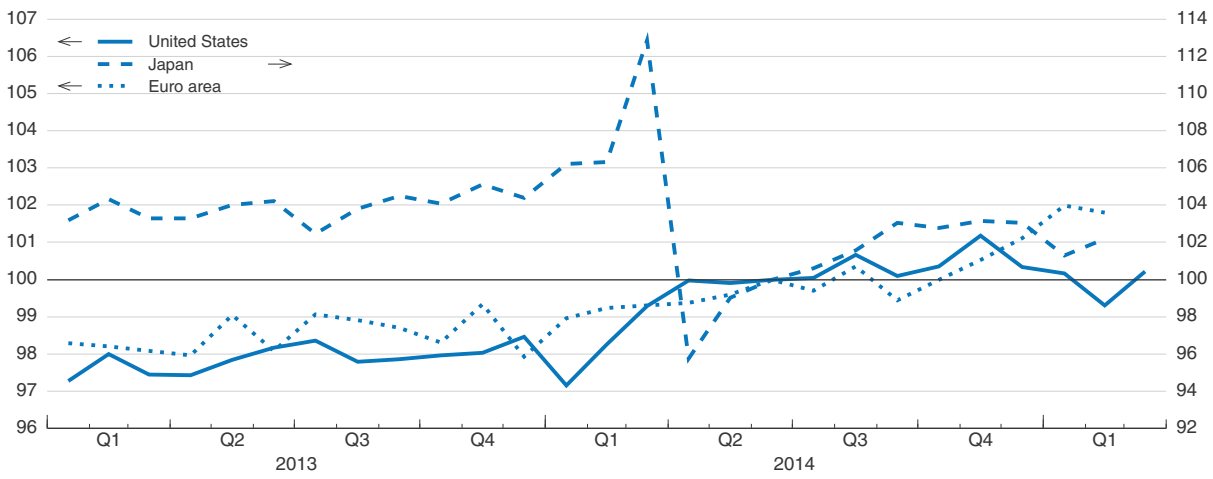
Month-on-month percentage changes at annual rates



Source: *OECD Economic Outlook 97 database*; Statistics Bureau of Japan; and OECD calculations.

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Figure 1.16. **Retail sales**
Index June 2014 = 100



Source: OECD, Main Economic Indicators Database.

StatLink http://dx.doi.org/10.1787/888933220720

be attributed to bad weather effects rather than a permanently higher saving rate. Consumer spending should thus pick up in the coming months, supported by robust labour income, low interest rates, strong sentiment and the gradual pass-through of the stronger dollar into consumer prices. The early-year slowdown in consumer spending in other parts of the world represents more of a puzzle but is also expected to reverse following relatively strong fundamentals in labour markets, wealth effects, purchasing power and sentiment.

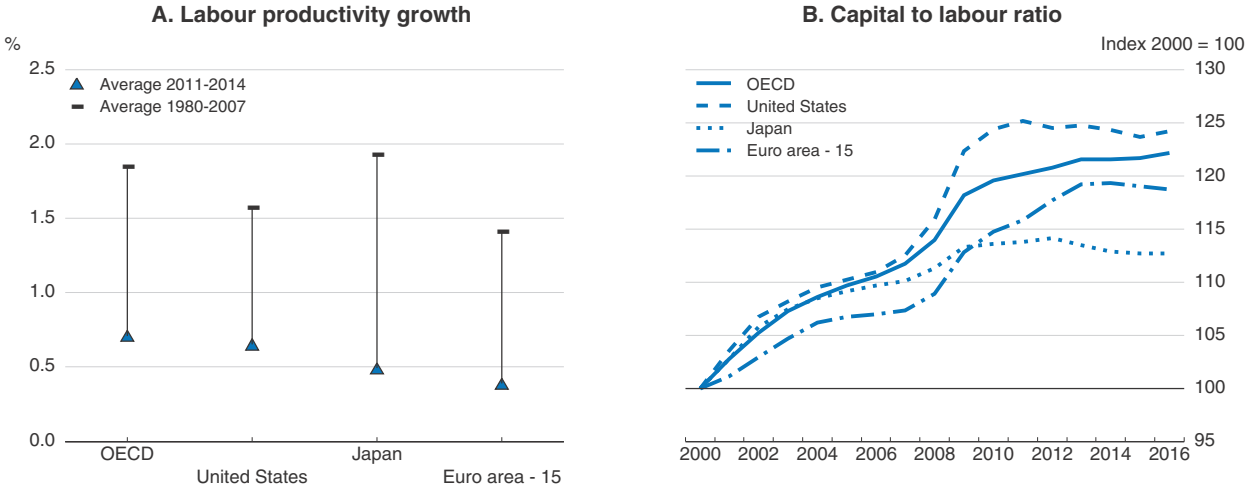
Sustained consumption growth depends on rising wages, so the prospect of cyclical increases in real wages is a welcome sign. Wages constitute the core of household income, especially of low-income households with high spending propensities, and other types of income, such as pensions, are tied to wage dynamics. Higher wages would boost sales, hiring and investment and in turn lead to higher employment and more income in a virtuous circle. But for higher wage growth itself to be sustainable and not eaten up by inflation, labour productivity growth must also rise.

Productivity growth needs to accelerate

It would be worrying if productivity growth remained weak once economies have returned to full employment. Between the end of the early 1980s recessions in advanced countries and the global economic and financial crisis that started in 2007, aggregate OECD labour productivity growth averaged just below 2% (Figure 1.17). From 2011 to 2014, however, it averaged only 0.7% per year and was less than that in the United Kingdom, Japan, the United States and the euro area, including Germany and France. Labour productivity growth can be unusually weak during or just after recessions when firms prefer hoarding labour and resorting to part-time and shift work to reducing employee counts. In contrast, strong job growth is often seen as a recovery gains speed and it becomes necessary to rehire unemployed workers.

Faster labour productivity growth will require a boost in investment, because much of the disappointing productivity performance of the last few years is due to weakness in capital spending, rather than slower technical progress (Box 1.3). Some of this recent

Figure 1.17. **Labour productivity and investment**



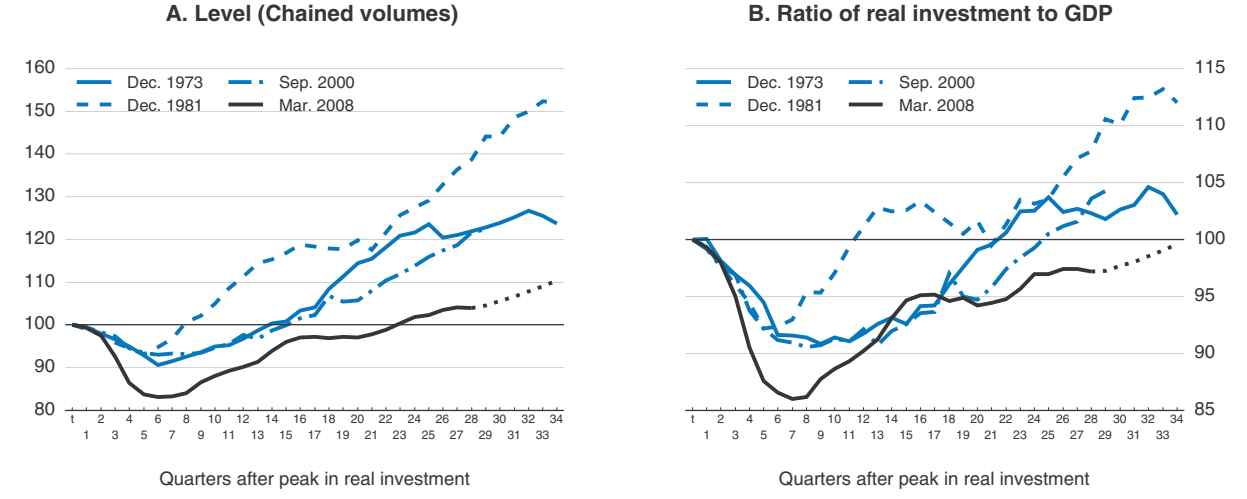
Source: OECD Economic Outlook 97 database.

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weakness is cyclical and due to a sharp slowdown in tangible investment during the financial crisis. But the subsequent investment recovery has been sluggish compared with past recessions, although in line with the weakness in output according to accelerator-type models (Figure 1.18; Chapter 3; IMF, 2015a). Still, the tepidness of investment is not a new trend. Except in countries like Canada and Australia, which ramped up mining sector investment in the 2000s as commodity prices increased, the contribution of capital deepening to productivity and GDP growth in the United States, Europe, Korea and Japan had been slowing for many years prior to the financial and economic crisis.

Figure 1.18. **Real business investment growth has been weak compared with previous cycles**

Peak in OECD real investment = 100



Note: Data are for OECD countries for which the breakdown of investment is available. For the March 2008 series, the dotted line is based on projections.

Source: OECD Economic Outlook 97 database; and OECD calculations.

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Private investment spending, excluding housing, is generally projected to strengthen only mildly until end-2016 as compared with previous cyclical recoveries. This is consistent with the projected modest acceleration in domestic and global activity, lingering uncertainty, the remaining excess capacity in many areas and the drag on investment engendered by lower oil prices in some large economies like the United States and Canada. As economies continue to recover, consumption growth accelerates in line with wages and incomes, and confidence in future economic prospects strengthens, firms can be expected to increase the pace of investment spending. A number of OECD countries have also implemented sizeable structural reforms in the wake of the economic crisis. On average across the OECD, countries have made progress in abolishing price controls or improving their design, streamlining administrative procedures for start-ups, simplifying rules and procedures and improving access to information about regulations. As these reforms bear fruit, output and investment should accelerate. Moreover, the boost to investment and growth in one country spills over to support investment and growth in others. Hence revived growth prospects, particularly in the euro area and Japan, could disproportionately boost global growth relative to the last several years when these areas have lagged. Such a

Box 1.3. **The contribution of weaker investment to slower potential growth**

The growth rate of OECD potential output per capita, proxying the trend growth rate of living standards, slowed from just below 1½ per cent per annum in the years preceding the crisis, to below 1% in the years immediately following it, before recovering to about 1% more recently (Figure below). The slowdown can be split into contributions from potential employment and trend productivity. The growth contribution from potential employment has slowed gradually due to the effect of ageing populations and more abruptly in the years following the crisis as structural unemployment rates is some countries rose. The slowdown in trend productivity is, however, much more important in explaining the decline in potential growth, with prolonged weakness in investment an important part of the story.

The decline in trend productivity growth can be split into contributions from total factor productivity and capital per worker, assuming an underlying Cobb Douglas production form for potential output. On this basis OECD total factor productivity growth slowed following the crisis, but has since recovered close to pre-crisis growth rates. Conversely the contribution from capital per worker slowed during the crisis and has remained subdued due to the prolonged weakness in investment. Indeed, the slower growth in capital per worker explains more than half, or about 0.3% per annum, of the slowdown in trend living standards for recent years compared to pre-crisis averages. This contribution from the slowdown in capital has become more apparent with the recent revision of capital stock data to be consistent with the new system of national accounts and the associated revision to the definition of investment, which now includes expenditures on research and development.

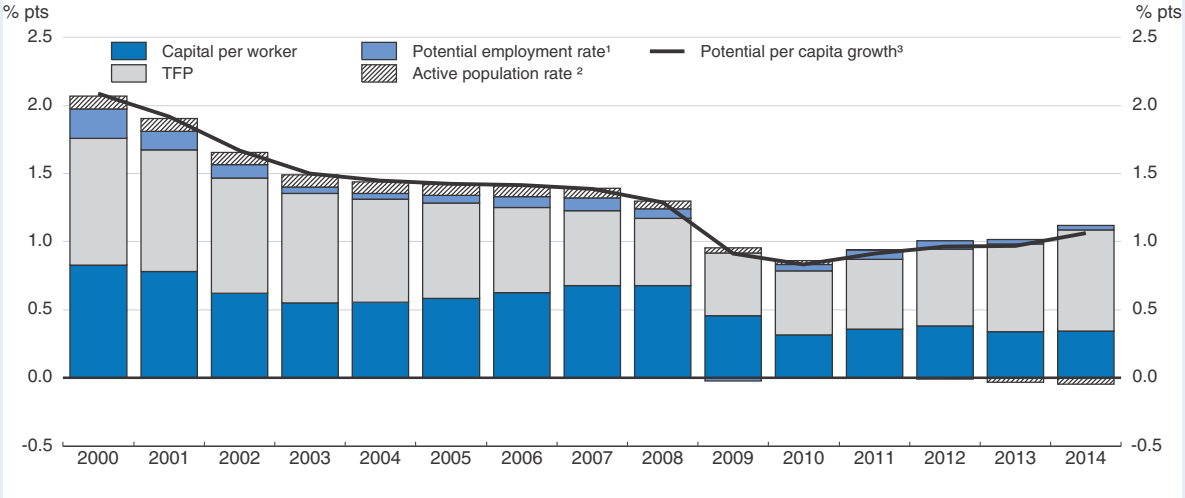
The foregoing analysis relates to the aggregate OECD, but nearly all OECD countries have experienced a prolonged post-crisis slowdown in the contribution of capital per worker to trend productivity growth, the only exceptions being Australia, Canada and Chile, which experienced strong mining-related investment in the wake of booming commodity prices.

- The slowdown in capital per worker was greatest among those countries most severely affected by the crisis. For Estonia, Greece, Iceland and Portugal the slowdown in capital per worker contributed to a slowdown in post-crisis potential growth averaging between ½ and 1 per cent per annum.
- Other countries for which the post-crisis slowdown in capital per worker contributed between ¼ and ½ per cent per annum to lower potential growth are Austria, Denmark, Hungary, Italy, Japan, Korea, Luxembourg, Slovenia, Switzerland, the United Kingdom and the United States.

Box 1.3. **The contribution of weaker investment to slower potential growth** *(cont.)*

Decomposition of the growth rate of OECD potential output per capita

Contribution to potential per capita growth



Note: Assuming potential output (Y*) can be represented by a Cobb-Douglas production function in terms of potential employment (N*), the capital stock (K) and labour-augmenting technical progress (E*) then $y^* = a\,(n^* + e^*) + (1 - a)\,k$, where lower case letters denote logs and a is the wage share. If P is the total population and PWA the population of working age (here taken to be aged 15-74), then the growth rate of potential GDP per capita (where growth rates are denoted by the first difference, d(), of logged variables) can be decomposed into the five components depicted in the figure: $d(y^* - p) = a\,d(e)^* + (1 - a)\,d(k - n^*) + d(n^* - pwa) + d(pwa - p)$.

1. Potential employment rate refers to potential employment as a share of the working-age population (aged 15-74).
2. Active population rate refers to the share of the population of working age in the total population.
3. Percentage changes.

Source: OECD Economic Outlook 97 database.

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collective response could boost the current low-level growth equilibrium to a higher sustained growth equilibrium.

Structural policy along a number of dimensions is essential to ensuring an increase in potential growth that is equitably shared. In this regard, the pace of structural reforms has slowed across the OECD in the past two years, in particular as concerns product market regulation, even as it has accelerated in large non-OECD economies (Koske et al., 2015; OECD, 2015a). Recent performance notwithstanding, a number of economies still suffer from structural impediments and would thus benefit from further policy action:

- Within the euro area, completing the Single Market with reference to the network infrastructures of telecommunications, energy transport and digital technology would boost investment and growth, as would further progress on banking and capital markets unions.
- Boosting competition and innovation and facilitating the entry of new firms would smooth the reallocation of labour and capital across firms and sectors and would help raise productivity growth. In the euro area periphery, product market reforms, especially in services, are needed to reap the full benefits of the labour market reforms introduced in recent years.
- Better integration of social protection and active labour market policies would facilitate job creation and matching and thus accelerate the elimination of labour market slack and the pick-up in wage growth. It would also reduce labour market duality and informality.

- In EMEs better physical and legal infrastructure can help address growth bottlenecks, reduce financial sector vulnerabilities and improve resource allocation, ultimately helping to narrow the gap in material living standards with advanced economies.
- In advanced and emerging market economies alike, the ultimate drivers of productivity gains are skills and knowledge-based human capital, underscoring the importance of raising the quality and inclusiveness of education systems.

Risks to the outlook

The current projections for modest OECD and world recoveries describe a most likely scenario with roughly symmetrical risks around it, including:

- The projected pick-up in investment in advanced countries may fail to materialise. If investment growth in the OECD area stayed at its 2014 level (2.7%) instead of gradually increasing to 4.7% by end-2016 as projected, OECD area growth would be about 0.2 percentage point weaker than projected in 2015 and 0.6 percentage point lower in 2016.[4] On the other hand, private investment could accelerate more than envisaged. The accelerator model predicts that investment can change swiftly and by a large multiple of changes in output as firms try to anticipate future capital needs and adjust capacity accordingly. The positive response of investment to the gradual closing of output gaps and to recent structural reforms in the OECD area could be stronger than anticipated, particularly since financing costs are historically low. This could have a noticeable effect on growth despite the relatively small share of private investment in output.
- Similarly, the projected pick-up in wage growth, and the associated increase in consumption growth, may not happen. Growth in compensation per employee in the OECD area was running at about 2¼ per cent in early 2015 and is projected to accelerate to 2.7% in 2016. In a scenario where compensation instead continues to grow at about 2¼ per cent until end-2016, private consumption growth might be 0.1-0.3 percentage point lower than projected in both 2015 and 2016 depending on the country, reducing aggregate OECD area growth in both years by about 0.2 percentage point as well. On the other hand, with tightening labour markets in most large OECD countries and even labour shortages in Japan, wage growth could pick up more than expected, driving acceleration in private consumption. Mirroring the above simulation results, an extra ½ percentage point in wage acceleration by end-2016 could raise OECD area growth by 0.2 percentage point in both 2015 and 2016.
- Alternatively, the projected acceleration in compensation could occur, with most of it being saved rather than spent. Part of the increase in purchasing power associated with lower oil prices appears to have been saved rather than spent, notably in the United States, as reflected in the aggregate OECD household saving ratio, which rose from 4.6% to 5.5% between early 2014 and early 2015. Consequently, private consumption in the OECD grew by only 1.9% at an annualised rate in the first quarter of 2015 despite solid real income gains. If household saving rates do not decline as expected, consumption growth may turn out weaker than projected. On the other hand, if household confidence improves more than expected, precautionary saving behaviour may wane and the saving rate may fall more than projected.

4. The estimates in this paragraph and the next one are based on simulations using the National Institute of Economic and Social Research's NiGEM model.

- Quantitative easing may prove ineffective in the euro area and Japan. The ECB and the Bank of Japan face challenges with boosting demand as continued asset purchases may have diminishing effects, lowering already low interest rates only marginally (Rawdanowicz et al., 2013). Moreover, quantitative-easing measures could be relatively ineffective in stimulating household consumption due to the composition and unequal holdings of financial wealth (Box 1.4).

Box 1.4. **Quantitative easing and household wealth**

By increasing wealth, quantitative easing (QE) can affect the consumption and investment decisions of households. However, the importance of this channel depends on the amount of financial assets, the type of assets, and how equally they are distributed within a country. This box analyses how these characteristics differ across selected OECD countries and draws tentative conclusions about the relative effectiveness of QE.

QE involves the purchase of financial assets by central banks, with the aim of increasing their price and consequently lowering their rate of return. QE adopted by OECD central banks has largely targeted sovereign and government-guaranteed bonds. However, through portfolio effects QE has also raised prices of corporate bonds and equities. In addition to direct holdings of bonds and equities, households can be exposed to financial markets through their savings with institutional investors such as pension funds. Households are also exposed to the financial system through bank deposit accounts and liabilities such as bank loans. QE and other monetary policy stimulus measures do not affect the nominal value of these, though they can affect interest received and paid by households.

By making households feel wealthier, asset price increases can induce households to consume more, especially if such increases are perceived as permanent. Increases in asset values can improve a household's collateral, easing access to credit through balance sheet effects (Bernanke and Gertler, 1995), enabling households to invest in housing or small businesses. The effect of changes in household wealth managed by institutions (such as pension funds) on household behaviour depends on the regulatory environment which may prohibit households from drawing down wealth prior to retirement. As richer households have a lower marginal propensity to consume (Carroll et al., 2014), QE may be less effective in countries where the distribution of wealth is highly unequal.

The size, composition and distribution of household financial assets differ greatly across six large OECD economies (Table below):

- Total (and directly held) financial assets are largest in relation to GDP in the United States and Japan and significantly smaller in European countries. A larger size of financial assets may make wealth effects more powerful.
- The nature of financial assets varies greatly. Japanese households hold around half of financial assets in currency and deposits. Consequently, they are less influenced by QE-driven wealth effects. In contrast, US households have the greatest direct exposure to financial market instruments, making them more susceptible to changes in asset prices and thus increasing the effectiveness of QE. In EU countries exposure is largely indirect through institutions, limiting the effects of QE on household consumption.
- In each country analysed the 20% wealthiest households own the majority of financial assets, with ownership in the United States being particularly concentrated, reducing the effectiveness of QE (Figure below).[1] In countries where data are available, the distribution of deposits is less skewed. With the exception of Italy, households' direct holdings of equities are more widespread than of bonds. Overall, wealth gains are most likely to go to households least likely to increase consumption.

Box 1.4. **Quantitative easing and household wealth** *(cont.)*

- Indirect exposure to financial markets via institutions is more common than direct exposure. This reduces the effects of QE on households. Pension and insurance funds tend to invest more in bonds than equities, with the exception of the United States, where their investments are more evenly matched.

Overall, it is the assets least widely held (bonds) that are directly affected by QE, with the nominal value of the most broadly held assets (deposits) unaffected. This limits the scope for QE to affect household spending. The effects of QE bond-buying programmes are likely to be more strongly felt by households in a country such as Italy, where bonds are held by more households and in larger amounts than elsewhere.

The significance of wealth effects on households' consumption and investment will also depend on the liability side of household balance sheets. There is less cross-country variability in terms of financial liabilities as a share of GDP. This reflects the fact that since the start of the crisis UK and US households have decreased leverage, in contrast to households in the euro area and Japan, where leverage is close to historic highs. In all countries the vast bulk of financial liabilities are in the form of loans (with mortgages comprising 50-85% of loans). The available evidence suggests that although household debt is concentrated, it is less so than household assets. In the United States almost three-quarters of households have some form of debt, compared with roughly half in France, Germany and the United Kingdom, and only a quarter in Italy. Therefore, for many households with debt the benefit of QE will only be through effects on the interest rate as their financial assets are limited to deposit accounts. This in turn will depend on how easily households can reduce interest rates on their bank loans – variable rate mortgages predominate in Italy and account for roughly half of mortgages in the UK (ECB, 2009) and Japan (Ministry of Land, Infrastructure, Transport and Tourism, 2015).

Overall, there is potential for a more important household spending channel for QE in the United States than elsewhere, as financial instruments are larger and held by more households, although their ownership is still highly concentrated. The household channel is potentially weakest in the United Kingdom due to the lack of direct exposure to financial assets (though this does preclude the effectiveness of other channels). Japan and euro area countries lie in the middle, with effects somewhat stronger in Italy.

Characteristics of household financial balance sheets in 2013

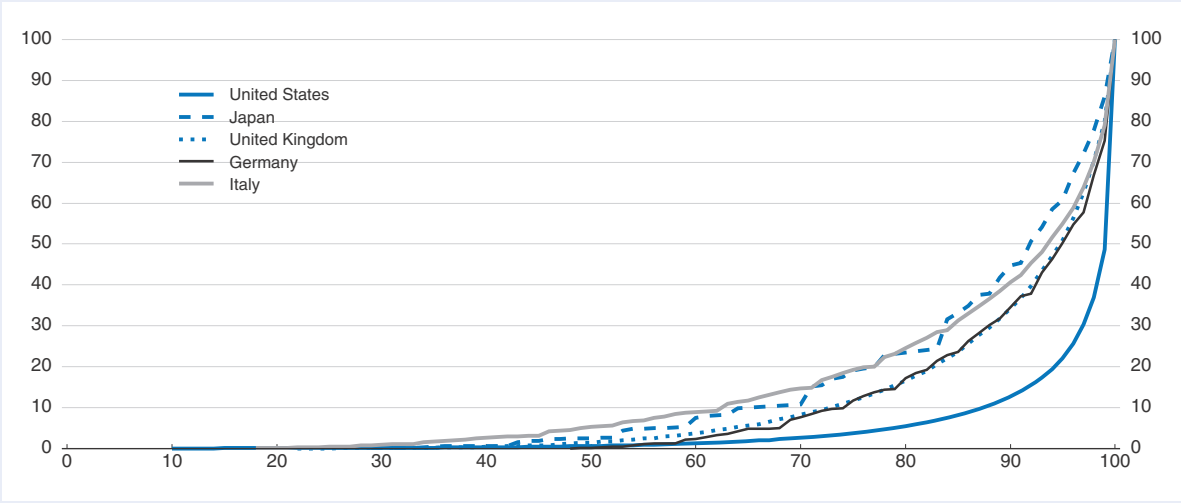
	France	Germany	Italy	Japan	United Kingdom	United States
	Per cent of GDP					
Financial assets	202.2	179.6	230.2	352.3	285.3	396.6
Financial liabilities	66.7	57.0	57.6	82.3	90.6	82.1
Composition of financial assets	Per cent of total financial assets					
Currency and deposits	30.1	40.8	31.7	52.9	27.8	12.7
Securities other than shares, except financial derivatives	1.6	4.8	18.7	2.5	0.7	7.9
Shares and other equity, except mutual funds shares	16.7	9.2	20.5	9.7	9.7	33.2
Mutual funds shares	7.1	8.5	7.2	4.7	2.1	12.1
Net equity of households in life insurance and pension funds reserves	34.7	34.5	17.6	26.0	55.5	31.3
Other financial assets	9.8	2.2	4.3	4.2	4.2	2.8

Note: 2012 used for France, Germany and Italy. Non-consolidated data is used to better demonstrate household exposures.
Source: OECD Financial Balance Sheet Accounts.

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Box 1.4. **Quantitative easing and household wealth** *(cont.)*

The cumulative distribution of total financial assets



Note: The dataset is based on household survey data from different years: Germany (2006), Italy (2004), Japan (2003), United Kingdom (2000) and the United States (2006). The different countries have different starting percentile (on the horizontal axis) from which onwards the distribution is computed.
Source: Luxembourg Wealth Study Database.

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1. US Survey of Consumer Finances, 2013; UK Wealth and Assets survey, 2010/2012; and The Eurosystem Household Finance and Consumption Survey. The forthcoming OECD Wealth Database (*In It together: Why Less Inequality Benefits All* – OECD, 2015d) contains extensive data on financial asset distributions for many OECD countries that can be used to analyse the economic implications of wealth disparities.
2. Hedged, denominated in dollars.

- The weakness of activity observed in the first quarter in a number of economies, and attributed mostly to a confluence of special factors, may in reality be signalling some persistent underlying weakness. Global activity in the first quarter is estimated to have advanced at the weakest pace outside of a recession in almost 20 years, dragged down by the United States and a number of EMEs. The US surprise is mostly attributed to a combination of effects from bad weather, port disruptions, reduced drilling for energy and perhaps residual seasonality. But a few puzzling developments, notably the weak response of global sales volumes to real income gains, and the drag from net trade experienced by the euro area in the first quarter despite a depreciating currency, suggest that domestic demand in a large swath of the world may be softer than thought. This alternative interpretation portends a more delayed or weaker acceleration of global activity than projected.
- Oil prices could rise above the assumed stable level of USD 65. The reasons could be many, from an uptick in geopolitical tensions in oil-producing regions, to a decline in production if OPEC were to revise its strategy. US production could also soon start declining following aggressive cuts in capital expenditures by shale producers. On the other hand, there could be additional near-term weakness in oil prices. The oil market is currently amply supplied, and storage in the United States is expected to bump up against capacity constraints within the next few months. This may lead to another fall in oil prices, as could the anticipated boost in oil supplies from Iran later this year.

- Reports of a strengthening El Niño raise the prospects of unusual or extreme weather events in certain parts of the world, which can have significant economic impacts depending on the region and also affect commodity prices. The phenomenon usually brings drought to the western Pacific, rains to the equatorial coast of South America, and convective storms and hurricanes to the central Pacific. The effects are typically most severe in the Asia and Pacific region, causing for instance hot and dry summers in southeast Australia and a weak monsoon and rising temperatures in India, with negative effects on agricultural production and upward pressure on prices. On the other hand, El Niño typically brings wet weather to the south-western United States, which would be of great benefit given the severe drought ongoing in California. Overall, previous experience suggests that El Niño might lead to short-lived falls in activity in Australia, Chile, Indonesia, India, Japan, New Zealand and South Africa (Cashin et al., 2014). But other countries may benefit, either directly or indirectly through positive spillovers from major trading partners, for instance Argentina, Canada, Mexico and the United States. Furthermore, most countries would likely experience short-run inflationary pressures following an El Niño shock as global commodity prices increased.

There are also a number of extraordinary risks not taken into account in the projections that could have potentially big effects. Many of them stem from side effects of ultra-expansionary monetary policies, aimed at stimulating weak recoveries, resulting in the search for yields and asset price booms in advanced economies. There are already some signs of excesses:

- An increasing number of sovereign bonds, in terms of countries and maturities, are traded at negative yields, even after the recent sell-off in government bond markets (Table 1.5). Governments of several European countries and Japan have managed to issue medium-term bonds at negative interest rates.[5] This suggests an extreme pricing of this asset class, with increasing chances of losses for investors, even if this should be seen in the context of negative deposit rates applied by central banks in European countries. Even where government bond yields are still positive, like in the United States, the term premium is estimated to be negative (BIS, 2015), a likely effect of quantitative-easing policies.
- In the euro area and the United States, the spreads between government and high-yield corporate bond yields have increased from levels close to historic lows in mid-2014. They are still relatively compressed, however, implying sustained investor risk appetite. Moreover, creditors are accepting a relaxation of security clauses in risky corporate bonds, with covenant-light bonds increasing in importance (Çelik et al., 2015). Also, the repackaging of loans to private equity and other high-risk borrowers into collateralised loan obligations has returned back to pre-crisis levels.
- Equity prices have reached record highs in many OECD countries. The assessment of valuation is inherently challenging. For instance, cyclically adjusted price-to-earnings ratios have been on the rise in many countries but they remain below their historic means, except in the United States where they are high by historical standards (Figure 1.19; Berg, 2015). Going forward, a key question is whether recent high earnings

5. This has been the case in Austria, Finland, France, Germany, Japan, Spain and Switzerland. The maturity of bonds varied across countries and in general ranged between 2 and 10 years.

Table 1.5. **Negative sovereign bond yields have become increasingly common**

Average sovereign benchmark bond yields for April and May 2015

	1Y	2Y	3Y	5Y	7Y	10Y	15Y
Switzerland	..	-0.83	-0.78	-0.42	-0.21	-0.03	..
Denmark	..	-0.45	-0.34	-0.13	..	0.48	..
Sweden	..	-0.31	-0.14	0.09	0.28	0.52	..
Germany	-0.24	-0.23	-0.19	-0.03	0.09	0.36	0.55
Finland	-0.04	-0.19	-0.10	0.07	0.28	0.48	..
Netherlands	-0.23	-0.19	-0.14	0.03	0.22	0.49	0.62
Austria	-0.19	-0.15	-0.08	0.07	0.30	0.48	..
Belgium	-0.18	-0.17	-0.10	0.09	0.30	0.60	0.81
France	-0.15	-0.16	-0.10	0.10	0.26	0.65	0.96
Ireland	-0.04	-0.07	0.02	0.31	..	0.96	1.27
Japan	-0.01	0.00	0.00	0.08	0.15	0.35	0.68
Italy	0.04	0.14	0.27	0.66	1.12	1.56	2.03
United Kingdom	0.44	0.65	0.89	1.33	1.42	1.79	2.14
Canada	0.68	0.63	0.63	0.94	1.25	1.57	..
United States	0.22	0.56	0.91	1.43	1.80	2.05	..
Australia	1.92	1.91	1.91	2.08	2.35	2.63	2.88

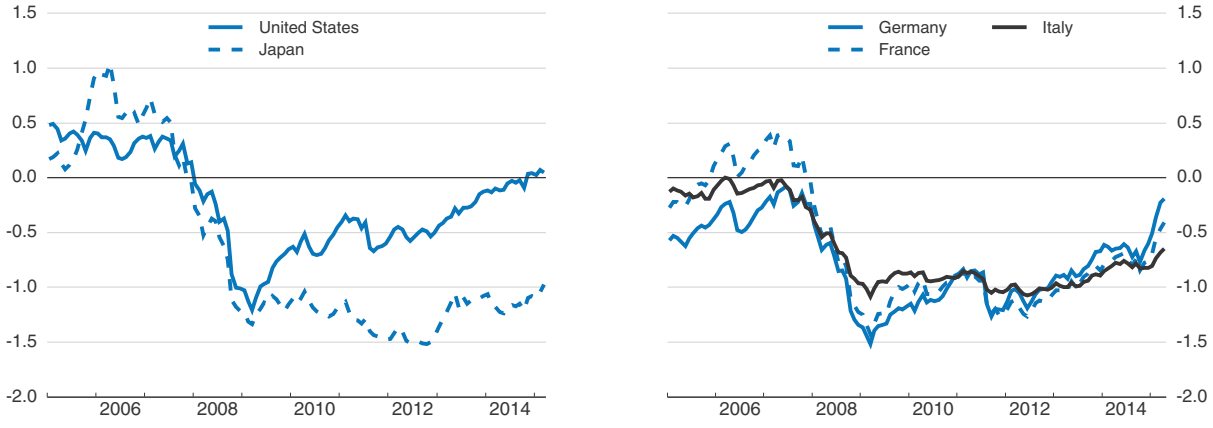
Note: The shading/colour gradient reflects the range of yields from the most negative to most positive ones.
Source: FactSet and OECD calculations.

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growth can be sustained. This question is particularly pertinent in in the United States. Recent US equity price gains have been partly driven by buybacks (OECD, 2015c). This and the dollar strengthening will likely reduce future profits. Moreover, interest rates and wages in the United States are expected to increase.

Figure 1.19. **Equity prices have increased**

Normalised cyclically adjusted price-to-earnings ratios in standard deviations



Note: The cyclically adjusted PE ratio (CAPE ratio) is computed as the current price divided by the average inflation-adjusted earnings from the previous 10 years. The measure attempts to smooth the impact of the business cycle on earnings. Normalisation is based on the average since the early 1980s.
Source: Datastream; OECD, *Main Economic Indicators Database*; and OECD calculations.

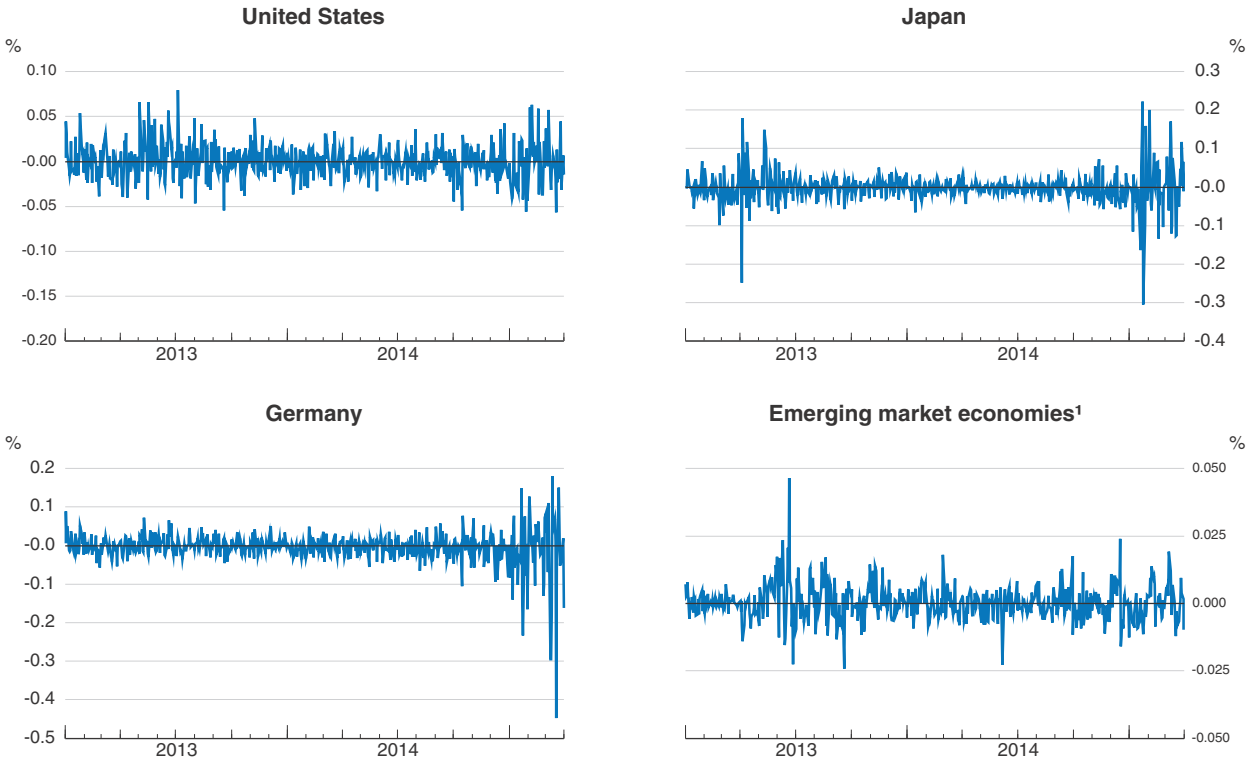
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An abrupt and simultaneous resolution of these excesses could disrupt financial markets seriously and have considerable negative implication for the real economy, if accompanied by large losses for investors, reduced risk tolerance and higher uncertainty. The current projections do not factor in such effects.

These signs of excesses in financial markets, and hence risks of corrections, are particularly uncomfortable as ongoing changes in the structure of financial markets could amplify shocks. Indeed, the amplitude of price movements has recently increased in some markets (Figure 1.20). Higher volatility in bond markets may reflect longer-term trends related to automation and prevalence of high-frequency trading (IMF, 2015b). Also, ongoing changes in bank regulation to reduce risk taking could discourage banks from acting as market makers, increasing volatility (BIS, 2014). Indeed, in the United States monthly Treasuries trading volumes by primary dealers, historically key market makers, declined from 10-12% of the total stock of outstanding Treasuries prior to the crisis to just 4% recently. Large asset holdings by central banks may also add to lower market liquidity, though existing evidence on this effect for the United States and Japan is not clear cut (FRBNY, 2014; Kurosaki et al., 2015).

Figure 1.20. **Volatility in bond markets has increased**

Daily difference in 10-year government bond yields over their level



1. Based on the JP Morgan Emerging Markets Global Composite Index. Bond yields refer to different maturities.

Source: Datastream; and OECD calculations.

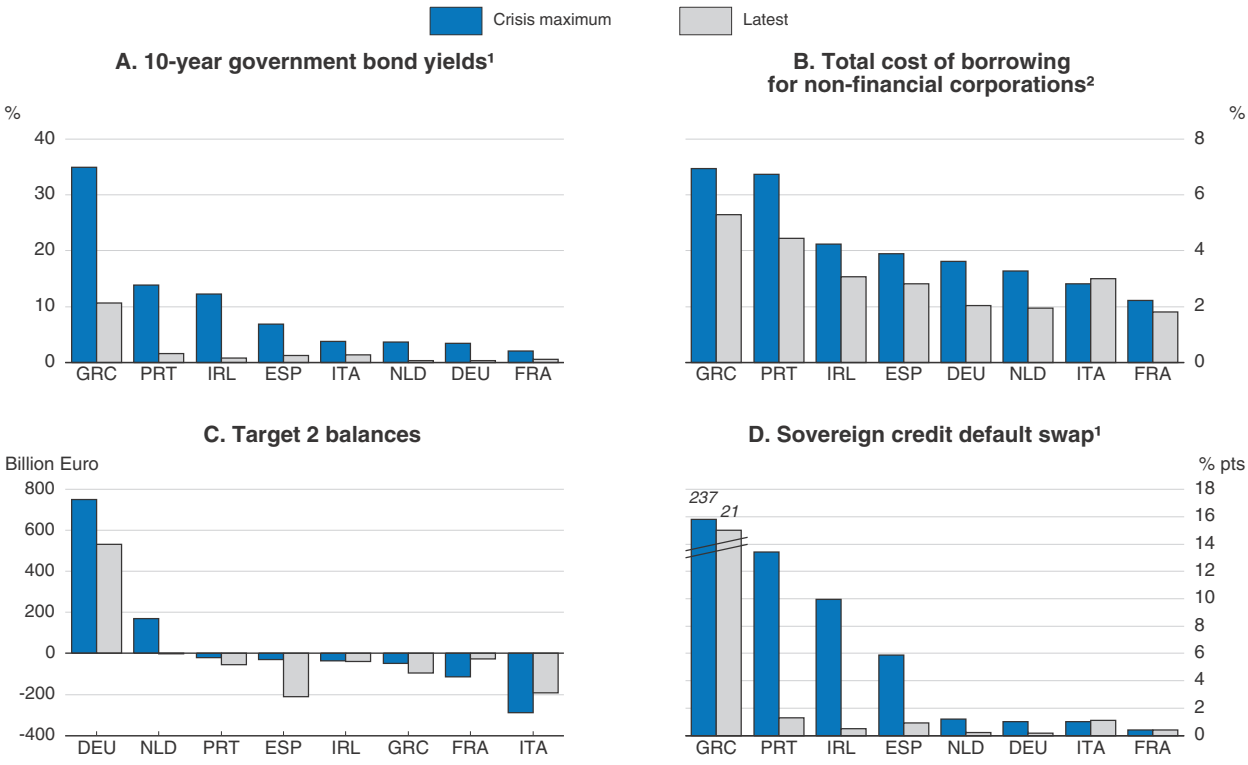
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In this context, and given limited room for either monetary or fiscal policy support, four adverse scenarios could have sizeable implications for the real economy with strong international spillovers.

- The normalisation of US monetary policy needed for meeting inflation and employment objectives may involve financial turmoil, with negative effects on domestic and global GDP. The beginning of policy interest rate tightening may be accompanied by a jump in US long-term interest rates and general asset price declines given extreme valuations of many asset classes. A mere convergence of financial market participants' expectations with the median expectations of FOMC members from March, would imply that the 10-year government bond yield increases by 1¼ percentage points to around 3¼ per cent. Much larger increases would take place if initial declines in asset prices lead to fire sales, a drying up of liquidity and pervasive risk aversion. In this case, it would drive down US growth unless offset by policy measures. Given the importance of the United States for the global economy, other economies would be affected by weaker US growth. Macro-model simulations, accounting for trade and simple financial spillovers, suggest that a stylised increase of 200 basis points in 10-year government bond yields combined with a 25% drop in equity prices in the United States and several other large economies during one year would lower OECD GDP growth by more than 1 percentage point compared with the baseline (Rawdanowicz et al., 2014a).[6] The impact would be magnified if the hike in US yields were to be accompanied by a strong appreciation of the dollar and disruptive capital outflows from EMEs, where external bank debt is dominated by short-term debt (Annex 1.1). Given the increase in dollar borrowing by banks and corporations in the EMEs (see above), a strong dollar appreciation could trigger financial instability, which could be compounded by capital outflows.
- Failure to reach a satisfactory agreement between Greece and its official creditors would intensify perceptions of redenomination risks and uncertainty. Although the implications of such an extraordinary event are impossible to predict, they would most likely involve an aggravation again of financial fragmentation in the euro area, dampening real activity and restarting negative feedback loops between the real economy, the banking sector and the public finances in vulnerable euro area countries. Euro area turmoil would primarily have negative effects on its neighbours, given strong trade and financial links. And global negative spillovers, especially via confidence and financial links, would also be likely, involving higher risk premia and a strong decline in financial asset prices. So far, risk premia in various financial instruments seem to discount such a scenario. Thus, spreads in government bond yields *vis-à-vis* German Bunds and sovereign credit default swap spreads have declined or stabilised at low levels in recent months for all euro area economies but Greece, where they have increased sizeably (Figure 1.21). Similarly, Target 2 balances for vulnerable countries, other than Greece, have been stable or narrowed. The calm in financial markets in spite of the mounting uncertainty may reflect low exposures of private investors to Greece. For instance, claims of BIS reporting banks on Greece in US dollar terms are a quarter of what they were four years ago, and sovereign debt is now mostly held by official creditors. Market calm could also reflect a perception that the ECB

6. These simulations assume the same increase in government bond yields in the United States as in other economies. This is a strong assumption. Although recent correlations of changes in 10-year government bond yields have been very high in many OECD countries (ranging between around 0.75 and 0.95 in Canada, France, Germany and the United Kingdom), they were still below 1 and in some countries they were as low as 0.5 (Italy and Japan). Nevertheless, past correlations may be a poor predictor of future comovements.

Figure 1.21. **Financial conditions have converged among euro area members**



Note: Crisis maximum is the highest (and for countries with Target 2 deficits the lowest) value between January 2010 and December 2012.
1. Monthly averages of daily 10-year government bond yields and 5-years sovereign credit default swaps.
2. Three-month moving average of the total cost of borrowing from banks.
Source: European Central Bank; Datastream; FactSet; and OECD calculations.

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measures and the stronger euro area institutional framework would contain any serious spillover effects. However, market sentiment could change abruptly, if Greece and its creditors fail to reach an agreement.

- Chinese GDP growth has recently weakened and the correction in its property market continues, with declines in house prices and sales stabilising. Against the background of rapid credit growth in recent years, especially outside the traditional banking sector (even if this trend has somewhat reversed recently), a further economic slowdown could lead to widespread bankruptcies of companies (OECD, 2015b). This would trigger negative feedback between the real economy, including the housing market, and the financial sector. Although it seems that the financial sector has buffers to accommodate such an eventuality and there is policy space to address banking sector problems, financial turmoil and a severe downturn cannot be ruled out. As discussed in the November 2014 *OECD Economic Outlook*, this in turn could have considerable global repercussions beyond those suggested by simplified model simulations.[7] Although trade

7. A decline of 2 percentage points in the domestic demand growth rate in China combined with a 10% reduction in global equity prices and a 20 basis point increase in the equity risk premium would lower global GDP in the second year by around ¾ per cent, with a slightly higher impact in Japan (around 1%) but a lower one in the euro area and the United States (around ½ per cent) (OECD, 2014b).

and direct financial channels do not imply large effects on global GDP, negative confidence and financial effects could be significantly larger. This scenario would involve commodity price declines, given that China is the largest consumer of many commodities, distributing income from commodity exporters to commodity importers (OECD, 2015b).

- An escalation of the conflict between Russia and Ukraine could lead to negative confidence effects and disruptions in energy supply, damping economic growth in EU economies (OECD, 2014b). Confidence effects could deter new investment, particularly in Germany, the Baltic States and several Central and Eastern European economies. Protracted gas supply disruptions would increase energy prices significantly due to switching to more expensive alternative sources. GDP growth could also be dampened by lower exports to Russia and Ukraine, even though these countries do not account for a large share of exports for the euro area as a whole.[8]

Policy requirements

Mutually reinforcing monetary, fiscal and structural policies are needed, with important cross-country differences. There are limits to relying on a single policy instrument to boost demand, both in terms of the scope for policy action and of how effective a single tool can be without creating imbalances in the future. This, together with uncertainties about the effectiveness of macroeconomic policies, suggests that there is a need to pursue wide-ranging stimulative policies. This would also allow authorities to reap positive synergies across various policies. For instance, structural policies to stimulate investment (Chapter 3), could strengthen not only current demand but also future potential growth. This in turn could raise neutral real interest rates and boost the effectiveness of monetary policy (Rawdanowicz et al., 2014b). Additional activity could also restore room for fiscal policy to better adapt to economic conditions.

Monetary policy

While remaining supportive, monetary policy stances are set to become increasingly divergent across the key economies, as is appropriate. The gradual disappearance of slack in the United States, and the associated prospect of inflation moving to its target, calls for gradual increases in policy rates. The timing and pace of this withdrawal of stimulus will depend on the outlook for inflation, which in turn will depend on the strength of the economy. In the euro area and Japan, very low inflation warrants continued supportive monetary policy, as planned.

Large commodity and exchange rate movements complicate monetary policy setting at the current juncture as their persistent effects on inflation and output are uncertain. With little signs of second-round effects of oil price falls or de-anchoring of medium-term inflation expectations, and headline inflation already recovering, monetary authorities should look through these movements and need not respond. However, should significant second-round effects materialise, extra measures will be needed. This would particularly

8. Simulations using the NiGEM model suggest that, at constant exchange rates, a 10% decline in Russian imports could reduce GDP growth marginally in the OECD and the euro area, but much more for Russia's neighbours. If this were to be accompanied by safe-haven demand for euros and an appreciation of the nominal euro effective exchange rate, adverse spillovers would be exacerbated. Each 5% appreciation could reduce GDP growth in the euro area by 0.2 percentage point.

be the case for the euro area and Japan, where risks of deflation are still not negligible and second-round inflationary effects proved to be important in the past.[9] Monetary policy should also look through the direct transitory impact of currency appreciation on inflation and only respond to the extent that second-round effects threaten an undershooting of the inflation target for a protracted period. Similarly, in countries with already very low inflation, exchange rate depreciation should not weaken stimulus, if following the dissipation of first-round effects inflation would still undershoot the target.

To the extent that financial markets may not have accurately incorporated the effects of a future tightening of US monetary policy, the actual tightening may lead to financial market volatility and global bond yield spillovers (see above). The need for policy response would largely depend on the relative effects of the induced currency turbulence and of higher interest rates, and on prevailing inflation and the monetary policy stance.

- In areas where inflation is below target and GDP growth is weak, more monetary policy easing would be desirable if the negative effects of higher bond yields materialise faster and exceed any positive effects from currency depreciation. In the euro area and Japan, with very low interest rates and already large asset purchases, the scope for further monetary accommodation is, however, limited. Expanding asset purchases is feasible but may lead to still more market distortions and be constrained in practice by the availability of bonds.[10] Similarly, taking policy rates well into negative territory could lead to costly market distortions.
- In countries with high inflation and inflation expectations poorly anchored, monetary policy should be tightened to limit capital outflows. This has already been the case in Brazil and Russia. In some countries, concerns regarding exchange rate effects have led to easing even as inflation remains above target. If short-lived foreign currency liquidity problems arise, threatening system-wide financial stability, countries could apply for multilateral facilities, if they have strong policy frameworks and track records in economic performance. Transparent and temporary exchange rate interventions could also be considered to address short-term volatility, when sufficient foreign exchange rate reserves are available. Introducing controls on capital flows is likely to be counterproductive.

Fiscal policy

Fiscal policy is estimated to be roughly neutral in the United States and the euro area and mildly restrictive in Japan (Table 1.6). Consideration of the near-term effects of the fiscal stance, in light of needed growth to service debt obligations, is key. A medium-term commitment to fiscal consolidation appears to appropriately balance the near and long term objectives. Public debt-to-GDP ratios are projected to stabilise by 2016 in the OECD area as a whole, a decline in the ratio in the euro area offsetting an increase in Japan and the United States (in 2015 only). However, government debt is still very high relative to GDP in most OECD countries.

9. Indirect and second-round effects of past oil price shocks accounted on average for around a third of total changes in inflation rates (ECB, 2010).
10. In particular in the euro area, the self-imposed 25% issue limit and 33% issuer limit are likely to constrain asset purchases for some countries, resulting in a shortfall of around EUR 40 billion by September 2016 compared with the envisaged total amount (Claeys et al., 2015). These constraints would be even more biding if asset purchase increased.

Table 1.6. **Fiscal positions will continue to improve**

Per cent of GDP / potential GDP

	2012	2013	2014	2015	2016
United States					
Actual balance	-9.0	-5.7	-5.0	-4.0	-3.6
Underlying balance	-7.5	-4.6	-4.2	-3.3	-3.1
Underlying primary balance	-4.5	-2.4	-1.5	-1.1	-1.0
Gross financial liabilities	110.5	109.2	110.1	111.4	111.1
Euro area					
Actual balance	-3.6	-2.9	-2.4	-2.1	-1.4
Underlying balance	-2.3	-1.4	-1.0	-0.9	-0.7
Underlying primary balance	0.3	1.0	1.3	1.2	1.2
Gross financial liabilities	103.9	104.9	111.5	110.9	109.5
Japan					
Actual balance	-8.7	-8.5	-7.7	-6.8	-5.8
Underlying balance	-8.0	-8.1	-7.2	-6.6	-5.7
Underlying primary balance	-7.2	-7.4	-6.2	-5.6	-4.9
Gross financial liabilities	215.4	220.3	226.0	229.2	231.7
OECD[1]					
Actual balance[1]	-5.8	-4.2	-3.7	-3.1	-2.5
Underlying balance[2]	-5.0	-3.5	-3.1	-2.7	-2.3
Underlying primary balance[2]	-2.7	-1.7	-1.1	-0.9	-0.7
Gross financial liabilities[2]	110.3	110.3	113.8	114.6	114.2

Note: Actual balances and liabilities are in per cent of nominal GDP. Underlying balances are in per cent of potential GDP and they refer to fiscal balances adjusted for the cycle and for one-offs. Underlying primary balance is the underlying balance excluding net debt interest payments.

1. Excludes Chile and Mexico.
2. Excludes Chile, Mexico and Turkey.

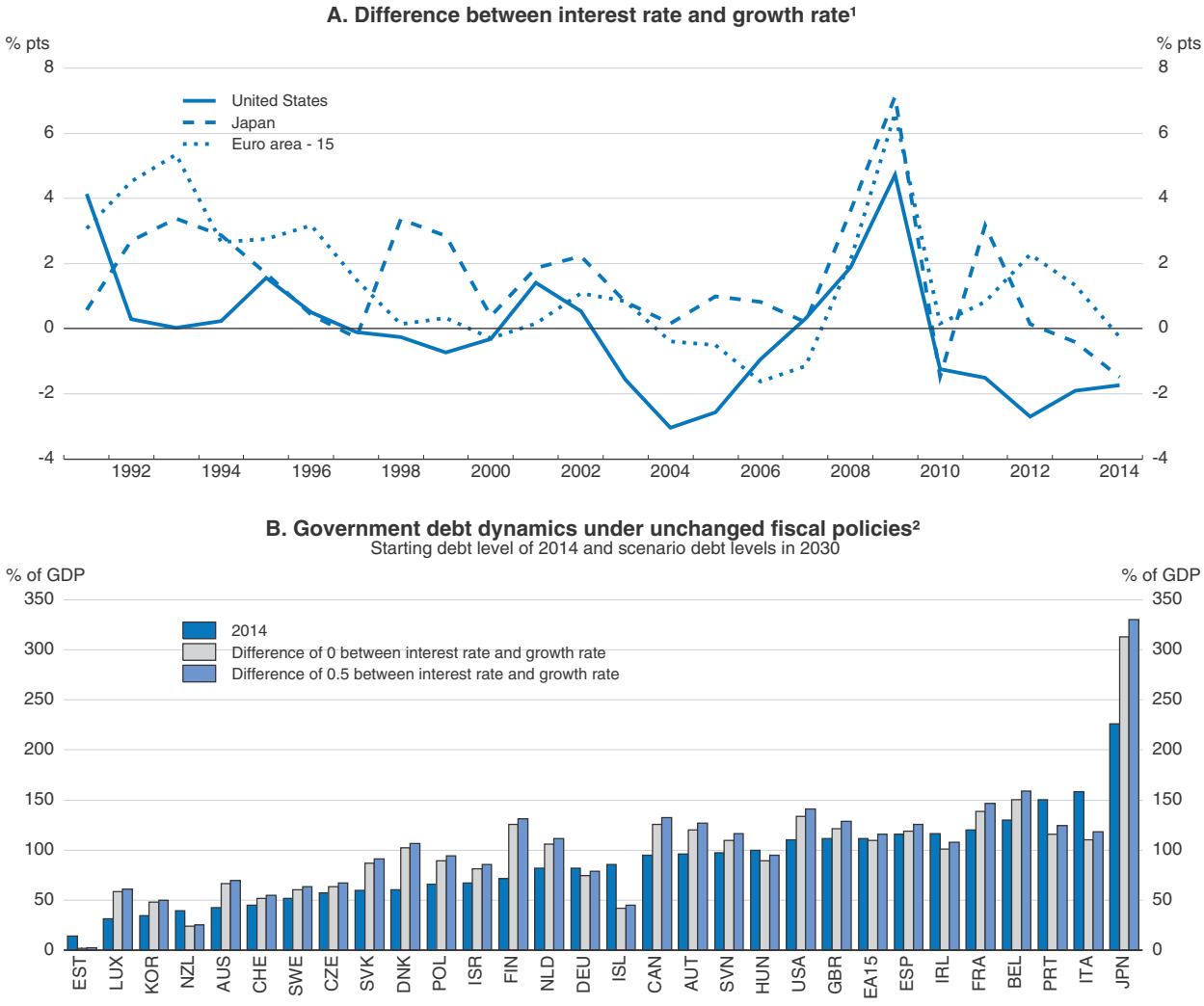
Source: OECD Economic Outlook 97 database.

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The evolution of government debt essentially depends on economic growth and interest rates going forward, rising budgetary pressures associated with population ageing, and the design of fiscal policies, which itself can have a significant impact on economic activity.

- In most OECD countries, exceptionally low interest rates help to contain debt servicing costs at present (Figure 1.22). Interest rates for 10-year government bonds and implicit interest rates for servicing overall government debt are below GDP growth rates in 75% and 40%, respectively, of the OECD countries, with the euro area economies that were hardest hit by the crisis being the main exceptions. Interest rates are likely to rise in the medium term as the economy strengthens and policy rates normalise. Moreover, better risk differentiation by capital markets since the crisis might imply that lenders will demand higher risk premia than those seen in earlier years to finance high government debt levels. Hence, there is a premium on boosting sustainable growth rates now.
- On unchanged policies, population ageing and rising healthcare costs are set to lead to rapidly rising spending pressure on public budgets. Public spending on healthcare, long-term care and pensions is estimated to increase by 2½ per cent of GDP between 2015 and 2030 on average in the OECD, with the fiscal burden differing considerably between

Figure 1.22. **Government debt dynamics**



1. The interest rate is a weighted sum (0.25*IRS + 0.75*IRL). IRS is the 3-month market interest rate and IRL is the 10-year government bond rate.
2. In the scenario the following assumptions are made: Output gaps close until 2020, with the speed of the closing depending on the size of the gap at the end of the short-term projection period (2016) according to the relationship diff(GAP(t)) = 0.2*diff(GAP(t-1)) – 0.4*GAP(t-1), where diff() denotes year-on-year difference and GAP denotes the output gap. Primary balances improve in line with the closing output gaps using fiscal elasticities as estimated in Mourre et al. (2014) for the EU countries and Girouard and André (2005) for all the other countries. In addition, primary balances incorporate the estimated (linearised) increase in spending on health care, long-term care and pensions as reported in Table 4.5 in *OECD Economic Outlook 96*. Greece and Norway are not shown.

Source: OECD Economic Outlook 97 database; and OECD calculations.

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countries (Chapter 3). The increase in spending pressure would be even greater if the increase in healthcare costs is not contained. Hence, both policy reforms and sustainable growth are needed.

Assuming, in a stylised scenario, that automatic stabilisers improve government finances as output gaps close, and estimated spending pressure stemming from healthcare, long-term care and pensions materialises without further fiscal consolidation, debt ratios would continue to rise in about two-thirds of OECD countries, if interest rates equal GDP growth rates from 2020 onwards (Figure 1.22). Adverse debt dynamics would be

more negative if interest rates were to exceed growth rates. It is clear that increases in potential growth rates as well as moves to address social spending pressures are crucial. Otherwise, several countries, at least, face unsustainable fiscal developments.

Effective fiscal adjustment over the medium term requires credible multi-annual fiscal plans to chart a path towards sustainable public finances, supported by growth, as well as to minimise the risk of uncertainty weighing on private spending. Simple plans are likely to be more credible, because they focus on key medium-term challenges facing public finances (Box 1.5).

Box 1.5. **Challenges to anchoring the public finances in the medium term with the euro area fiscal rules**

Anchoring the public finances in the medium term to achieve a prudent and sustainable level of debt and net worth can be supported by well-designed fiscal rules (Fall et al., 2015). These can help to guide fiscal policy decisions and to commit governments to sound policies in the face of short-term pressures. Fiscal rules are especially important in a monetary union to ensure that budgetary policy plays the required counter-cyclical stabilisation role in the absence of other levers at national level, and because market creditworthiness may be fragile.

The Stability and Growth Pact (SGP) of the EU Treaty provides the cornerstone of EU fiscal governance. A major overhaul of the euro area fiscal rules was undertaken in 2011-13 with the Six and Two Packs of regulations and laws and the new "Fiscal Compact" Treaty. These rules aim to avoid excessive fiscal imbalances and to provide a set of rules for the medium-term budget balance and the debt-to-GDP ratio.

While the application of the new rules is still in its infancy (European Commission, 2014), experience of applying the new framework in recent years points to a number of questions about whether the rules could be made more effective in anchoring policy in the medium term. There are three main areas where the EU rules currently raise concerns.

First, many countries are still to meet the 3% of GDP deficit ceiling of the "corrective arm" of the SGP. Deadlines have been extended on 12 occasions since 2009. This partly reflects the fact that a headline GDP ceiling during a cyclical downturn can lead to undesirable pro-cyclical policies. It has therefore been appropriate to allow some slippage. However, the uncertainty around whether such leeway would be granted and requirements imposed around it could create uncertainty about policy and risk undermining some of the beneficial effects on demand that can be achieved by allowing fiscal policy to offset negative economic shocks.

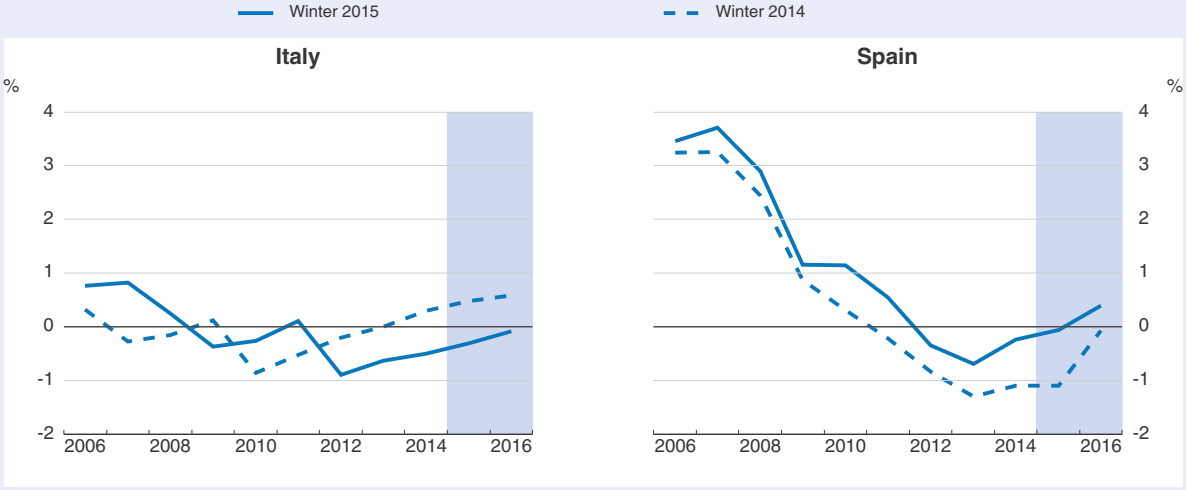
Second, the medium-term objectives (MTOs) for the structural budget balance in the "preventive arm" of the SGP point to some problems because of measurement issues that are inherent with cyclical adjustment in general and with the EU's agreed methodology for estimating potential output and output gaps in particular. While the focus on structural budget balances should in principle provide a more stable medium-term anchor for fiscal policy, there are cases where the measurement problems may be leading to pro-cyclical and unstable policy requirements.

For example, European Commission estimates of potential output growth in Italy and Spain have been revised substantially over the past year (Figure). These effects are large enough to have policy-relevant implications for how much fiscal consolidation is required each year to meet the MTOs. A number of methodological changes, including options that countries can apply, have been introduced in the past year, but these issues merit a more comprehensive approach to address longstanding measurement problems (OECD, 2010).

Box 1.5. **Challenges to anchoring the public finances in the medium term with the euro area fiscal rules** *(cont.)*

Third, the design of the numerical debt rule and the expenditure benchmark can create anomalies that run counter to a medium-term policy orientation. For example, the debt rule potentially requires very large swings in the budget balance when it begins to bind, if a country's budget balance and GDP growth start from a position far from what is needed to meet the frontloaded adjustments imposed on high-debt countries (Barnes et al., 2012). While the expenditure benchmark is intended to achieve the MTO, it uses a long average of potential output and this may lead to inconsistent signals to the MTO. Updating the benchmark on an annual basis and the translation from the real-terms measures in the expenditure benchmark to nominal quantities required for budgeting may make multi-annual budgeting more difficult.

Potential growth output estimates



Source: European Commission, Winter forecast 2014 and Winter forecast 2015.

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Recent experience suggests that the medium-term orientation of EU fiscal rules may be undermined by weaknesses in their design (complexity) and operation (extensions, poor choice of fiscal consolidation strategies, minimal compliance, and/or gaming the system). Widespread deviations are likely to undermine the effectiveness of the overall framework and political support for it. Hence, fiscal oversight should put greater emphasis on the medium-term outlook for *observable* variables, including the budget balance and debt-to-GDP ratio, supported by sound macroeconomic forecasts and realistic budgetary projections. Less emphasis should be put on the numerical debt and expenditure rules, while focussing surveillance more on the drivers of the medium-term debt-to-GDP ratio and public spending.

Moreover, the composition of fiscal policy matters. Fiscal consolidation in the aftermath of the crisis relied to a considerable extent on cutting public investment (about one-quarter of the consolidation effort since 2010). This has been costly in terms of demand stabilisation as fiscal multipliers associated with government investment spending are higher than for other fiscal instruments (Chapter 3). Empirical analysis also suggests that cuts in public spending on infrastructure can lower potential growth (e.g. Barbiero and Cournède, 2013). A budget-neutral reallocation of public spending towards

investment would thus support the economy's growth potential, provided projects are carefully chosen, and make debt dynamics more favourable.

Government investment would be particularly powerful if it helps pave the way for private investment. In the European Union, the Investment Plan for Europe (Juncker Plan) provides an opportunity to adjust public spending along these lines (Box 3.7 in Chapter 3). Complementary budgetary measures to bring forward private investment could include the introduction of temporary tax credits or accelerated depreciation of capital equipment for tax purposes.

In addition, fiscal-structural policies should be adjusted to lessen pressures on public budgets and strengthen output growth. Raising the effective retirement age can help to tackle the spending pressure that ageing will create and would also support the productive potential of the economy. Also, OECD analysis suggests that there is much scope for efficiency improvement in healthcare and education that would leave the quality of services intact (Joumard et al., 2008; Sutherland et al., 2009).

Complete policy packages should integrate fiscal, monetary and demand-friendly structural policies

Monetary and fiscal policy action should be supported by structural policy changes in an integrated, rather than a piecemeal, approach. First, within structural policy, attention to labour and business settings is important. For example, product market reforms undertaken in a strict labour environment tend to limit the ability of new firms to hire the labour they need. Alternatively, labour market reforms undertaken within a rigid business environment with large incumbent firms tend to force all adjustment onto labour. Overall, structural policies can contribute substantially to fiscal sustainability and soften trade-offs between fiscal consolidation, growth and equity objectives. But while such policy actions are often undertaken with a view to boosting long-run growth from the supply side, their short-term effects on demand are less certain and these must also be considered.

When pro-growth structural policies are introduced in normal times and with the support of other macro policies, the empirical evidence generally points to greater short-term gains than losses. In bad times, however, and especially when fiscal and monetary policies are not deployed to offset short-run negative effects, the negative transitional dynamics associated with structural changes are not as easily smoothed. In such a situation, structural policies that boost short-run demand should be prioritised. They include policies that reduce entry barriers in sectors with pent-up demand, policies to reduce administrative burdens on firms, and policies that boost aggregate demand directly such as public infrastructure investment. Policies that improve confidence or reduce uncertainty over future economic conditions may offer the biggest short-term impact as they can rapidly boost consumption and investment through wealth effects and improved expectations. Examples include credible reforms to pension and health systems that improve the sustainability of public finances, reducing the need for precautionary saving and creating fiscal space for stimulus. A forthcoming OECD study on the short-term effects of structural reforms discusses these issues in greater depth (Caldera Sanchez et al., 2015).

Bibliography

Barbiero, O. and B. Cournède (2013), "New Econometric Estimates of Long-term Growth Effects of Different Areas of Public Spending", *OECD Economics Department Working Papers*, No. 1100, OECD Publishing, Paris.

Barnes, S., D. Davidsson and Ł. Rawdanowicz (2012), "Europe's New Fiscal Rules", *OECD Economics Department Working Paper*, No. 972, OECD Publishing, Paris.

Berg, T. (2015), "Quicksilver Markets", *OFR Brief Series*, No. 15-02, Office of Financial Research, March 17.

Bénétrix, A.S., P. R. Lane and J.C. Shambaugh (2014), "International Currency Exposures, Valuation Effects and the Global Financial Crisis", *Mimeo*.

Bernanke, B.S. and M. Gertler (1995), "Inside the Black Box: The Credit Channel of Monetary Policy Transmission", *The Journal of Economic Perspectives*, Vol. 9(4), pp. 27-48.

BIS (2014), "Market-making and Proprietary Trading: Industry Trends, Drivers and Policy Implications", *CGFS Papers*, No. 52, Bank for International Settlements.

BIS (2015), *BIS Quarterly Review*, March, Bank for International Settlements.

Caldera Sanchez, A., A. De Serres and N. Yashiro (2015), "The Short-Run Impact of Structural Reforms", *OECD Economics Department Working Papers*, OECD Publishing, Paris (forthcoming).

Carroll, C.D., J. Slacalek and K. Tokuoka (2014), "The Distribution of wealth and the MPC: Implications of new European data", *ECB Working Paper Series*, No. 1648.

Cashin, P., K. Mohaddes and M. Raissi (2014), "The Macroeconomic Effects of El Niño", *Cambridge Working Paper in Economics*, No. 1418, University of Cambridge.

Çelik, S., G. Demirta and M. Isaksson (2015), "Corporate Bonds, Bondholders and Corporate Governance", *OECD Corporate Governance Working Papers*, No. 16, OECD Publishing, Paris.

Chui, M.K.F., I. Fender and V. Sushko (2014), "Risks Related to EME Corporate Balance Sheets: The Role of Leverage and Currency Mismatch", *BIS Quarterly Review*, September.

Clayes, G., A. Leandro and A. Mandra (2015), "European Central Bank Quantitative Easing: The Detailed Manual", *Bruegel Policy Contribution*, Issue 2015/02, March.

ECB (2009), "Housing Finance in the Euro Area", *ECB Occasional Paper Series*, No. 101.

ECB (2010), *Structural Issues Report*, June 2010, Chapter 3.

European Commission (2014), "Economic governance review – Report on the application of Regulations (EU) n° 1173/2011, 1174/2011, 1175/2011, 1176/2011, 1177/2011, 472/2013 and 473/2013", COM(2014) 905 final.

Fall, F., D. Bloch, J.-M. Fournier and P. Hoeller (2015), "Government Debt and Fiscal Frameworks", *OECD Economic Policy Paper*, forthcoming.

FRBNY (2014), "Domestic Open Market Operations during 2013", Federal Reserve Bank of New York, April.

Girouard, N. and C. André (2005), "Measuring Cyclically-adjusted Budget Balances for OECD Countries", *OECD Economics Department Working Papers*, No. 434, OECD Publishing, Paris.

Guichard, S., D. Haugh and D. Turner (2009), "Quantifying the Effect of Financial Conditions in the Euro Area, Japan, United Kingdom and the United States", *OECD Economics Department Working Papers*, No. 677, OECD Publishing, Paris.

IEA (2015), "Medium-Term Oil Market Report 2015", IEA, Paris.

IFF (2015), "March 2015 EM Portfolio Flows Tracker", Institute of International Finance, 26 March.

IMF (2015a), "Private Investment: What's the Holdup?", *World Economic Outlook*, April.

IMF (2015b), *Global Financial Stability Report*, April.

Joumard, I., C. André, C. Nicq and O. Chatal (2008), "Health Status Determinants: Lifestyle, Environment, Health Care Resources and Efficiency", *OECD Economics Department Working Papers*, No. 627, OECD Publishing, Paris.

Koske, I., I. Wanner, R. Bitetti and O. Barbiero (2015), "The 2013 update of the OECD's database on product market regulation: Policy insights for OECD and non-OECD countries", *OECD Economics Department Working Papers*, No. 1200, OECD Publishing, Paris.

Kurosaki, T., Y. Kumano, K. Okabe and T. Nagano (2015), "Liquidity in JGB Markets: An Evaluation from Transaction Data", *Bank of Japan Working Paper Series*, No. 15-E-2.

Ministry of Land, Infrastructure, Transport and Tourism (2015), "平成 26年度民間住宅ローンの実態に関する調査 結果報告書" (A Report of Survey on Private Housing Loans in Fiscal Year 2014), Housing Bureau, Ministry of Land, Infrastructure, Transport and Tourism, Japanese Government.

Morin, M. and C. Schwellnus (2014), "An Update of the OECD International Trade Equations", *OECD Economics Department Working Papers*, No. 1129, OECD Publishing, Paris.

Mourre, G., C. Astarita and S. Princen (2014), "Adjusting the budget balance for the business cycle: The EU methodology", *European Economy, Economic Papers*, No. 536, European Commission.

OECD (2009), *OECD Economic Outlook Interim Report,* OECD Publishing, Paris.

OECD (2010), *OECD Economic Surveys: Euro Area 2010*, OECD Publishing.

OECD (2013), *Science, Technology and Industry Scoreboard 2013*, OECD Publishing, Paris.

OECD (2014a), *OECD Economic Outlook,* Vol. 2014/1, OECD Publishing, Paris.

OECD (2014b), *OECD Economic Outlook,* Vol. 2014/2, OECD Publishing, Paris.

OECD (2015a), *Economic Policy Reforms 2015: Going for Growth*, OECD Publishing, Paris.

OECD (2015b), *OECD Economic Survey: China*, OECD Publishing, Paris.

OECD (2015c), *OECD Business and Finance Outlook*, OECD Publishing, Paris (forthcoming).

OECD (2015d), *In It Together: Why Less Inequality Benefits All*, OECD Publishing, Paris.

Ollivaud, P., E. Rusticelli and C. Schwellnus (2015), "The Changing Role of the Exchange Rate for Macroeconomic Adjustment", *OECD Economics Department Working Papers*, No. 1190, OECD Publishing, Paris.

Ollivaud, P. and D. Turner (2015), "The effect of the global financial crisis on OECD potential output", *OECD Journal: Economic Studies*, Vol. 2014/1, OECD Publishing, Paris.

Rawdanowicz, Ł., R. Bouis and S. Watanabe (2013), "The Benefits and Costs of Highly Expansionary Monetary Policy", *OECD Economics Department Working Papers*, No. 1082, OECD Publishing, Paris.

Rawdanowicz, Ł., R. Bouis, J. Brezillon, A.K. Christensen and K. Inaba (2014a), "Spillover Effects from Exiting Highly Expansionary Monetary Policies", *OECD Economics Department Working Papers*, No. 1116, OECD Publishing, Paris.

Rawdanowicz, Ł., R. Bouis, J. Brezillon, K. Inaba and A.K. Christensen (2014b), "Secular Stagnation: Evidence and Implications for Economic Policy", *OECD Economics Department Working Papers*, No. 1169, OECD Publishing, Paris.

Robertson, J. (2015), "What Seems to Be Holding Back Labor Productivity Growth, and Why It Matters", Atlanta Fed Macroblog, Federal Reserve Bank of Atlanta.

Sutherland, D., R. Price and F. Gonand (2009), "Improving public spending efficiency in primary and secondary education," *OECD Journal: Economic Studies*, Vol. 2009(1), pp. 1-30, OECD Publishing, Paris.

Turner, D. and F. Spinelli (2013), "The Effect of Government Debt, External Debt and their Interaction on OECD Interest Rates", *OECD Economics Department Working Papers*, No. 1103, OECD Publishing, Paris.

Wurzel, E., L. Willard and P. Ollivaud (2009), "Recent Oil Price Movements: Forces and Policy Issues", *OECD Economics Department Working Papers*, No. 737, OECD Publishing, Paris.

ANNEX 1.1

Indicators of potential financial vulnerabilities

The following tables show the position of OECD and selected non-OECD countries on a number of indicators that could reveal potential exposure to financial turbulence. The main focus of Table 1.A1. is on domestic vulnerabilities of the OECD and BRIICS countries, that of Table 1.A2. on financial account vulnerabilities of the OECD and non-OECD G20 countries.

Table 1.A1 presents indicators typically associated with financial vulnerabilities arising primarily from the domestic economy in four broad categories: the real economy, the non-financial sector, the financial sector and public finances (International Monetary Fund, 2012; European Commission, 2012). Possible weaknesses in the real economy are captured by the difference between the potential and the actual GDP growth rate, the difference between the actual unemployment rate and the natural rate of unemployment (or NAIRU), the current account deficit and the evolution of relative unit labour costs. Indicators of financial market excesses related to the non-financial sector are debt of households and non-financial corporations and real house price growth. An aggregated ratio of core Tier-1 capital to total assets (i.e. the leverage ratio) for selected banks in each country,[11] non-performing loans, and financial corporations' debt are included to account for the direct risk exposure of the financial sector. Vulnerabilities stemming from the public sector are quantified along three dimensions: government net borrowing, gross government debt and the difference between 10-year real sovereign bond yields and the potential real GDP growth rate. Higher values, with the exception of the leverage ratio, indicate a larger vulnerability. Table 1.A1 also includes the current sovereign credit ratings issued by Standards and Poor's.

Table 1.A2 displays financial-accounts-related risk factors for the OECD and non-OECD G20 countries to financial stability based on previous OECD empirical analysis (Ahrend and Goujard, 2012a, 2012b). The analysis shows that:

- Greater (short-term) borrowing from external banks or a skew in external liabilities towards debt increases the risk of a financial crisis substantially (external bank debt being defined as debt to a foreign bank).
- A larger share of FDI in gross external liabilities decreases chances of a financial crisis.
- Shorter maturity of banks' debt raises the crisis risk, mainly by increasing exposure to financial contagion.
- The size of foreign reserve holdings reduces the probability of a crisis.
- Total external assets (excluding reserves) or liabilities are found not to affect the risk for countries with small and moderate levels of assets and liabilities. However, external assets reduce, and external liabilities increase the crisis risk when they are large.

11. The calculations of the country leverage ratios are based on over 1200 commercial banks, including 915 in the United States, 197 in the OECD euro area countries, 23 in the United Kingdom, 11 in Canada and 7 in Japan.

Table 1.A2 shows for each of the 8 selected indicators: *i*) the position of each country in 2014Q3 (or the latest available) along various dimensions of its financial account structure, and *ii*) the country-specific change, from 2007 to 2014Q3. For some of the variables, the numbers need to be interpreted with care as the relevance of the variable may differ across countries. For example, the foreign currency reserves of the United States are the lowest relative to GDP in the OECD area, but this does not signify a weakness as the US dollar is a reserve currency, and the same applies to low currency reserves in individual euro area countries.

Bibliography

Ahrend, R., and A. Goujard (2012a), "International Capital Mobility and Financial Fragility – Part 1: Drivers of Systemic Banking Crises: The Role of Bank-Balance-Sheet Contagion and Financial Account Structure", *OECD Economics Department Working Papers*, No. 902, OECD Publishing, Paris.

Ahrend, R., and A. Goujard (2012b), "International Capital Mobility and Financial Fragility – Part 3: How Do Structural Policies Affect Financial Crisis Risk? Evidence from Past Crises across OECD and Emerging Economies", *OECD Economics Department Working Papers*, No. 966, OECD Publishing, Paris.

European Commission (2012), *Alert Mechanism Report 2013*, Brussels.

International Monetary Fund (2012), *Global Financial Stability Report October 2012*,Washington, DC.

Table 1.A1. **Indicators of potential financial vulnerabilities**

	Real economy				Non-financial sector		
	Potential GDP growth rate-actual GDP growth rate differential	Actual unemployment rate-NAIRU differential	Current account deficit[1]	Relative unit labour cost	Household gross debt[2,3]	Non-financial corporation gross debt[1,3]	Real house prices
	2015	2014Q4	2014	% change 2000Q1-15Q1	2013 or latest available	2013 or latest available	% change 2000Q1-15Q1
United States	-0.1	0.3	2.4	-13.8	110.1	114.4	19.3
Japan	-0.2	-0.6	-0.5	-50.1	132.6	160.9	-22.0
Germany	-0.5	-0.6	-7.8	-12.5	94.8	70.5	5.8
France	0.2	0.8	1.0	1.5	108.1	103.4	73.2
Italy	-0.5	3.9	-1.8	10.7	79.6	91.7	12.9
United Kingdom	-0.3	-0.5	5.5	-11.6	146.6	87.3	80.4
Canada	0.3	0.2	2.2	26.3	167.7	139.0	95.9
Australia	0.3	0.4	2.8	38.0	193.3	80.1	96.0
Austria	0.6	1.3	-0.8	-1.8	90.8	97.7	21.2
Belgium	0.0	0.5	-1.8	5.8	101.9	94.7	62.7
Chile	0.7	-0.2	1.1	20.6	74.1	139.4	..
Czech Republic	-1.0	-0.5	-0.6	31.8	64.6	61.6	..
Denmark	-1.2	0.1	-6.3	10.7	320.5	102.4	27.3
Estonia	0.5	-1.7	0.1	46.7	89.6	102.6	..
Finland	0.4	1.7	1.9	0.5	122.8	98.0	25.6
Greece	0.1	8.7	-0.9	7.1	104.0	76.3	-9.4
Hungary	-1.2	-2.4	-4.1	25.0	55.4	102.4	..
Iceland	-1.8	0.6	-3.6	-22.8	..	322.9	..
Ireland	-1.8	-0.5	-6.2	14.9	223.0	235.9	8.0
Israel	-0.2	-0.4	-3.0	-15.5	..	75.1	35.2
Korea	0.6	0.0	-6.4	9.6	160.0	151.3	27.1
Luxembourg	-0.1	0.7	-5.7	28.5	153.4	312.4	..
Mexico	0.0	-0.4	2.1	-7.3	..	..	..
Netherlands	-0.9	1.2	-10.3	-0.6	288.7	100.5	1.2
New Zealand	-0.6	-0.1	3.3	63.9	..	..	106.6
Norway[7]	1.1	0.3	-8.5	39.3	215.5	105.1	89.2
Poland	-0.4	-0.1	1.4	-9.4	58.8	52.8	..
Portugal	-1.3	1.5	-0.6	-3.4	144.1	153.0	-31.7
Slovak Republic	-0.2	0.3	-0.1	32.0	54.9	76.6	..
Slovenia	-0.8	1.9	-5.9	-5.0	56.9	94.5	..
Spain	-2.5	5.2	-0.8	2.6	140.1	122.5	20.9
Sweden	-0.6	0.4	-6.3	-6.7	171.0	142.1	101.5
Switzerland	1.3	0.2	-7.0	36.0	197.3	..	49.1
Turkey	1.1	1.0	5.8	-29.7	..	105.4	..
Brazil	2.1	..	3.9	17.2	..	..	..
China	0.4	..	-2.1	99.3	..	..	..
Colombia	1.1	-0.4	5.3	24.0	..	38.1	..
India	0.2	..	1.4	-40.7	..	..	..
Indonesia	0.9	..	3.0	-10.6	..	..	..
Latvia	0.3	0.3	3.1	15.5	..	..	..
Russian Federation	5.0	..	-3.3	152.9	..	..	..
South Africa	0.8	..	5.4	0.7	..	..	111.9

1. In per cent of GDP.
2. In per cent of gross household disposable income.
3. Gross debt is defined as liabilities less financial derivatives and shares and other equity. Based on consolidated data for most countries.
4. In per cent of total (unweighted) assets.
5. Rating for sovereign debt in foreign currency.
6. OECD Economic Outlook 97 database estimates.
7. Mainland (potential) GDP is used instead of total (potential) GDP where applicable.

Source: OECD National Accounts database; IMF Financial Soundness Indicators database; European Central Bank; European Commission; OECD Housnig Prices database; Standards & Poors; and OECD calculations; OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933221746

Table 1.A1. **Indicators of potential financial vulnerabilities** *(cont.)*

Financial sector			Public finance				
Core Tier-1 leverage ratio[4]	Non-performing loans to total loans	Financial corporation gross debt[1,3]	Headline government budget deficit[1,6]	Gross government debt[1,6]	Real 10-year sovereign bond yield-potential GDP growth rate differential	Sovereign credit rating S&P[5]	
Latest available	Latest available	2013 or latest available	2014	2014	2014Q4 or latest available	Latest	
5.6	1.9	346.4	5.0	110.1	-1.1	AA+	United States
4.7	1.7	582.8	7.7	226.0	-0.5	AA-	Japan
4.1	2.7	321.0	-0.6	82.3	-2.1	AAA	Germany
3.3	4.5	278.6	4.0	120.4	-0.9	AA	France
5.4	17.3	207.9	3.0	158.5	1.1	BBB-	Italy
4.0	2.7	659.4	5.3	111.3	-1.8	AAA	United Kingdom
3.7	0.5	332.3	1.6	94.8	-1.2	AAA	Canada
4.0	1.1	337.0	2.2	42.5	-0.1	AAA	Australia
5.8	3.5	240.1	2.4	96.3	-1.9	AA+	Austria
4.9	4.1	295.4	3.2	129.8	-1.4	AA	Belgium
..	2.2	201.8	..	..	-2.3	AA-	Chile
..	5.7	120.7	2.0	57.1	-2.9	AA-	Czech Republic
4.4	4.4	450.2	-1.2	60.4	-1.2	AAA	Denmark
..	1.4	117.5	-0.6	14.3	..	NA	Estonia
3.6	..	241.0	3.2	71.4	-1.9	AA+	Finland
8.0	34.3	194.2	3.6	184.1	10.2	NA	Greece
..	15.6	95.4	2.5	99.8	-0.6	NA	Hungary
..	..	990.4	0.2	85.4	0.2	BBB-	Iceland
6.5	18.7	959.1	4.1	116.5	-2.0	A	Ireland
..	2.2	206.7	3.7	67.5	-3.4	A+	Israel
..	..	353.9	-1.6	34.5	-1.3	A+	Korea
..	0.2	5047.5	-0.6	31.3	-3.9	AAA	Luxembourg
..	3.1	..	0.3	1.0	1.0	BBB+	Mexico
4.2	3.1	658.6	2.3	81.8	-1.0	AA+	Netherlands
..	..	..	-1.4	39.2	-0.8	AA	New Zealand
6.2	1.3	207.9	-9.1	32.6	-2.0	AAA	Norway[7]
..	4.9	99.2	3.2	65.8	-1.1	NA	Poland
6.0	11.2	254.7	4.5	150.4	1.7	BB	Portugal
..	5.3	118.5	2.9	60.0	-1.8	A	Slovak Republic
..	11.7	121.6	4.9	97.6	0.7	A-	Slovenia
5.5	8.5	239.6	5.8	115.8	1.5	BBB	Spain
3.6	0.6	285.9	1.9	52.1	-2.3	AAA	Sweden
4.3	0.8	..	-0.2	45.3	-1.6	NA	Switzerland
..	2.8	119.0	..	..	-1.1	NA	Turkey
..	2.9	..	6.2	..	9.4	..	Brazil
..	..	..	0.3	..	-3.6	..	China
..	3.0	75.7	..	..	1.2	..	Colombia
..	4.3	..	6.2	..	0.6	..	India
..	2.1	..	2.2	..	1.2	..	Indonesia
..	4.9	..	1.4	46.2	-2.4	..	Latvia
..	6.7	..	-0.4	..	6.2	..	Russian Federation
..	3.4	..	4.1	..	4.4	..	South Africa

1. In per cent of GDP.
2. In per cent of gross household disposable income.
3. Gross debt is defined as liabilities less financial derivatives and shares and other equity. Based on consolidated data for most countries.
4. In per cent of total (unweighted) assets.
5. Rating for sovereign debt in foreign currency.
6. OECD Economic Outlook 97 database estimates.
7. Mainland (potential) GDP is used instead of total (potential) GDP where applicable.

Source: OECD National Accounts database; IMF Financial Soundness Indicators database; European Central Bank; European Commission; OECD Housnig Prices database; Standards & Poors; and OECD calculations; OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933221746

Table 1.A2. **Financial-accounts-related risk factors to financial stability**

Latest available (in per cent)

	External debt[1]	External bank debt[2]	Short-term external bank debt[2]	Short-term external bank debt[3]	External liabilities[2]	External assets[2]	Foreign exchange reserves[2]	FDI liabilities[1]
	Higher values indicate higher financial stability risk					Higher values indicate lower financial stability risk		
United States	49.3	14.6	5.7	39.3	178.5	139.5	0.7	19.8
Japan	56.9	19.3	16.3	84.2	111.8	184.9	28.9	3.6
Germany	60.2	30.2	14.4	47.7	217.4	252.3	1.8	17.8
France	60.0	53.9	29.3	54.3	308.2	292.3	2.0	12.7
Italy	70.4	25.9	9.7	37.5	159.0	132.1	2.6	15.2
United Kingdom	56.0	71.3	46.2	64.7	539.4	534.2	3.4	10.5
Canada	48.5	24.8	14.3	57.6	156.2	163.4	4.3	34.2
Australia	51.1	21.8	7.3	33.5	168.6	116.8	3.7	25.7
Austria	64.8	141.7	12.5	8.8	253.3	255.7	3.5	29.0
Belgium	40.3	42.8	19.4	45.3	405.1	446.7	3.4	53.2
Chile	28.9	18.0	8.1	45.0	142.6	128.5	16.0	62.3
Czech Republic	37.7	20.1	5.1	25.5	127.1	92.9	27.8	57.7
Denmark	61.1	57.3	34.5	60.2	237.7	276.9	21.7	17.5
Finland	59.3	45.0	15.3	34.1	318.8	327.3	3.4	15.6
Greece	91.9	27.8	14.4	51.9	233.0	116.0	0.9	4.0
Hungary	27.2	35.1	10.4	29.5	303.9	231.5	32.7	69.8
Iceland	83.2	38.6	11.9	30.7	601.1	242.0	23.9	16.1
Ireland	38.1	152.2	61.8	40.6	1961.6	1862.7	0.6	16.7
Israel	32.3	5.6	3.0	53.2	89.4	106.3	27.8	35.7
Korea	41.0	13.6	8.5	62.6	72.6	78.5	26.1	18.2
Luxembourg	25.2	920.6	368.3	40.0	14069.8	14277.4	1.3	33.0
Mexico	49.6	10.7	4.1	38.6	77.7	43.7	15.2	34.7
Netherlands	57.0	104.5	37.0	35.4	434.1	480.6	2.6	19.2
New Zealand	55.8	17.0	6.7	39.4	136.7	77.6	8.9	30.9
Norway	62.5	27.6	9.9	35.8	181.7	305.1	11.2	26.9
Poland	47.1	23.2	6.3	27.0	108.5	43.1	17.8	43.9
Portugal	70.6	30.6	8.5	27.6	288.3	172.0	1.5	21.7
Slovak Republic	50.2	31.5	11.1	35.4	137.4	69.3	1.0	49.0
Slovenia	76.1	22.6	5.3	23.3	145.3	101.9	1.9	21.7
Spain	61.4	32.3	13.0	40.2	229.5	132.4	2.5	24.4
Sweden	52.9	48.6	21.7	44.7	291.1	281.9	10.4	28.2
Switzerland	33.5	61.5	41.0	66.6	511.3	633.1	74.8	31.9
Turkey	65.1	21.4	11.6	54.0	82.4	28.7	13.4	25.6
Argentina	44.4	2.5	1.5	60.5	34.6	42.0	4.5	51.1
Brazil	33.1	65.5	4.6	7.0	66.0	32.3	15.3	46.2
China	36.1	10.3	8.2	79.3	43.1	60.4	37.5	56.7
India	53.9	10.2	5.5	53.9	41.6	24.0	14.8	29.6
Indonesia	41.3	10.8	5.8	53.9	61.3	20.6	10.6	44.8
Russian Federation	47.4	8.4	3.3	38.8	51.7	69.6	18.2	39.0
Saudi Arabia	15.7	8.7	5.1	58.2	35.6	138.1	97.5	78.6
South Africa	27.0	8.8	3.5	40.1	111.5	107.5	12.3	37.2

1. As per cent of external liabilities.
2. As per cent of GDP.
3. As per cent of external bank debt.

Source: BIS; IMF; World Bank and OECD calculations.

StatLink http://dx.doi.org/10.1787/888933221760

Table 1.A2. **Financial-accounts-related risk factors to financial stability** *(cont.)*

Change from 2007 (in percentage points)

External debt[1]	External bank debt[2]	Short-term external bank debt[2]	Short-term external bank debt[3]	External liabilities[2]	External assets[2]	Foreign exchange reserves[2]	FDI liabilities[1]	
Positive values indicate an increase in the financial stability risk					Positive values indicate a decrease in the financial stability risk			
-5.8	-5.9	-3.0	-3.5	24.1	-6.0	0.2	1.0	United States
1.9	6.3	7.2	14.4	38.2	60.4	6.7	-0.8	Japan
-7.5	-20.0	-13.5	-7.8	11.8	17.7	0.3	-0.9	Germany
0.0	-13.5	-14.3	-10.4	5.8	-0.6	0.0	-0.4	France
-1.2	-25.4	-8.7	1.6	0.0	0.1	1.0	0.4	Italy
-8.8	-44.8	-40.6	-10.0	-30.2	-12.5	1.6	2.9	United Kingdom
13.8	1.4	-0.4	-5.4	-13.4	6.9	1.1	-12.3	Canada
2.3	-10.1	-4.8	-4.6	-5.4	7.5	0.8	0.2	Australia
1.3	69.6	-14.3	-28.3	-70.8	-57.2	0.4	2.4	Austria
-21.6	-72.1	-69.4	-32.0	-111.6	-101.8	1.0	19.2	Belgium
-3.6	-0.2	-1.5	-7.6	41.2	26.6	5.6	1.7	Chile
4.1	-2.5	-3.7	-13.6	16.1	26.4	8.2	0.2	Czech Republic
-6.7	-13.8	-2.3	8.4	-14.4	31.2	10.8	-3.8	Denmark
20.0	5.0	2.7	2.5	35.9	75.6	0.4	-3.3	Finland
16.5	-31.3	-2.5	23.2	33.1	22.1	0.6	-4.9	Greece
-4.3	-28.8	-7.5	1.6	-8.9	18.6	14.5	5.7	Hungary
3.8	-252.5	-114.1	-12.5	-133.9	-369.2	10.2	1.1	Iceland
-15.4	-117.3	-88.9	-15.3	534.8	456.7	0.3	2.2	Ireland
-12.5	-2.9	-0.9	7.2	-30.0	-12.6	10.7	10.6	Israel
-1.8	-3.3	-1.9	0.8	-0.1	23.3	1.8	2.6	Korea
-3.8	-236.9	-139.7	-3.9	703.7	790.7	1.0	8.5	Luxembourg
15.9	2.8	1.7	8.3	9.3	12.6	6.5	-9.0	Mexico
-1.8	-32.3	-31.0	-14.3	-61.3	-8.2	1.1	-1.7	Netherlands
-2.6	-8.5	-6.2	-11.4	-43.7	-17.2	-5.1	-1.6	New Zealand
-1.5	-33.9	-30.6	-30.0	-43.3	17.9	-5.6	7.1	Norway
1.8	-1.2	0.2	2.1	2.6	-0.2	1.4	-2.3	Poland
0.8	-44.4	-19.4	-9.5	-9.7	-28.4	0.6	3.0	Portugal
9.1	-0.3	-1.1	-3.2	17.9	10.1	-25.2	-8.4	Slovak Republic
4.5	-25.8	-7.8	-3.7	2.4	-15.8	-0.3	-3.3	Slovenia
-2.6	-27.2	-6.0	8.3	-6.3	-15.8	1.6	4.0	Spain
3.2	-5.5	-10.7	-15.2	9.2	1.6	4.5	-3.7	Sweden
-16.1	-111.0	-84.3	-6.0	-69.8	-100.6	64.6	11.0	Switzerland
10.4	2.5	3.2	9.8	-0.8	-0.6	0.8	-6.5	Turkey
-9.7	-4.3	-1.9	10.2	-22.9	-26.8	-10.4	11.8	Argentina
6.9	57.8	1.0	-40.2	-7.8	1.3	0.8	12.4	Brazil
3.9	4.3	4.9	24.1	4.6	-15.5	-10.5	-0.6	China
4.3	-1.2	-0.4	1.9	1.0	-9.2	-11.6	3.9	India
-11.9	0.2	0.2	0.8	-0.1	-2.7	-1.8	13.1	Indonesia
11.8	-5.6	-3.4	-8.9	-57.9	-26.7	-23.0	-0.5	Russian Federation
-20.7	-0.3	-0.6	-4.2	5.0	7.0	16.6	15.0	Saudi Arabia
7.3	-2.7	-1.7	-5.0	-2.3	27.3	1.7	-4.2	South Africa

1. As per cent of external liabilities.
2. As per cent of GDP.
3. As per cent of external bank debt.

Source: BIS; IMF; World Bank and OECD calculations.

StatLink http://dx.doi.org/10.1787/888933221760

OECD Economic Outlook, Volume 2015 Issue 1
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Chapter 2

DEVELOPMENTS IN INDIVIDUAL OECD COUNTRIES AND SELECTED NON-MEMBER ECONOMIES

AUSTRALIA

Growth is projected to dip to 2¼ per cent in 2015 but pick up to nearly 3% in 2016. Gathering momentum in consumption, non-resource investment and exports help the economy adjust and recover from the fall in commodity prices and unwinding resource-sector investment. Consumer price inflation has been dented by lower oil prices and will remain moderate due to economic slack.

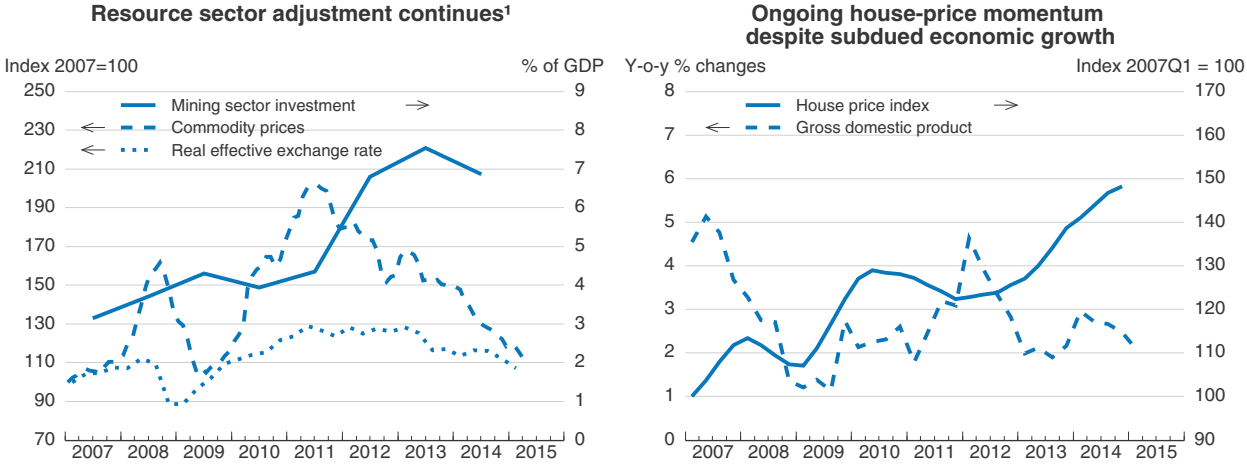
Monetary policy firepower should be held in reserve given uncertainties about the outlook and the downside aspects of rate cuts on the booming housing and credit markets. Fiscal policy should continue to provide support if needed through the operation of automatic stabilisers. Structural reform should facilitate post-resource-boom adjustment, in particular, further shift towards indirect taxes.

The unwinding of resource-sector investment reflects large-scale projects reaching completion and easing-up of investment plans given commodity-price falls. Enhancing the climate for business investment in non-commodity sectors requires maintaining sound macroeconomic policies, further tax reform, cuts to red tape and competition-boosting measures. Plans to boost investment in public infrastructure are welcome, but project selection requires rigorous cost-benefit analysis.

Rebalancing continues

Weak global commodity markets, notably those for iron ore and coal, and the consequent decline in resource-sector investment have generated job and output losses, although commodity production itself has not been cut back substantially. Positive adjustments in the non-resource sector are underway, with the exchange-rate depreciation lifting exports and employment; for instance, tourism has picked up. Meanwhile, house prices and credit growth continue to rise, especially in the largest cities, and are

Australia



1. Mining sector investment refers to financial years. For commodity prices, index 2007Jan=100. Real effective exchange rate is based on constant trade weights.

Source: OECD Economic Outlook 97 database; OECD, *Housing Prices Database*; Australian Bureau of Statistics, Cat. No. 5204.0 and 5206.0; and Reserve Bank of Australia.

StatLink http://dx.doi.org/10.1787/888933220831

Australia: **Demand, output and prices**

	2011	2012	2013	2014	2015	2016
	Current prices AUD billion	Percentage changes, volume (2012/2013 prices)				
GDP at market prices	1 454.7	3.7	2.0	2.7	2.3	2.9
Private consumption	780.4	2.5	1.7	2.5	2.7	3.0
Government consumption	256.9	2.3	0.8	2.0	1.3	1.6
Gross fixed capital formation	395.2	9.0	-2.2	-2.0	-1.3	0.7
Final domestic demand	1 432.5	4.2	0.4	1.2	1.4	2.1
Stockbuilding[1]	9.7	-0.1	-0.4	0.0	0.0	0.0
Total domestic demand	1 442.2	4.1	0.0	1.2	1.4	2.1
Exports of goods and services	314.3	6.5	6.2	6.7	5.7	6.2
Imports of goods and services	301.7	6.3	-1.9	-1.8	-0.3	2.7
Net exports[1]	12.6	0.1	1.6	1.8	1.2	0.7
Memorandum items						
GDP deflator	_	-0.4	1.2	0.4	-0.4	1.9
Consumer price index	_	1.7	2.4	2.5	1.6	2.4
Private consumption deflator	_	2.5	2.6	2.3	1.5	2.3
Unemployment rate	_	5.2	5.7	6.1	6.0	5.8
Household saving ratio, net[2]	_	10.4	10.4	9.4	8.8	8.1
General government financial balance[3]	_	-2.6	-1.4	-2.2	-1.9	-1.5
General government gross debt[3]	_	37.3	38.3	42.5	44.6	46.8
Current account balance[3]	_	-4.3	-3.3	-2.8	-3.1	-2.5

1. Contributions to changes in real GDP, actual amount in the first column.
2. As a percentage of disposable income.
3. As a percentage of GDP at market value.

Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933222086

increasingly driven by investors. Building-approval data indicate a significant supply response is underway. Consumer-price inflation remains benign with recent figures pushed up by exchange-rate depreciation but damped by the drop in oil prices.

Macroeconomic policies are accommodating the commodity-market downturn

Concern for "real-side" developments and the absence of inflationary pressure prompted a policy-rate cut of 25 basis points to 2.25% in February and to 2% in May, the first moves since August 2013. However, the net gains from further monetary expansion in the near term are finely balanced. The momentum in the housing market and possible need for expansionary firepower given uncertainties in the macroeconomic outlook suggest caution. The Reserve Bank of Australia is assumed to commence policy-rate increases in early 2016 in response to improved economic conditions.

Budget proposals published in May do not endeavour to make up for the larger-than-expected deficit results; indeed, the pace of consolidation is slightly lower than in the previous budget. This approach is appropriate given weakening revenues and macroeconomic outcomes in the wake of the commodity price falls. The general-government deficit is projected fall to 1.9% of GDP in 2015 and to 1.5% of GDP in 2016.

Structural reforms should assist economic adjustment and inclusive growth

Structural reforms are underway to assist the economic adjustment of activity away from the resource sector. In particular, initiatives to strengthen infrastructure and some initial steps in tax reform have already been taken. The budget for 2015-16 focuses on a smaller set of structural reforms with less emphasis on cost-cutting measures compared with the previous year's budget. It notably proposes a package of measures supporting small and medium enterprise, including a preferential rate of corporate taxation and increased tax allowances. Also of note are measures increasing support for child-care and proposals to tackle base erosion and profit shifting. The latter include new anti-avoidance legislation and the extension of the Goods and Services Tax to cross-border supplies of digital services and products. Future structural reforms should prioritise further tax changes, shifting away from direct taxation and towards indirect taxation, including reduced reliance on personal and corporate income taxes and measures such as increased use of the Goods and Services Tax and land tax. Ensuring increased well-being will also be helped by the proposals to increase child-care subsidies by boosting inclusion through positive effects on female labour participation. In environmental policy it remains important that the Emission Reduction Fund is efficient through robust measurement and verification methods and implementation of a safeguard mechanism that prevents offsetting emissions elsewhere in the economy.

Output growth will pick up in 2016, and external uncertainties dominate the risk profile

Strengthening private consumption will contribute significantly to output increases with housing construction and exports also playing a role. The unemployment rate is projected to decline as employment adjusts to sectoral shifts in demand due to economic rebalancing. Inflation will remain moderate throughout the projection period due to continuing slack.

External risks remain prominent. Commodity prices may well rise from current levels, recharging company and government balances. Alternatively, if current commodity prices persist, or head down further, then revenue impacts will deepen and cutbacks in production could become substantial. Domestically, the continuing property market momentum adds to the risk of a sharp correction and there are sizeable upside and downside uncertainties in the strength of household spending growth.

AUSTRIA

Economic growth will remain subdued in 2015, but will strengthen and reach 1.7% in 2016. Going forward, easing geopolitical tensions, strengthening external demand and the depreciation of the euro will support export growth. The pick-up in trade and historically low interest rates provide a good environment for investment to recover. The income-tax reform will boost private consumption.

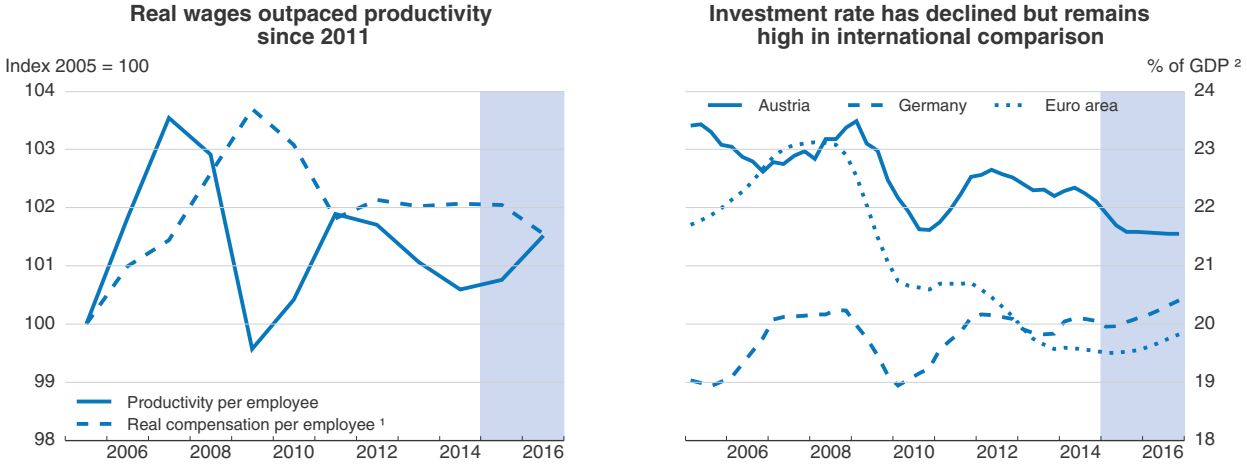
Close monitoring and supervision of banks is essential to revive confidence. Structural reforms in the service sector would boost competition and the diffusion of new technologies. Further increasing the labour participation of the elderly, and in particular of women, would help make growth more inclusive. Preparations for the planned alignment of women's retirement age with those of men should be brought forward.

Investment rates, although declining recently, remain considerably higher than in other European countries, partly because of a higher share of residential construction and transport infrastructure investment. The share of intellectual property investment has risen markedly after the crisis and has partly offset declines in the share of business investments in buildings, structures and ICT equipment. Government initiatives towards the support of venture capital and crowdfunding as well as intense engagement within the European Fund for Strategic Investment have the potential to boost entrepreneurship and business investment.

Economy activity has fallen behind

Economic activity has been very weak since the beginning of 2012. Despite the increasing output gap and rising unemployment, inflation has been higher than in other euro area countries. Poor real disposable income growth has been partly offset by declining saving rates, helping to maintain consumption. Falling labour productivity has weakened

Austria



1. Real compensation per employee is defined as compensation per employee (wages plus employers' contributions) divided by the private consumption deflator.
2. 4-quarter moving average of nominal share of total investment to GDP.

Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933220841

Austria: **Demand, output and prices**

	2011	2012	2013	2014	2015	2016
	Current prices € billion	Percentage changes, volume (2010 prices)				
GDP at market prices*	308.7	1.0	0.1	0.4	0.6	1.7
Private consumption	165.6	0.6	-0.2	0.2	0.8	1.8
Government consumption	61.2	0.3	0.4	1.0	1.0	-0.6
Gross fixed capital formation	69.6	0.6	-1.4	0.4	-1.9	2.5
Final domestic demand	296.3	0.5	-0.4	0.4	0.2	1.5
Stockbuilding[1]	4.5	-0.1	-0.7	-0.2	0.5	-0.1
Total domestic demand	300.7	0.4	-1.0	0.2	0.7	1.3
Exports of goods and services	165.7	1.4	1.3	1.8	3.3	5.9
Imports of goods and services	157.7	0.8	-0.2	2.5	4.2	5.4
Net exports[1]	7.9	0.4	0.8	-0.2	-0.3	0.5
Memorandum items						
GDP deflator	_	1.8	1.5	1.7	1.1	1.5
Harmonised index of consumer prices	_	2.6	2.1	1.5	0.6	1.6
Private consumption deflator	_	2.4	2.2	1.7	0.9	1.6
Unemployment rate[2]	_	4.9	5.4	5.7	5.8	5.7
Household saving ratio, net[3]	_	9.0	7.3	7.5	7.7	8.7
General government financial balance[4]	_	-2.2	-1.3	-2.4	-2.3	-2.1
General government gross debt[4]	_	96.7	95.1	96.3	97.6	97.8
General government debt, Maastricht definition[4]	_	81.4	80.9	84.5	85.7	85.9
Current account balance[4]	_	1.5	0.9	0.8	0.9	1.4

* Based on seasonal and working-day adjusted quarterly data; may differ from official non-working-day adjusted annual data.

1. Contributions to changes in real GDP, actual amount in the first column.
2. Based on Labour Force Survey data.
3. As a percentage of disposable income.
4. As a percentage of GDP at market value.

Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933222092

international competitiveness and, despite real wages being still below pre-crisis levels, triggered substantial losses in export market shares. Structural changes in the composition of global value chains, in particular with respect to Germany, may have amplified these losses. Business and consumer confidence remained subdued despite the uptick of activity in the euro area in early 2015.

Fundamentals are improving, but structural reforms in services are crucial

A tax reform, to be legislated in mid-2015, will enter in force on 1 January 2016 and reduce income taxation significantly. This should buttress private consumption despite some projected increase in the saving rate. External conditions have improved owing to stronger growth prospects in the euro area and price competitiveness gains *vis-à-vis* partners outside the euro area following the depreciation of the euro. Notably, the strong appreciation of the Swiss franc improves prospects for the Austrian tourism sector. In addition, the low real interest rate environment and the plunge in oil prices should strengthen domestic demand.

Progress in deregulating product markets has been impressive. Its success should inspire similar structural reforms in the service sector, where regulations, in particular entry regulations, are still among the most stringent in the OECD. These regulations hamper labour productivity and partly explain the downward rigidity of prices, since nearly three quarters of the inflation differential with respect to the euro area and Germany can be ascribed to services. Besides the close monitoring and supervision of banks, the authorities should push forward the defragmentation of the overbanked domestic financial market to reduce operating costs. In this regard, the merger of the *Volksbanken*, which would bring down the number of their branches from 63 to 8, is a welcome first step.

Further growth potential resides in the promotion of a more gender-balanced society by shifting to a tax-and-benefit system that encourages a better distribution of work, the provision of more full-day schools and care centres, and sensitising the private sector for more family-friendly workplaces and working time models.

Economic activity is set to recover gradually

GDP growth is projected to increase gradually over the projection period driven by a pick-up in export and investment with an additional boost provided by private consumption. Risks for the projections are balanced. If cost pressures increase further, Austria's exporters may benefit less than projected from the weakness of the euro. Uncertainty about bank balance sheet impairments remains. If this channel explains more of the current sluggishness of investment and consumer confidence than assumed, growth may prove more subdued than projected. On the upside, the tax reform could boost private consumption more if saving rates pick up less than expected. Second-round effects on employment and investment may also be stronger than anticipated. Finally, export performance may be stronger than projected if lost market shares are regained more swiftly.

BELGIUM

The recovery is projected to gradually strengthen. Economic growth is expected to broaden with rising exports and business investment owing to supportive financial conditions and improving external demand. Household consumption growth will be held back by fiscal consolidation and wage restraint. Inflation will pick up somewhat in 2016 as the effects of falling oil prices wears off.

Fiscal consolidation is set to resume, mainly on the spending side. Further structural reforms to secure fiscal sustainability and promote employment and competitiveness should be pursued, such as increasing the effective retirement age, reforming wage setting and shifting the tax burden from labour to less growth distortive taxes, such as consumption and environmental taxes.

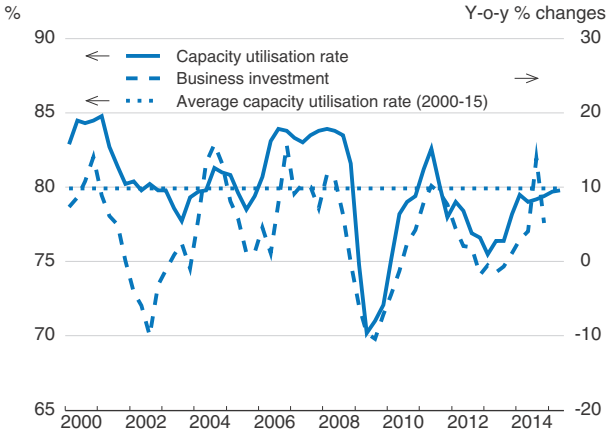
Investment in the aftermath of the crises has been stronger than in other euro area countries. While recovery in business investments is set to continue, public investment remains subdued and low in international comparison, reflecting needed fiscal consolidation. However, further cuts to infrastructure spending may undermine future growth.

Activity is picking up slowly

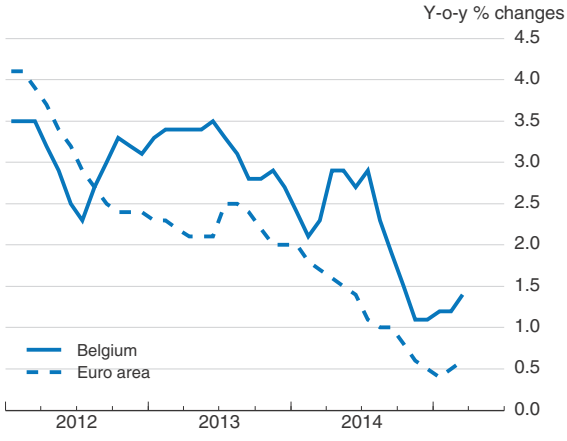
The economy has continued to recover as household consumption and business investment have strengthened somewhat, but growth has been weak. Business confidence has increased and consumer confidence has returned to its long term average. Supportive lending conditions and increasing profit margins have supported business investment. Capacity utilisation has also returned to its long term average, creating a positive environment for further investment spending. Nevertheless, the unemployment rate is still high at around 8.5%. While core inflation has fallen largely in line with that in the euro area, it still remains relatively high.

Belgium

Investment continues to recover[1]



Core inflation has fallen[2]



1. Capacity utilisation rate in the manufacturing sector, seasonally adjusted. Investment is nominal private non-residential gross fixed capital formation.
2. Harmonised consumer price index excluding food and energy.

Source: European Commission; National Bank of Belgium; and *OECD Economic Outlook 97 database*.

StatLink http://dx.doi.org/10.1787/888933220854

Belgium: **Demand, output and prices**

	2011	2012	2013	2014	2015	2016
	Current prices € billion	Percentage changes, volume (2012 prices)				
GDP at market prices	379.9	0.1	0.3	1.1	1.3	1.8
Private consumption	195.1	0.8	0.3	0.9	1.5	1.3
Government consumption	90.4	1.5	1.1	1.0	-0.3	-0.1
Gross fixed capital formation	87.4	0.0	-2.1	5.1	1.2	3.1
Final domestic demand	372.9	0.8	0.0	1.9	1.0	1.4
Stockbuilding[1]	5.1	-0.9	-0.8	-1.0	0.1	0.0
Total domestic demand	378.1	-0.1	-0.9	0.9	1.1	1.4
Exports of goods and services	309.3	1.9	2.9	3.8	3.4	5.3
Imports of goods and services	307.4	1.8	1.7	3.6	2.9	5.0
Net exports[1]	1.9	0.1	1.0	0.2	0.5	0.5
Memorandum items						
GDP deflator	_	2.1	1.5	0.6	0.6	1.3
Harmonised index of consumer prices	_	2.6	1.2	0.5	0.0	1.3
Private consumption deflator	_	2.2	1.2	0.7	0.2	1.3
Unemployment rate	_	7.7	8.4	8.5	8.5	8.1
Household saving ratio, net[2]	_	7.5	6.9	6.2	5.6	5.1
General government financial balance[3]	_	-4.1	-2.9	-3.2	-2.5	-1.6
General government gross debt[3]	_	120.3	117.6	129.8	130.4	128.9
General government debt, Maastricht definition[3]	_	103.9	104.4	106.6	107.2	105.7
Current account balance[3]	_	-0.7	-0.2	1.8	2.7	2.7

1. Contributions to changes in real GDP, actual amount in the first column.
2. As a percentage of disposable income.
3. As a percentage of GDP at market value.

Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933222101

Fiscal consolidation and wage moderation will weigh on domestic demand

After pausing in 2014, fiscal consolidation is planned to resume, with an annual structural balance adjustment of 0.7% of GDP in 2015 and 2016, and it is to be expenditure-based. Further consolidation is a welcome step towards securing fiscal sustainability as public debt remains large, and the emphasis on containing spending is welcome. Success, however, will require co-ordinated efforts at all levels of government. The drag on domestic demand will be partly offset by accommodative monetary policy in the euro area and better financial conditions, as lending standards for non-financial corporations have eased further.

The authorities continue to pursue wage moderation policies, by keeping low the maximum real wage increase in the collective bargaining process. This implies zero real growth for negotiated wages in 2015 and a modest 0.5% growth in 2016. In addition, parliament has recently approved a temporary suspension of the nominal indexation of wages and replacement income (known as "index jump"). While a protracted period of low wage growth will help regain external competiveness, the situation highlights the need to reform wage setting more broadly in order to link wage growth more closely to domestic productivity developments. As part of this reform, social partners should be encouraged to

phase out the automatic wage indexation mechanism and to consider reintroducing a lower youth minimum wage. The growth potential could be increased and become more inclusive by investing in skills and by improving integration policies, as the labour force is ageing and the large foreign-born population suffers from poor labour market prospects. This requires notably developing more equitable education and training system.

The recovery will gradually continue

Growth is projected to broaden and gradually increase in line with the recovery in the euro area. Improving external demand and the exchange rate depreciation will support exports and the current account surplus will continue to rise. Accommodative monetary policy and improving confidence should further bolster investment growth. However, the strength of the recovery in domestic demand will likely be limited by fiscal consolidation and wage moderation. Unemployment is projected to edge down and, as the substantial downward pressure from low energy prices fades away, headline inflation will gradually increase.

House prices are rising again and remain at historically high levels. A correction would cut household wealth and consumption. The Belgium economy is highly dependent on the strength of the recovery in the euro area, and therefore developments in geopolitical tensions and negotiations with Greece. Improved corporate profits and continued supporting financial conditions could trigger a faster-than-projected recovery of business investment.

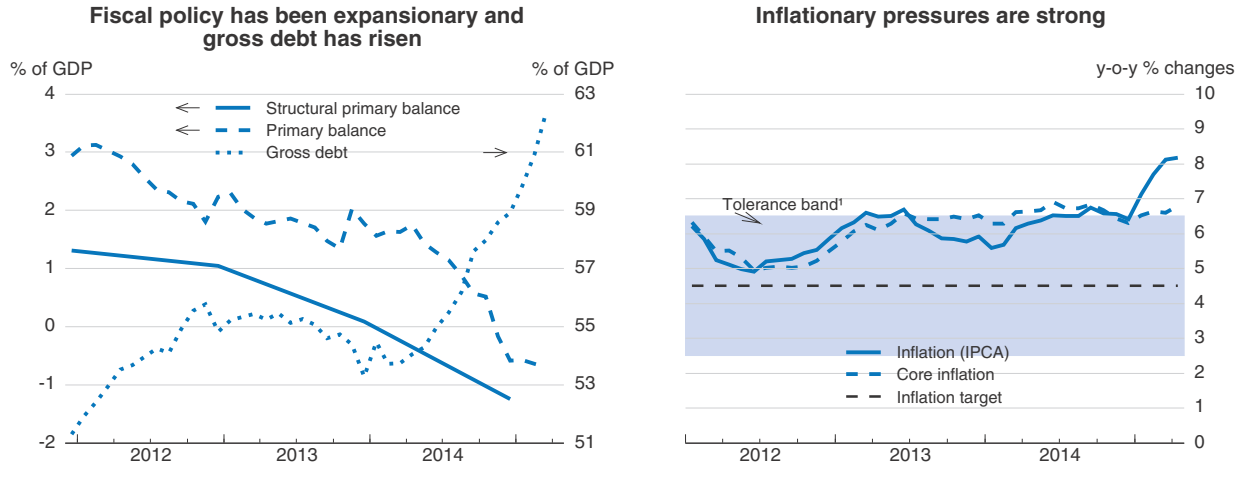
BRAZIL

The economy is projected to contract this year, but a slow recovery is expected to unfold gradually from the end of 2015, driven initially by strengthening exports, which will be boosted by the depreciation of the real.

Fiscal performance has deteriorated and inflation has risen significantly. Consequently, rebuilding confidence in macroeconomic policies remains the priority. Continuous vigilance to ensure a return of inflation to the target is warranted. Recent government commitments for fiscal adjustment are welcome and also lay the grounds for stronger growth. More specifically, recent adjustments of social benefits, lower support to public banks and cost-covering electricity prices are correcting past distortions and are important initiatives on the supply side. The planned launch of a new round of concessions, especially in transportation, is fundamental to addressing bottlenecks and promoting higher growth. The recent decision to restart trade negotiations with the EU and the start of a wide-ranging free-trade agreement with Mexico are welcome. Progress on a comprehensive reform of indirect taxes, lowering trade barriers and reducing administrative burdens could spur competition and accelerate the recovery significantly. The commitment to inclusive growth, including through further improvements in education and well-targeted social transfers, should be maintained.

At less than 20% of GDP, Brazil's level of investment has traditionally been low by international and Latin American standards. This partly reflects Brazil's relatively low domestic saving. Over the past 4 years, however, investment has been trending down due to policy uncertainties and lack of confidence. These factors have recently been compounded by corruption allegations surrounding the national oil company, Petrobras. Business investment is projected to pick up in 2016 as activity accelerates.

Brazil



1. The inflation target is met whenever the accumulated inflation during the period January-December of each year falls within the tolerance band.

Source: Central Bank of Brazil; and IBGE.

StatLink http://dx.doi.org/10.1787/888933220867

Brazil: **Demand, output and prices**

	2011	2012	2013	2014	2015	2016
	Current prices Brazilian Real billions	Percentage changes, volume (2000 prices)				
GDP at market prices	4 374.8	1.8	2.7	0.2	-0.8	1.1
Private consumption	2 637.0	3.9	2.9	0.9	0.6	1.2
Government consumption	817.4	3.2	2.2	1.4	-1.5	-0.5
Gross fixed capital formation	902.9	-0.6	6.0	-4.3	-3.7	0.9
Final domestic demand	4 357.3	2.9	3.4	-0.1	-0.7	0.8
Stockbuilding[1]	51.2	-1.1	0.2	0.2	0.0	0.0
Total domestic demand	4 408.4	1.8	3.5	0.1	-0.7	0.8
Exports of goods and services	501.8	0.1	2.2	-1.0	-6.3	5.9
Imports of goods and services	535.5	0.2	7.2	-1.0	-3.3	2.4
Net exports[1]	- 33.7	0.0	-0.7	0.0	-0.3	0.3
Memorandum items						
GDP deflator	_	5.9	6.5	6.9	7.1	5.9
Consumer price index	_	5.4	6.2	6.3	8.3	5.2
Private consumption deflator	_	6.1	7.0	6.8	8.1	6.3
General government financial balance[2]	_	-2.3	-3.1	-6.2	-4.9	-4.1
Current account balance[2]	_	-2.3	-3.4	-3.9	-3.6	-3.1

1. Contributions to changes in real GDP, actual amount in the first column.
2. As a percentage of GDP at market value.
Source: OECD Economic Outlook 97 database.

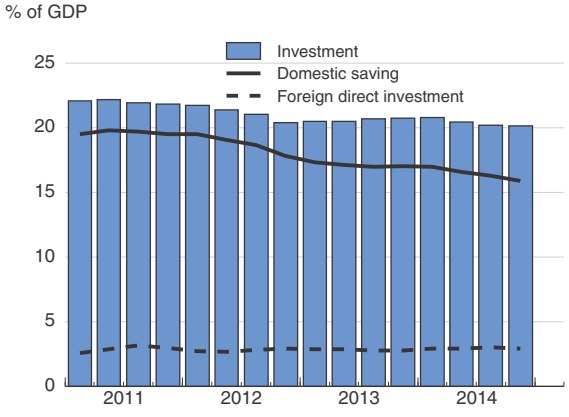
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Growth has stalled and confidence has declined

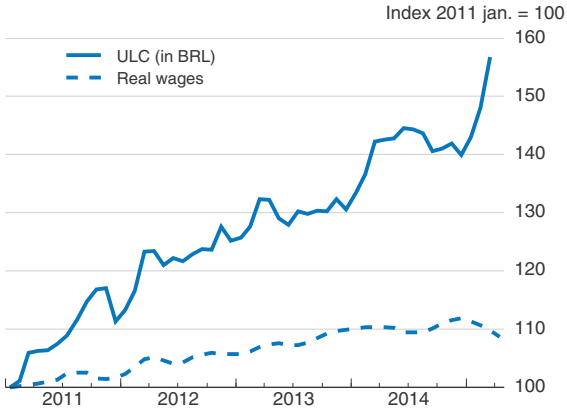
The economy came to a standstill in 2014 against the background of deteriorating terms of trade, domestic bottlenecks and policy uncertainty. While monetary policy tightened, fiscal policy delivered a sizeable stimulus. In practice, several of the fiscal

Brazil

Investment is low and has declined over the last years



Labour costs have outpaced productivity



Source: Central Bank of Brazil; and IBGE.

StatLink http://dx.doi.org/10.1787/888933220871

measures failed to support growth effectively and further added to existing distortions. Fiscal accounts deteriorated and the primary balance, which had been in surplus since 1999 to keep public debt on a declining path, turned into a deficit. As a result, gross debt increased by almost 7 percentage points of GDP. Headline and core inflation have been significantly above the 4.5% inflation target, and have risen above the ceiling of the tolerance band in early 2015 due to adjustments in administrative prices. Short-term indicators including business conditions and retail sales are consistent with a contraction of activity in early 2015.

Business and consumer confidence has deteriorated sharply owing to a combination of low growth and high inflation, the corruption investigations and discussions about possible sovereign rating downgrades. Deteriorating international competitiveness and substantial policy uncertainties resulting from a series of ad-hoc policy changes that affected the conditions of doing business added to the decline of confidence among investors, and thus to a contraction of investment.

Macroeconomic policy space is limited but structural reforms can boost growth

Macroeconomic policy space is severely limited by the need to restore confidence and preserve Brazil's investment grade rating. In January 2015, the new government announced a significant fiscal adjustment, with primary surplus targets of 1.2% and 2% of GDP for 2015 and 2016. The new targets are backed by concrete measures to reduce expenditures and – to a lesser extent – raise revenues. This has lent credibility to the consolidation plans. At the same time, the central bank adopted a more ambitious strategy of bringing inflation back to the 4.5% target by end-2016 and, accordingly, has raised the policy rate further. Despite hikes in administrative prices and a depreciated currency, which have pushed year-on-year headline inflation significantly above the target range in early 2015, inflation expectations have declined, probably as a result of these stronger fiscal and monetary policies. Also, price realignments, as in the energy sector, are aimed at ensuring the right signals are in place for markets to work well.

Structural reforms have a significant potential to boost growth. Reducing the compliance costs and distortions imposed by Brazil's fragmented system of indirect taxes could provide an almost immediate cost reduction for firms, and could be achieved by consolidating indirect taxes into a single, broad-based value-added tax with full deductibility for inputs and an exemption for exports. This would improve competitiveness, adding to the effects of the depreciated exchange rate. In addition, reducing barriers to international trade would reduce the costs of imported inputs and strengthen incentives to enhance productivity by exposing Brazilian firms to more international competition. Lowering domestic entry barriers could reinforce the limited exposure of Brazilian firms to competitive pressures, eventually raising productivity. Improvements in infrastructure could also reduce transport costs, particularly for exporters. Although concessions already play an important role in infrastructure in Brazil, improvements in the regulatory environment could enhance predictability and boost new and sizeable investments by the private sector. PPPs are to play a much larger role in the upcoming concessions, in line with less participation by public banks, in particular BNDES.

Brazil has achieved substantial reductions of poverty and inequality and has seen the emergence of a new middle class. Policy efforts, including in education and social

transfers, have played a crucial role in this process and this momentum should be maintained to make growth more inclusive.

The economy will contract in 2015, followed by a gradual recovery in 2016

The economy will be negatively affected in 2015 by low levels of confidence, lower investment in the oil sector and the headwinds from macroeconomic policy tightening. Over the course of the year, however, improved macroeconomic policies and a few announced structural policy reforms are assumed to raise confidence. Private consumption, and with some delay also investment, are projected to rebound and lead the recovery of growth. Exports will be supported by a more competitive exchange rate, which will reduce the current account deficit.

Unemployment, which has so far been isolated from low activity levels due to declining labour participation among young cohorts, is expected to rise during 2015, before beginning to fall again slowly as of 2016. As the effects of administrative price hikes and currency depreciation taper off, inflation is projected to decline over the projection period and converge to the inflation target by the end of 2016.

Risks to the outlook include a failure to achieve the announced fiscal adjustment, which will be seen as a litmus test for improved macroeconomic policies. Besides reducing investment, this could trigger a loss of Brazil's investment grade rating. Fallout from the events unfolding at Petrobras could be stronger than expected, particularly if the investigations lead to more bankruptcies in upstream activities. Although water reservoir levels have recently risen following a prolonged drought, the possibility of energy or water rationing remains. Such rationing significantly dented growth in the early 2000s. A principal upside risk is related to the structural reform agenda. Given the significant scope to improve the business climate, a few key reforms could make a significant difference for productivity and boost growth.

CANADA

Growth is projected to slow to around 1½ per cent in 2015 before rebounding in 2016. The recent fall in oil prices has resulted in declines in related investment and GDP. However, substitution towards non-energy exports is underway, supported by the currency depreciation and stronger foreign-market growth. Non-oil related business investment should strengthen with a lag. Following recent weather-related weakness, consumption growth should pick up. With economic slack fully absorbed, inflation is projected to return to the 2% midpoint of the inflation target range by mid-2016.

Monetary accommodation is assumed to be progressively withdrawn from early 2016 to counter inflationary pressures. High household debt and house prices pose financial-stability risks, and further macro-prudential measures may be required should these risks increase. Fiscal consolidation should continue as planned. Barriers to foreign direct investment should be reduced and continued efforts placed on increasing the quality and quantity of R&D.

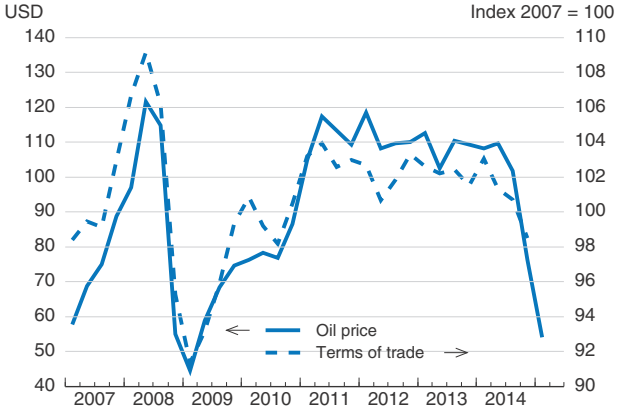
Business investment stands above pre-recession levels. This partly reflects the expansion of the oil and gas sector; however, investment plans have been pared back with the fall in oil prices. Nevertheless, financial conditions remain supportive for investment overall and higher demand for non-energy exports and related capacity requirements should support investment in the medium term.

The fall in oil prices has weakened the expansion

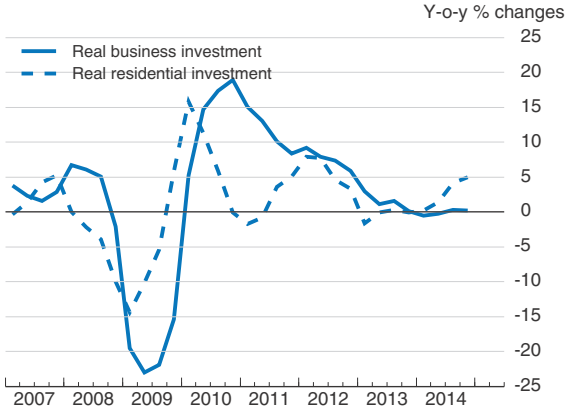
GDP rose 2.4% in 2014, driven by private consumption, reflecting some improvement in the labour market and low interest rates. A weaker currency and stronger growth in export markets (particularly the United States) have boosted export growth. However, a slowing in activity has begun, with GDP declining in the first quarter of 2015. The decline in oil prices in late 2014 and early 2015 have reduced incomes and oil investment. Weaker consumer confidence and, in early 2015, poor weather have also undermined consumption growth.

Canada

Oil prices and the terms of trade have fallen



Investment has weakened in recent years



Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933220887

Canada: **Employment, income and inflation**

Percentage changes

	2012	2013	2014	2015	2016
Employment	1.3	1.4	0.6	0.9	1.1
Unemployment rate[1]	7.3	7.1	6.9	6.7	6.5
Compensation per employee[2]	3.2	2.3	2.7	2.7	2.9
Unit labour cost	2.7	1.6	1.1	1.9	1.7
Household disposable income	4.2	3.8	3.4	3.6	4.1
GDP deflator	1.5	1.4	1.8	-0.4	1.9
Consumer price index	1.5	1.0	1.9	1.0	2.0
Core consumer price index[3]	1.7	1.2	1.8	2.0	2.0
Private consumption deflator	1.3	1.3	1.9	1.1	1.8

1. As a percentage of labour force.
2. In the total economy.
3. Bank of Canada definition: consumer price index excluding eight of the most volatile components and the effects of changes in indirect taxes on the remaining components.

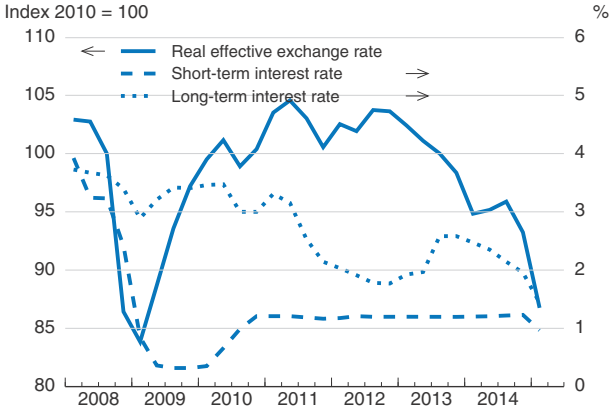
Source: OECD Economic Outlook 97 database.

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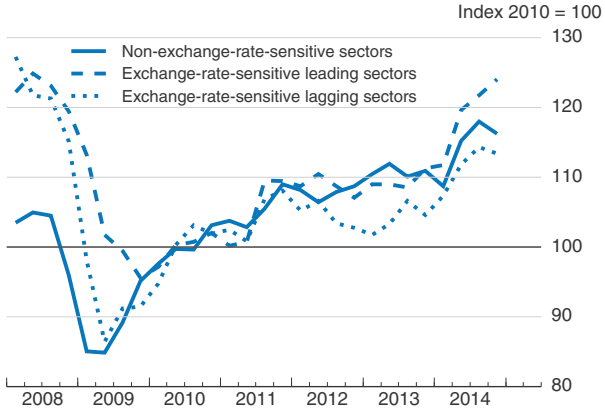
The labour market has improved over the past year, but the downturn in the oil sector is depressing short-term employment prospects. Wage growth has remained fairly modest, albeit with some pick-up. Headline inflation has moderated to the lower end of the Bank of Canada's target range, given large declines in gasoline prices. Despite some remaining slack, core inflation remains slightly above the 2% target midpoint, in part reflecting the currency depreciation. However, pass-through from lower oil prices should weaken core inflation slightly in 2015 before it returns to the midpoint of the target range in mid-2016.

Canada

Financial conditions are accommodative



Non-energy exports[1] to be supported by the depreciation, but headwinds remain



1. Based on A. Binette et al. (2014), Canadian Non-Energy Exports: Past Performance and Future Prospects, Bank of Canada Discussion Paper 2014-1, April. Lagging export sectors include those facing longer-term structural challenges.

Source: OECD Economic Outlook 97 database; Statistics Canada; and OECD calculations.

StatLink http://dx.doi.org/10.1787/888933220894

Canada: **Financial indicators**

	2012	2013	2014	2015	2016
Household saving ratio, net[1]	5.2	5.2	4.0	4.4	4.3
General government financial balance[2]	-3.1	-2.7	-1.6	-1.6	-1.1
General government gross debt[2,3]	95.9	92.3	94.8	96.0	95.5
General government net debt[2,3]	43.3	39.7	40.4	41.6	41.1
Current account balance[2]	-3.3	-3.0	-2.2	-3.7	-3.1
Short-term interest rate[4]	1.2	1.2	1.2	0.9	1.3
Long-term interest rate[5]	1.9	2.3	2.2	1.7	2.6

1. As a percentage of disposable income.
2. As a percentage of GDP at market value.
3. Debt is overstated relative to most other countries as no account is taken of assets in government-employee pension funds, which amounted to 44.4% of GDP in 2012. (see Box 4.7 in the *OECD Economic Outlook no. 95,* May 2014).
4. 3-month interbank rate.
5. 10-year government bonds.

Source: OECD Economic Outlook 97 database.

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Monetary conditions are accommodative, and the pace of fiscal consolidation is easing

Monetary policy will remain accommodative throughout the forecast period. The Bank of Canada lowered its policy rate by 25 basis points, to 0.75%, in January 2015 to counter the

Canada: **Demand and output**

	2013	2014	2015	2016	Fourth quarter 2014	Fourth quarter 2015	Fourth quarter 2016
	Current prices CAD billion	Percentage changes from previous year, volume (2007 prices)					
GDP at market prices	1 893.8	2.4	1.5	2.3	2.5	1.2	2.4
Private consumption	1 051.9	2.7	2.1	2.3	2.6	2.1	2.2
Government consumption	408.7	0.2	0.1	1.0	0.4	0.1	1.3
Gross fixed investment	452.5	0.3	-1.5	0.9	1.5	-2.4	1.3
Public[1]	72.3	-2.7	2.0	-2.8	-0.4	0.6	-3.4
Residential	131.4	2.7	2.7	-1.8	4.8	0.2	-2.5
Non-residential	248.8	-0.1	-4.7	3.4	0.3	-4.6	4.9
Final domestic demand	1 913.2	1.6	0.8	1.7	1.9	0.6	1.8
Stockbuilding[2]	10.8	-0.2	0.2	0.0			
Total domestic demand	1 924.0	1.4	1.1	1.7	1.4	0.7	1.8
Exports of goods and services	571.8	5.4	3.4	6.9	6.4	3.7	7.6
Imports of goods and services	602.0	1.7	2.0	4.8	2.6	2.0	5.3
Net exports[2]	- 30.2	1.1	0.4	0.5			

Note: Detailed quarterly projections are reported for the major seven countries, the euro area and the total OECD in the Statistical Annex.

1. Excluding nationalised industries and public corporations.
2. Contributions to changes in real GDP, actual amount in the first column.

Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933222025

Canada: **External indicators**

	2012	2013	2014	2015	2016
			$ billion		
Goods and services exports	553.6	555.1	565.5	493	528
Goods and services imports	587.4	584.5	581.5	532	560
Foreign balance	- 33.9	- 29.3	- 16.0	- 40	- 32
Invisibles, net	- 26.1	- 25.3	- 23.2	- 20	- 19
Current account balance	- 60.0	- 54.6	- 39.2	- 59	- 52
			Percentage changes		
Goods and services export volumes	2.6	2.0	5.4	3.4	6.9
Goods and services import volumes	3.7	1.3	1.7	2.0	4.8
Export performance[1]	- 0.1	0.2	1.6	- 2.3	0.6
Terms of trade	- 1.0	0.1	- 1.2	- 6.1	- 0.2

1. Ratio between export volume and export market of total goods and services.
Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933222033

expected weakness from the fall in oil prices. This stance is appropriate for now, but monetary stimulus will need to be gradually withdrawn as economic slack diminishes. While the timing will depend on economic developments, it is assumed that the first policy rate increase will occur in the first quarter of 2016, with further increases thereafter. Given the supportive monetary stance, further macro-prudential measures on mortgage lending to ensure financial stability should be considered if housing-related risks increase.

In recent quarters the pace of fiscal consolidation has proceeded broadly as planned. On the basis of budget plans, an additional cumulative structural consolidation of only 0.4% of GDP is projected to occur over 2014-16. The latest federal budget showed that the government is on track to eliminate its deficit in the current fiscal year, largely through maintaining spending restraint. However, given lower revenues, particularly following the decline in oil prices that result in smaller projected surpluses at the federal level and deficits in some oil-producing provinces, less consolidation is anticipated through 2016 than in previous official projections. As a result, provincial governments plan to reduce their combined deficits by a weaker 0.3% of GDP over 2014-16. The general government debt-to-GDP ratio is expected to be fairly flat. Rising health-care costs will remain a longer-run challenge, and continued structural reforms to limit such expenditure growth are needed. Raising tax efficiency by relying more on environmentally related taxes would help achieve greener growth. In addition, reducing regressive and distortive income-tax expenditures could help support inclusive growth.

Growth in non-energy exports and investment should lead the expansion

GDP growth is projected to recover from recent low rates to 2¼ per cent in 2016, as the drag from weaker oil-related investment diminishes. Private consumption is also expected to recover from the weak start to 2015 as the effects of the harsh winter and adjustment to the decline in oil prices fade. Interest rate increases in 2016 will dampen household spending and residential investment later in the year. Exports, particularly non-energy, will benefit from the lower Canadian dollar and stronger export market growth. However, the

sensitivity of non-energy exports to exchange rate movements depends on the sector, with some likely to continue to face broader competitiveness or structural challenges. As capacity is limited in non-energy export industries, investment should rise with a lag, although there is considerable uncertainty regarding its timing.

The main upside risk to the projections is that oil demand and prices rebound, driven for example by geopolitical risks. Stronger growth in key export markets, particularly the United States, could lead to a faster rotation towards non-energy exports than projected and call forth a quicker increase in investment. The main downside risk remains a disorderly housing market correction, particularly given high household debt, which would depress private consumption and residential investment and could, in the extreme, threaten financial stability. In addition, further declines in oil prices, a sudden slowdown in China or slower-than-projected growth in the United States could lead to a greater and more protracted than expected deceleration in activity, including weaker investment, exports and private consumption.

CHILE

After a sharp slowdown in 2014 the economy is projected to gradually recover in 2015 and 2016. The pick-up in activity will initially be driven by higher public spending, but will increasingly be supported by stronger external demand for industrial goods from the United States and Europe.

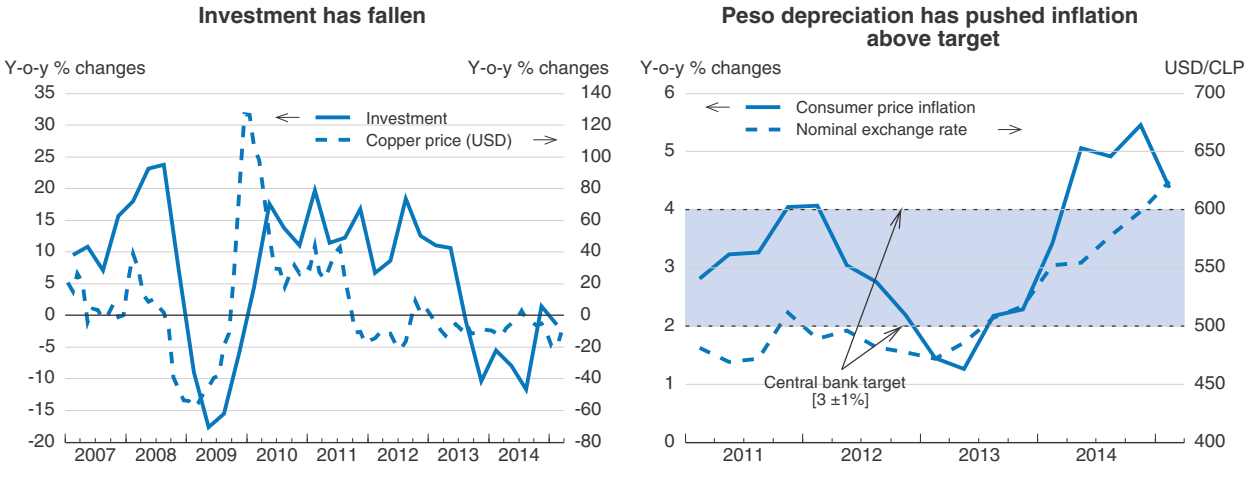
As the exchange rate has stabilised, inflation is moderating, although it remains above the central bank's target band. Since inflation expectations remain well anchored, monetary policy can continue to support growth in the near term, before moving to a more neutral stance as growth strengthens. The underlying stance of fiscal policy is expected to be expansionary in 2015, but then to become neutral in 2016 as the government remains committed to achieve a zero structural balance by 2018.

The large decline in copper prices in the aftermath of the commodity super-cycle has affected the investment plans of mining companies, which have significantly reduced investment since 2012. This decline is perceived to be to a large extent permanent, and mining investment is therefore not expected to recover very strongly, even in the medium term. Therefore, advancing the *Productivity Agenda*, which is meant to broaden the base of the economy, is essential. Structural reforms to open market further to competition will be particularly important to boost investment outside the mining sectors, increasing and making growth more inclusive.

The economy is in transition

The long phase of strong economic growth driven by the booming mining sector has come to an end. Declining copper prices and lower demand from China have reduced the terms of trade, business confidence and investment. The mining sector over-invested during the commodity super-cycle – when mining investment grew from approximately 2% to almost 7% of GDP – creating a lot of spare capacity. As a result, mining investment has declined by a third since 2012, and is expected to remain weak in the medium term. Lower terms of trade have also cut household incomes and private consumption.

Chile



Source: OECD Economic Outlook 97 database; Datastream; and Central Bank of Chile.

StatLink http://dx.doi.org/10.1787/888933220903

Chile: **Demand, output and prices**

	2011	2012	2013	2014	2015	2016
	Current prices CLP billion	Percentage changes, volume (2008 prices)				
GDP at market prices	121 319.5	5.5	4.3	1.8	2.9	3.7
Private consumption	74 017.8	6.1	5.9	2.2	2.2	3.3
Government consumption	14 690.6	3.5	3.4	4.4	7.0	5.1
Gross fixed capital formation	27 132.0	11.6	2.1	-6.1	1.2	1.2
Final domestic demand	115 840.4	7.0	4.6	0.5	2.6	3.1
Stockbuilding[1]	1 652.6	0.4	-0.9	-1.1	2.0	0.0
Total domestic demand	117 493.0	7.5	3.9	-0.5	4.8	3.1
Exports of goods and services	46 162.8	0.1	3.4	0.7	3.0	6.1
Imports of goods and services	42 336.3	4.8	1.7	-7.0	1.9	4.3
Net exports[1]	3 826.5	-1.6	0.6	2.5	0.4	0.7
Memorandum items						
GDP deflator	_	0.8	1.8	5.5	4.9	3.3
Consumer price index	_	3.0	1.8	4.7	3.3	2.6
Private consumption deflator	_	2.7	2.5	5.6	4.7	3.5
Unemployment rate	_	6.4	6.0	6.3	6.2	6.3
Central government financial balance[2]	_	0.6	-0.6	-1.8	-2.4	-1.7
Current account balance[2]	_	-3.6	-3.6	-1.1	-0.8	0.0

1. Contributions to changes in real GDP, actual amount in the first column.
2. As a percentage of GDP at market value.
Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933222118

Monetary and fiscal policies are supporting the recovery

To support domestic demand, the central bank decreased policy interest rates by 200 basis points and has kept them close to historical lows since October 2014. This monetary support resulted in an exchange rate depreciation of around 15% in real terms since early 2013, cushioning the economy from the falling terms of trade by boosting exports and investment in non-mining sectors. The current account deficit has already fallen from 3½ per cent of GDP in 2013 to projected ¾ per cent in 2015.

Fiscal policy is also supporting activity. Taking advantage of a robust fiscal situation – with a near absence of net debt – the government has responded to the slowdown in activity with a strong fiscal impulse to the economy in 2015. Government expenditures will grow by around 10% in 2015, part of which will however be offset by tax increases. Because most of the increase in spending is in public investment and infrastructure investment, the fiscal stimulus can remain temporary, leaving the government in a position to achieve its goal of zero structural balance by 2018.

The economy is projected to rebound, but structural reforms are essential for sustained growth

Economic activity posted a moderate recovery during the first months of the year, and the exchange rate depreciation and stronger growth of trading partners in the second half of 2015 and in 2016 are expected to boost industrial exports. Similarly, private consumption

will increasingly add to growth as lower prices of oil contribute to improve the income of families.

The economic consequences of the large drop in copper prices have shown how much Chile is affected by external shocks. Growth, however, will depend on implementing the government's ambitious reform agenda. Uncertainties on this point, or about the effects of reform, could depress confidence and therefore the speed of the investment recovery. By contrast, tangible progress in reform — particularly policies to foster competition, reduce skill mismatches, increase economic diversification and raise female labour force participation — could boost economic potential more than assumed and will help to reduce inequalities.

CHINA

Growth is projected to continue to edge down, to 6.7% by 2016. Slowing real estate and business investment will be countered to some extent by stepped-up infrastructure investment. Consumption is set to remain robust. Urbanisation and the rapid expansion of service industries will generate employment and keep unemployment low. Enduring overcapacity in some heavy industries should keep producer price inflation negative and consumer price inflation low.

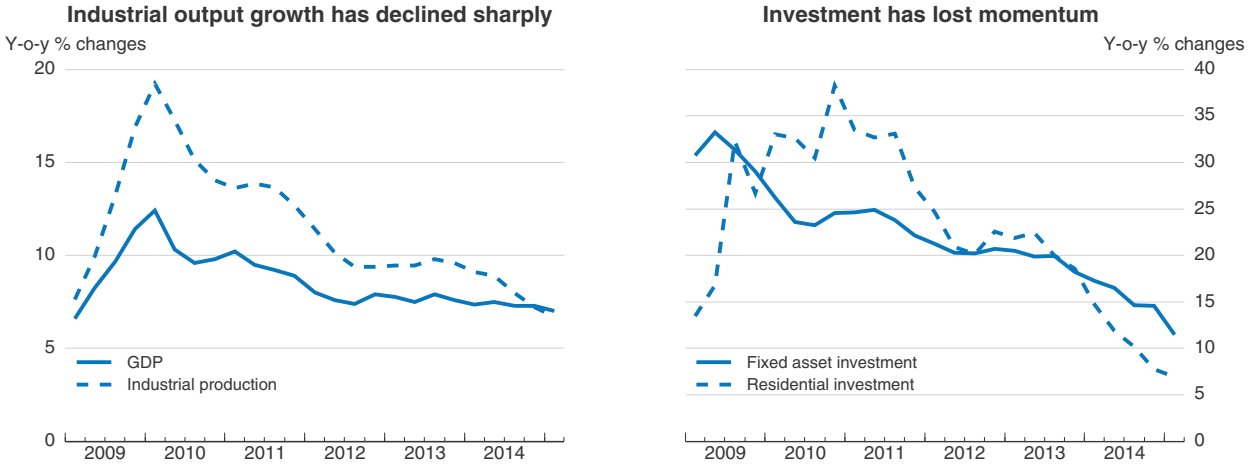
Monetary policy should be eased further to stabilise growth and contain deflationary pressures. Financing costs need to be brought down as real interest rates are high and slowing growth heightens credit risks. Fiscal policy should also ease, as planned, to support activity. Accelerating debt-for-bond swaps at the sub-national government level would mitigate fiscal risks, but unconditional rollover of debt works in the opposite direction. Pension reform should accelerate to ensure fiscal sustainability in the long term.

Investment has been slowing for some years, and is now a smaller fraction of GDP than consumption. Investment efficiency has fallen in recent years on the back of growing excess capacity in real estate and several manufacturing industries. Market forces should be allowed to play a greater role in allocating resources, in particular capital. To that end, a level playing field for all firms needs to be established by gradually removing implicit guarantees to state-owned enterprises. Rural land reform should extend land tenure and encourage land consolidation. Urbanisation will continue to drive investment and growth, as will the expansion of the service sector, which will be spurred by liberalisation measures.

Orderly adjustment towards a "new normal" rate of growth is underway

China's output growth continued to slip in early 2015, with excess capacity weighing on business investment, in particular for state-owned firms, whose leverage is high and

China



Note: Fixed asset investment and residential investment refer to nominal values and do not include investment by rural households.
Source: CEIC.

StatLink http://dx.doi.org/10.1787/888933220919

China: **Demand, output and prices**

	2011	2012	2013	2014	2015	2016
	Current prices Renminbi trillions	Percentage changes, volume (2005 prices)				
GDP at market prices	48.4	7.7	7.7	7.4	6.8	6.7
Total domestic demand	47.2	8.3	8.3	7.9	7.2	7.0
Exports of goods and services	13.5	5.3	8.6	5.7	6.1	5.5
Imports of goods and services	12.3	6.3	10.7	6.9	7.0	6.2
Net exports[1]	1.2	0.1	0.0	0.0	0.1	0.1
Memorandum items						
GDP deflator	_	2.4	2.2	0.8	-0.1	0.8
Consumer price index	_	2.6	2.6	2.1	1.6	2.0
General government financial balance[2,3]	_	0.0	-0.2	-0.3	-1.2	-1.5
Headline government financial balance[2,4]	_	-1.6	-1.8	-1.8	-2.3	-2.2
Current account balance[2]	_	2.5	1.6	2.1	2.4	2.1

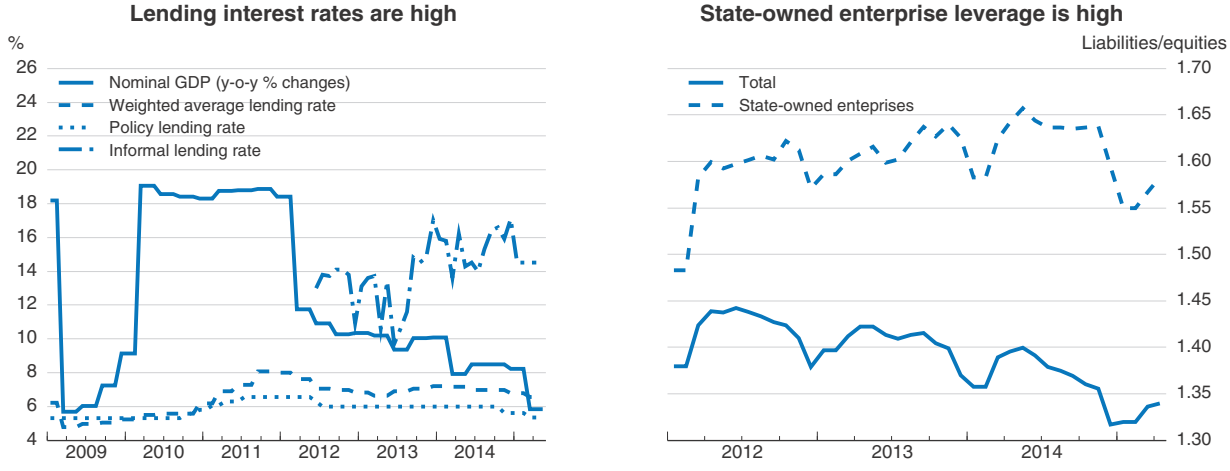
1. Contributions to changes in real GDP, actual amount in the first column.
2. As a percentage of GDP at market value.
3. Encompasses the balances of all four budget accounts (general account, government managed funds, social security funds and the state-owned capital management account).
4. Balance of the general budget account.

Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933222361

whose profits are slowing. Real estate investment also remained weak in the context of the ongoing property market correction. However, lower interest rates and the recent relaxation of down-payment ratios for second-home buyers will support housing demand in the short run. Meanwhile, investment in infrastructure and social housing has been stepped up.

China



Note: In Panel A, the informal lending rate refers to lending by private informal institutions in Wenzhou. In Panel B, total refers to industrial enterprises. By the same token, state-owned enterprises also only include industrial enterprises.
Source: CEIC.

StatLink http://dx.doi.org/10.1787/888933220927

Buoyant household incomes are supporting robust consumption growth. Despite exchange rate appreciation, exports have continued to expand and, with the slowdown in growth and especially investment, imports have weakened. These factors, and falling prices for commodity imports, have widened the trade surplus.

Macroeconomic policy easing is accompanied by structural reforms

Against the backdrop of a cooling economy, interest rates and the reserve requirement ratio have been cut in steps over the past few months, somewhat reducing financing costs. The People's Bank of China has also made use of short-term instruments to drive down interbank interest rates. At the same time, it has reined in shadow banking, thereby improving the credit structure. Bank lending has been geared towards more productive uses as entities enjoying implicit guarantees now have more restricted access to credit. Indeed, the recent default by a private company on its bond principal repayment signals that implicit state guarantees can no longer be taken for granted, which will foster better pricing of risk. Accordingly, smaller and private firms will face less crowding out in the credit market, although their financing costs remain high even for viable projects. Better disclosure and reporting requirements would also help them obtain financing.

The effective exchange rate has appreciated sharply, in tandem with the strengthening of the dollar (to which the renminbi is closely linked), and with reduced foreign exchange intervention by the People's Bank of China. The narrowing interest rate differential with the United States will alleviate appreciation pressure to some extent. Greater exchange rate flexibility is a prerequisite for full interest liberalisation and gradually increasing capital account convertibility, and will help the economy absorb shocks. In the transition to a market-based exchange rate regime, a peg to a trade-weighted basket could help anchor expectations and damp output fluctuations.

Fiscal policy is set to loosen with a 2.3% of GDP headline deficit target (2.7% accounting for carry-over and debt-swaps) for 2015, up from 1.8% in 2014 (in terms of a broader definition of the budget, the deficit is set to increase from 0.3% in 2014 to 1.2% in 2015). Large infrastructure projects are being implemented, including in railways, water and environment protection, where ample needs remain. Urbanisation will be another driver of infrastructure investment spending. Tax cuts have been adopted for micro and small firms and the threshold below which such cuts apply has been raised. Tariffs have also been cut on several consumption goods. In contrast, spending pressure is high in areas that are vital for long-term growth such as education, innovation, health and social security. Debt swaps at the sub-national level should help reduce debt-servicing costs and mitigate fiscal risks, but unconditional rollover of sub-national debt by creditors may jeopardise the cleaning of sub-national balance sheets. Recent measures to reform the pension system for civil servants will strengthen longer-term fiscal sustainability.

Growth will continue to slow

More stimulative macroeconomic policies and lower commodity prices are projected to keep growth at the government target of "around 7%". Consumption is set to remain robust on the back of rising real incomes. Infrastructure investment will partly offset the slowing of real estate and equipment investment in some manufacturing sectors. Inflation will remain very low in part due to economic slack. The current account surplus is set to increase to 2.4% of GDP this year owing to lower commodity prices.

Faster adjustment in industries affected by overcapacity would further slow investment in the short term, but is necessary to reduce imbalances. Propping up housing demand by easing home-purchase restrictions would support short-term growth at the cost of increasing imbalances. A strong appreciation of the effective exchange rate would hurt international competitiveness. An unexpectedly vigorous global recovery, an acceleration of infrastructure investment and the effective kick-off of the New Silk Road strategy could lead to higher growth through stronger investment and exports. Stepping up structural reforms to streamline business regulation and reduce the costs of doing business could also provide a boost to growth.

COLOMBIA

Economic growth will slow down in 2015 as weaker commodity prices reduce investment and exports, and public spending slows due to lower oil and mining revenues. Tighter household balance sheets and weaker employment growth will also slow domestic demand growth. Currency depreciation will temporarily raise headline inflation, but also contribute to growth by gradually boosting non-commodity exports. Stronger foreign demand and the easing of infrastructure bottlenecks will also contribute to an export-led recovery in 2016.

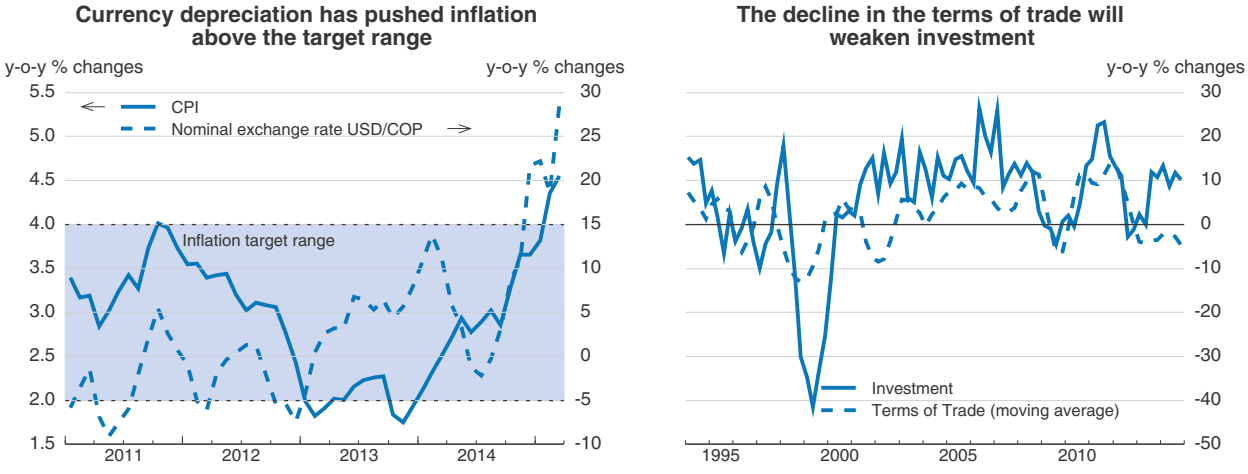
Monetary policy should be neutral to keep inflation expectations anchored. Fiscal consolidation consistent with the fiscal rule should continue, but in the longer term more tax revenues are required to finance needed social expenditures and infrastructure investments. Structural reforms are needed to make growth more inclusive and to facilitate the economic rebalancing process.

Investment will weaken due to less resource-related investment. Reducing the tax burden on business investment would boost investment outside oil and mining. More competition in banking would lower the cost of financing investment. Infrastructure investment has increased, but there are still large gaps to fill. Swift implementation of the ambitious private-public partnership programme in transport infrastructure is crucial.

Growth is moderating due to lower commodity prices

Lower global commodity prices and declining resource-sector investment have resulted in reduced output and widened the current account deficit. Inflation has edged above the target zone, driven mainly by increased food prices, due to adverse weather conditions, a recent trucker strike, and the depreciation of the peso. Private consumption growth has slowed as employment growth moderated and consumer confidence weakened.

Colombia



Source: OECD Economic Outlook 97 database; and *OECD National Account Database*.

StatLink http://dx.doi.org/10.1787/888933220932

Colombia: **Demand, output and prices**

	2011	2012	2013	2014	2015	2016
	Current prices Colombian Peso trillions	Percentage changes, volume (2005 prices)				
GDP at market prices	619.9	4.0	4.9	4.6	3.3	3.7
Private consumption	381.3	4.4	3.8	4.3	3.6	3.2
Government consumption	98.0	6.4	9.3	6.2	1.9	2.2
Gross fixed capital formation	146.3	4.7	6.0	10.9	3.0	3.6
Final domestic demand	625.6	4.8	5.3	6.2	3.2	3.1
Stockbuilding[1]	1.7	-0.1	-0.1	0.2	-0.1	0.0
Total domestic demand	627.3	4.9	5.2	6.7	3.3	3.1
Exports of goods and services	116.1	6.0	5.3	-1.7	3.6	5.0
Imports of goods and services	123.6	9.1	6.4	9.2	3.4	2.0
Net exports[1]	-7.4	-0.7	-0.3	-2.1	-0.2	0.3
Memorandum items						
GDP deflator	_	3.0	1.9	1.8	2.6	3.2
Consumer price index	_	3.2	2.0	2.9	4.2	3.2
Private consumption deflator	_	2.7	2.1	2.9	4.0	3.4
Unemployment rate	_	10.4	9.6	9.1	8.5	8.5
Current account balance[2]	_	-3.1	-3.2	-5.3	-6.0	-5.3

1. Contributions to changes in real GDP, actual amount in the first column.
2. As a percentage of GDP at market value.
Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933222410

Monetary policy is supportive but public spending growth is slowing

The monetary policy rate has remained at 4.5% since September 2014, despite the recent surge in inflation. This monetary support is appropriate given economic uncertainties, since the increase in inflation is mainly due to transitory factors and inflation expectations remain close to the 3% target. Reducing agricultural trade barriers would curb the impact of local weather conditions on food prices.

As resource-related revenues fall, public spending will be reduced to achieve budget balance targets in 2015 and 2016. Colombia's fiscal rule allows for automatic stabilisers, but as the decline in oil and coal prices might be permanent adjusting spending is appropriate. However, public investment in transport infrastructure needed to remove bottlenecks should not be cut. A structural tax reform is needed to raise more revenues, reduce the tax burden on investment to support growth outside the commodity sector, and decrease informality and inequalities.

Structural reforms would facilitate the adjustment process and would make growth more inclusive. Fostering competition in product markets such as telecommunications, food and the retail sectors will boost productivity. More competition in banking would reduce financing costs. Reforming the minimum wage, reducing non-wage labour costs and more skills investment are needed to curb labour informality and reduce inequality. A structural pension reform to increase pension coverage is needed to reduce still high old-age poverty.

Growth will weaken as structural constraints slow adjustment

Growth will be reduced by the gradual rebalancing of investment and employment towards non-commodity exports and tradables that compete with imports. This will reduce the dominance of oil and mining exports, now 70% of total exports, in a healthy adjustment. Investment is projected to gain some momentum towards the second half of 2016 and lower employment growth will contain private consumption growth. The current account deficit will widen in 2015 but then gradually narrow again as competitiveness improves and external demand from neighbouring oil-exporting countries picks up. Inflation is projected to move closer to the target due to increased economic slack and the fading effects of the weaker currency and food-price shocks related in part to the drought caused by the "El Niño" phenomenon. The drought will also affect output negatively by reducing agricultural production and energy supply.

The evolution of global oil and coal prices, and of external demand from the United States and China, could significantly alter short-term prospects. The large current account is a vulnerability, but this is mitigated by good capital market access, the flexible exchange rate regime, a prudent debt composition and contingent credit lines. Successful execution of the transport infrastructure programme is key to the economic rebalancing. Better climate conditions should the drought ease would raise growth and lower inflation.

CZECH REPUBLIC

The economic expansion has gained momentum, driven by domestic demand. Renewed consumer confidence and income growth are supporting consumer spending, while public spending and an improving outlook are raising investment. Stronger growth in trading partners will drive further growth in exports. Global commodity price falls have temporarily reduced inflation but rising domestic cost pressures will push it towards the target during 2016.

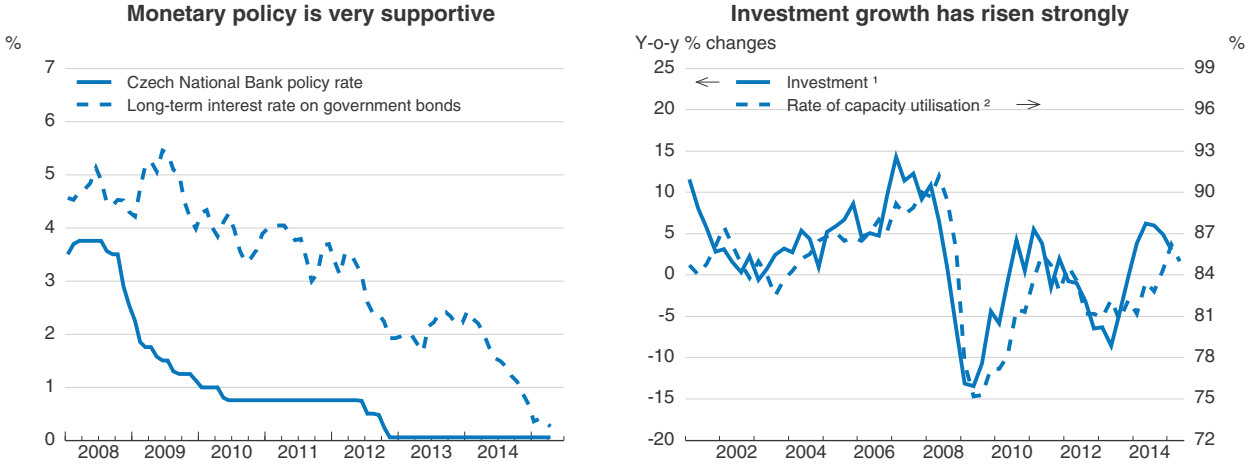
Monetary policy is expected to remain very expansionary to ensure that inflation moves towards the 2% target. The exchange rate should be allowed to float freely again when deflationary risks have largely receded. Fiscal policy is expected to tighten slightly in 2016. Structural reforms to promote competition and reduce skill mismatches in the labour market would raise incomes and make growth more inclusive.

Business investment began recovering in 2014. This upswing is being spurred by accommodative financial conditions, rising confidence and diminishing spare capacity in some sectors. Public investment is currently boosted by efforts to use expiring EU funds. Given the infrastructure gap, effective use of these funds holds the promise of raising productivity and incomes.

Domestic demand is driving the expansion

Strong domestic demand growth in 2014 is set to continue in 2015. Public investment has risen as EU structural funds that will expire in 2015 are being spent. Business investment is also recovering. Household spending on durable goods has turned up, likely reflecting higher consumer confidence and pent-up demand. In addition, exports are benefitting from stronger trading partner growth and market share gains. Year-on-year headline inflation fell to 0.1% in the first quarter of 2015, due to falling energy and food

Czech Republic



1. Data refer to private non-residential and government fixed capital formation.
2. Manufacturing sector.

Source: OECD Economic Outlook 97 database; and OECD, *Main Economic Indicators Database*.

StatLink http://dx.doi.org/10.1787/888933220946

Czech Republic: **Demand, output and prices**

	2011	2012	2013	2014	2015	2016
	Current prices CZK billion	Percentage changes, volume (2010 prices)				
GDP at market prices	4 019.7	-0.7	-0.7	2.0	3.1	2.5
Private consumption	1 982.8	-1.7	0.4	1.7	2.7	2.4
Government consumption	792.2	-1.0	2.3	2.3	0.9	2.3
Gross fixed capital formation	1 067.4	-2.8	-4.4	4.5	4.4	3.7
Final domestic demand	3 842.4	-1.9	-0.6	2.6	2.8	2.7
Stockbuilding[1]	19.5	-0.2	-0.2	-0.4	0.2	-0.6
Total domestic demand	3 861.8	-2.1	-0.8	2.2	3.2	2.1
Exports of goods and services	2 875.3	4.3	0.3	8.8	8.0	6.2
Imports of goods and services	2 717.4	2.6	0.3	9.6	8.5	6.0
Net exports[1]	157.9	1.3	0.0	-0.1	0.2	0.6
Memorandum items						
GDP deflator	_	1.4	1.7	2.4	1.2	1.6
Consumer price index	_	3.3	1.4	0.4	0.2	1.6
Private consumption deflator	_	2.5	1.0	-0.3	-0.1	1.2
Unemployment rate	_	7.0	6.9	6.1	5.7	5.5
General government financial balance[2]	_	-3.9	-1.2	-2.0	-1.9	-1.3
General government gross debt[2]	_	58.2	57.9	57.1	55.1	55.0
General government debt, Maastricht definition[2]	_	44.6	45.0	42.6	40.6	40.4
Current account balance[2]	_	-1.6	-0.5	0.6	0.8	0.8

1. Contributions to changes in real GDP, actual amount in the first column.
2. As a percentage of GDP at market value.
Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933222128

prices. But core inflation has continued to rise and inflation expectations appear well anchored.

Policy settings are supporting growth but could be augmented by further structural reforms

Monetary policy remains very accommodative. The policy rate has been close to zero since late 2012 and the exchange rate floor for the koruna (against the euro) has prevented an appreciation. The Czech National Bank has committed to maintaining the floor until at least mid-2016, but it should be removed when upward pressure on the currency no longer poses a severe deflationary threat. The policy rate is expected to remain unchanged throughout 2015 and 2016.

Fiscal policy is also supporting growth. Public investment rose by almost one-fifth in 2014, and a further increase is expected in 2015 before some of the available EU structural funds expire. If funds are spent well, the investment in infrastructure and innovation should lift productivity. Fiscal policy is expected to tighten slightly in 2016. Government finances will continue to benefit from very low borrowing costs. Nonetheless, further steps should be taken to secure fiscal sustainability, including creating an independent fiscal council, as is currently proposed, and containing ageing-related spending.

Structural reforms that reduce barriers to competition and improve the business environment would support the upswing in investment. Reforms that reduce skills mismatches in the labour market and increase the participation of women, minorities and older workers, would help boost potential GDP and make growth more inclusive.

The expansion will be robust

Private sector demand growth is being driven by rising confidence and incomes, as well as easing credit conditions and the temporary boost from lower oil prices. As the unemployment rate falls further, stronger wage growth will support household incomes. Investment will contribute to growth in both years, boosted by higher public investment in 2015 and rising business capital spending in 2015 and 2016. However, the overall pace of investment growth will slow in 2016. Stronger external demand will drive ongoing growth in exports. Rising cost pressures and margin re-building will push up inflation in 2015 and 2016.

Stronger business sentiment than assumed could drive investment higher than expected. This could occur if the recent surge in European car sales were to be sustained. Government investment could also be stronger than projected. On the downside, if wage growth does not pick up further or households' renewed optimism proved fleeting, consumption could be lower than projected. Exports could be lower if the euro area recovery was slower than expected or if gains in export market share were not realised.

DENMARK

Economic growth is projected to rise to 1.9% this year and 2.3% in 2016, thanks to improved trade prospects, a weaker effective exchange rate, lower energy prices and easing financial conditions. Improved confidence, recovering house prices and a savings surplus in the private sector will underpin gathering momentum in business investment and private consumption.

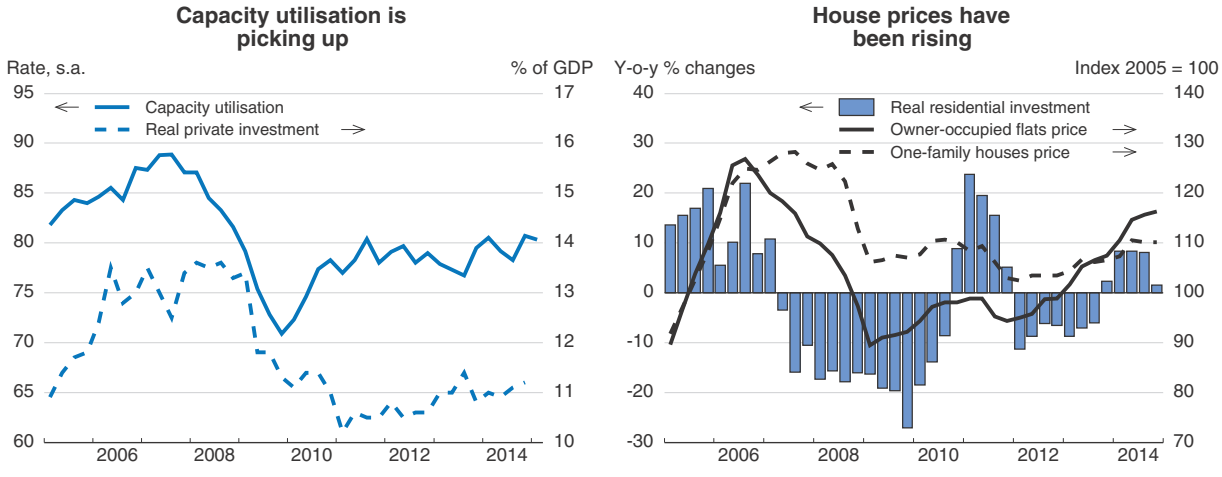
Very accommodative monetary policy continues to ease access to credit, but it could also result in house prices that exceed fundamentals. To maintain macroeconomic stability, the authorities should bring forward the planned restoration of the link between property value and taxation, currently scheduled for 2020. As planned, the current supportive fiscal policy needs to move to a neutral stance with the recovery of the economy.

Public investment that supported growth during the downturn will decline gradually to pre-crisis levels. Business investment growth should be supported by the firming general outlook, high domestic corporate savings, favourable financial conditions and increasing capacity utilisation. Investment opportunities could be boosted by further structural reforms, such as policies enhancing competition in domestic services.

Recovery has gained ground

The recovery of the Danish economy took hold last year. Foreign trade strengthened and export of sea freight services is picking up. Housing investment has increased markedly, linked to the recovery in the housing market, related tax incentives and historically low interest rates. With unemployment edging down and employment improving, private consumption has also firmed up. Consumer price inflation is about zero, but core inflation and wage growth are positive. Consumer confidence has reached record high and retail sales have been on an upward trend, signalling further upswing of household spending in the near future.

Denmark



Source: OECD Economic Outlook 97 database; OECD *Monthly Economic Indicators Database*; and Statistics Denmark.

StatLink http://dx.doi.org/10.1787/888933220958

Denmark: **Demand, output and prices**

	2011	2012	2013	2014	2015	2016
	Current prices DKK billion	Percentage changes, volume (2010 prices)				
GDP at market prices	1 833.4	-0.7	-0.5	1.1	1.9	2.3
Private consumption	884.3	0.4	0.0	0.5	1.9	2.2
Government consumption	490.6	-0.2	-0.5	1.4	0.9	0.6
Gross fixed capital formation	335.6	0.6	1.0	3.7	3.4	3.2
Final domestic demand	1 710.5	0.3	0.0	1.4	1.9	1.9
Stockbuilding[1]	21.2	-0.6	-0.2	0.3	0.0	0.0
Total domestic demand	1 731.7	-0.3	-0.2	1.7	1.9	1.9
Exports of goods and services	970.7	0.1	0.8	2.6	3.0	4.9
Imports of goods and services	868.9	0.9	1.5	3.8	3.1	4.4
Net exports[1]	101.7	-0.4	-0.3	-0.5	0.1	0.5
Memorandum items						
GDP deflator	_	2.5	1.5	0.6	1.3	1.3
Consumer price index	_	2.4	0.8	0.6	0.5	1.2
Private consumption deflator	_	2.6	1.0	0.7	1.0	1.3
Unemployment rate[2]	_	7.5	7.0	6.5	6.2	6.2
Household saving ratio, net[3]	_	0.0	-0.4	-6.3	-0.9	0.7
General government financial balance[4]	_	-3.7	-1.1	1.2	-1.7	-2.6
General government gross debt[4]	_	60.2	57.3	60.4	55.9	55.0
General government debt, Maastricht definition[4]	_	45.6	45.0	45.2	40.7	39.8
Current account balance[4]	_	5.6	7.2	6.3	7.0	7.2

1. Contributions to changes in real GDP, actual amount in the first column.
2. The unemployment rate is based on the Labour Force Survey and differs from the registered unemployment rate.
3. As a percentage of disposable income, net of household consumption of fixed capital.
4. As a percentage of GDP at market value.

Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933222134

Supportive domestic policies combined with improved external environment provide a boost

Private consumption is supported by favourable financial conditions, wage growth and recovering house prices. A firming domestic and world-wide outlook, increasing capacity utilisation and high savings surplus in the corporate sector should lead to recovery of business investment, although there is some uncertainty on this score given the persistent weakness of investment in many advanced economies. Stronger competition in domestic services sectors that remain heavily regulated could help to boost investment opportunities as well as productivity growth. At the same time, high public investment will slowly decelerate, as the authorities move towards a broadly neutral fiscal policy. Recent developments in unit labour costs, that are growing more moderately than in the past, and improved trade prospects, should boost exports.

Structural and fiscal policies should lean against the cycle

In defence of the euro-krone peg, the central bank decreased the main deposit rate further into negative territory earlier this year, further easing already very supportive financial conditions. Monetary policy is assumed to maintain this stance throughout the projection period. This feeds particularly into the housing market, where strong price increases are already apparent in the capital and some other urban areas. As these pressures are likely to continue, the authorities should bring forward a restoration of the link between property value and taxation (property values have not been updated since 2002), which is planned for 2020.

Significant one-off government revenues (related to the tax treatment of pensions) used in recent years have come to an end and, combined with lower revenues from North Sea production, this will result in worsening of the public finance deficit. The authorities have set a medium-term goal of 'at minimum' a structural balance by 2020. Fiscal policy should move to a neutral stance earlier to ensure this objective as the economy continues to recover. Prudent fiscal stance is important to cope with future spending pressures related to ageing while maintaining the current welfare system and low levels of inequality.

Stronger demand underpins the recovery

Output is projected to accelerate in 2015 to 1.9% and to 2.3% in 2016. The recovery reflects strengthening private consumption, private investment and foreign trade. Inflation is projected to rise slightly towards the end of the projection period. Public investment is set to decrease slowly while business investment, both non-residential and housing, is projected to pick up. As growth rises, and as recent benefit reforms take hold, both employment and the labour force are projected to rise, leaving the unemployment rate broadly unchanged.

There is some uncertainty about the projected pick-up in investment and private consumption. The investment ratio of the Danish corporations has been low for some years now. Allowing for more competition in domestic services sector, notably in retail trade, pharmacies, taxis and professional services would improve investment opportunities. Household consumption depends on the extent of debt reduction, house price and interest rate developments. Denmark is a trading nation, and its prospects therefore depend on the evolution of its export markets. A stronger pass through of supportive domestic financial conditions could raise domestic demand growth more than projected.

ESTONIA

Economic growth is projected to strengthen gradually. Strong wage growth will fuel private consumption and investment will recover somewhat. Export growth will pick up only slowly, however, hampered by weak economic growth in some of Estonia's main trading partners.

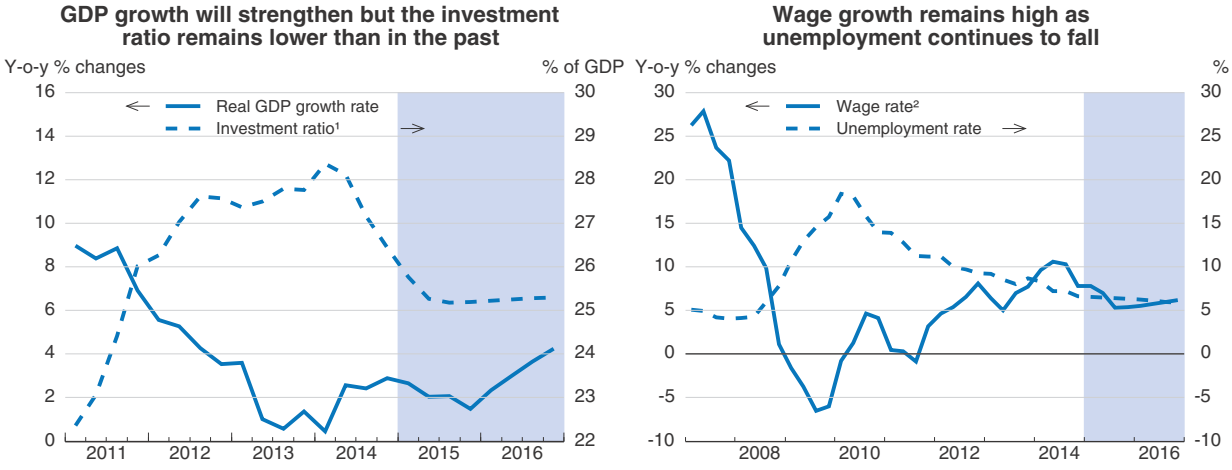
The government's fiscal stance is expansionary, but public debt remains very low. Reducing the high structural surplus would be appropriate to finance medium-term fiscal priorities, including education and infrastructure spending. Lower taxes on labour earnings, in particular on low earnings, would raise growth by stimulating employment. To raise productivity, structural reforms need to focus on improving skills and knowledge transfer to Estonian firms.

The investment-to-GDP ratio declined in recent years, despite robust GDP growth. Uncertainty, in part due to heightened geopolitical tensions, is holding back business investment. Public investment has also weakened as transfers from the European Union have fallen temporarily and projects funded via earlier sales of Kyoto permits are being phased out. More investment to expand access to European transport networks and energy supply facilities would improve medium-term economic growth prospects.

Economic activity is being subdued by weak investment and export growth

Economic growth was weak at the beginning of 2015 as export growth decelerated owing to weakness in some of Estonia's main trading partners, including Finland and Russia (which account for 15% and 10% of Estonia's exports). Business investment is being held back by subdued confidence, in part due to heightened geopolitical tensions, and low capacity utilisation. Public investment has also weakened: transfers from the EU are lower this year and next, as the selection of projects for the new EU multi-annual budget period is only starting; and investment projects financed via earlier sales of Kyoto permits are

Estonia



1. Real gross fixed capital formation. Four-quarter moving average.
2. Average nominal wage per employee, seasonally adjusted.

Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933220960

Estonia: **Demand, output and prices**

	2011	2012	2013	2014	2015	2016
	Current prices € billion	Percentage changes, volume (2010 prices)				
GDP at market prices	16.4	4.7	1.6	2.1	2.1	3.3
Private consumption	8.3	5.1	3.8	4.6	4.3	4.3
Government consumption	3.1	3.3	2.8	2.3	3.2	1.7
Gross fixed capital formation	4.2	10.9	2.3	-2.8	-2.7	3.7
Final domestic demand	15.6	6.3	3.2	2.1	2.2	3.7
Stockbuilding[1]	- 0.1	-1.5	-2.2	2.7	0.7	0.0
Total domestic demand	15.4	5.5	1.2	4.9	2.9	3.6
Exports of goods and services	14.4	6.2	2.4	2.6	1.8	4.5
Imports of goods and services	13.5	11.8	3.3	2.7	2.2	4.9
Net exports[1]	1.0	-4.2	-0.7	0.0	-0.3	-0.2
Memorandum items						
GDP deflator	_	2.7	4.5	2.1	1.1	2.0
Harmonised index of consumer prices	_	4.2	3.2	0.5	0.1	1.8
Private consumption deflator	_	3.4	3.1	0.7	-0.1	1.6
Unemployment rate	_	10.0	8.6	7.3	6.5	6.1
General government financial balance[2]	_	-0.2	-0.2	0.6	0.4	0.6
General government gross debt[2]	_	13.2	13.5	14.3	12.9	11.4
General government debt, Maastricht definition[2]	_	9.7	10.1	10.6	9.2	7.7
Current account balance[2]	_	-2.5	-1.1	-0.1	0.8	0.6

1. Contributions to changes in real GDP, actual amount in the first column.
2. As a percentage of GDP at market value.
Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933222146

being phased out. However, private consumption continues to grow vigorously, underpinned by real wage gains, declining unemployment and low interest rates. Lending to the private non-financial sector has been moderate, although international financial market confidence in Estonia's economy is strong, as reflected by low long-term interest rates.

Competitiveness is broadly unchanged. The depreciation of the euro affects Estonia's exports only moderately, as most of its trade is within the euro area and the currencies of Sweden and Russia, two important non-euro area trading partners, also depreciated. Wage growth remains high, offsetting the effects of depreciation on competitiveness. Wage growth has been fuelled by skill mismatches and demographic ageing. Emigration of young workers also contributed, though diminishing recently. The lower global oil price has reduced costs, but also the profitability of the domestic oil shale industry.

Fiscal and structural reforms are supporting growth, but more energy-saving investment is needed

Fiscal policy is expansionary. The government raised spending on child and family cash benefits and free school meals at the beginning of 2015, and cut the income tax and unemployment insurance contributions rates. These measures have been partly financed by some broadening of the VAT tax base, as well as by higher tobacco and alcohol taxes.

A number of recent structural reforms aim at raising growth prospects and macroeconomic stability, and may begin to show first results already during the projection horizon. The government has implemented reforms to make the R&D system more effective, including through a new innovation strategy and by strengthening co-ordination across ministries. The government has also taken substantial steps to improve vocational education, including by upgrading the technical equipment in vocational schools. The new macro-prudential policy framework, established in 2014, allows the Estonian central bank to take action, for example if low interest rates risk result in excessive lending. Steps to address gender imbalances in pay and improve women's career prospects in business leadership would help reduce shortages of skilled labour and raise productivity.

More investment in energy efficiency can reduce environmental damage, and its economic costs, and bolster innovation. Greenhouse gas emissions per unit of GDP remain among the highest in the OECD, largely due to the use of domestic oil shale. High emission intensity makes activity vulnerable to rising CO_2 emissions prices in the European emissions trading system. Estonia can do more to improve energy efficiency in district heating and buildings and promote the processing of oil shale into lighter oil products. Also, taxation of the various energy sources should be harmonised according to their CO_2 emission content.

Domestic demand is projected to drive growth

Economic growth is projected to strengthen gradually. Household consumption will continue to grow strongly, fuelled by decreasing unemployment and solid wage growth. Weakness of some of Estonia's main trading partners continues to weigh on export growth. Investment will strengthen slowly as capacity utilisation improves. Inflation is projected to increase slowly, damped by low global commodity prices and the negative output gap. The government's budget balance is projected to remain in surplus.

Risks are broadly balanced. Heightened geopolitical tensions, notably regarding Russia and Ukraine, may further damp private sector confidence and trade. On the downside, private investment could recover faster than projected, for instance if plans to boost cross border infrastructure gain traction. The newly elected government has announced further reductions in labour taxation which may provide additional growth stimulus if implemented during the projection horizon.

EURO AREA

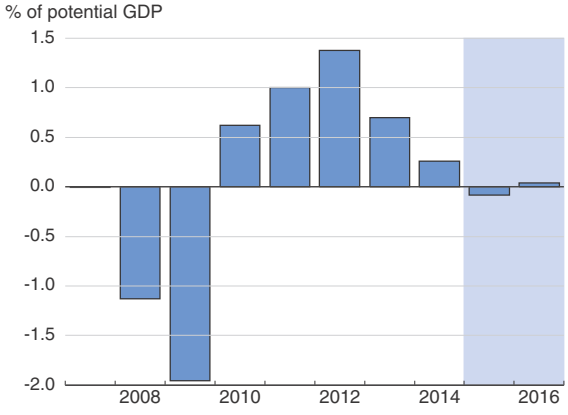
Economic growth will gradually strengthen to 2¼ per cent by the end of 2016, supported by lower oil prices, the depreciation of the euro, improving financial conditions, additional stimulus from further monetary expansion and a pause in fiscal adjustment. However, unemployment will decline only gradually, to a rate of 10¼ per cent at end-2016. Inflation should edge up to around 1½ per cent as the effects of lower energy prices dissipate and monetary easing is stepped up. Risks are broadly balanced around the projections, although event risks surrounding renewed financial turmoil remain significant.

Fiscal policy will be broadly neutral, which is appropriate in the short run as the recovery is still weak and uncertain. Nevertheless, credible medium term consolidation plans are needed since government debt is still much too high in many countries. The very supportive monetary stance should continue as planned, as inflation is still well below 2% and growth is weak. Vulnerable countries have made significant progress in structural reforms following the onset of the crisis. However, further reform efforts, notably completing the Single Market, are needed to durably raise economic activity and to make growth more inclusive.

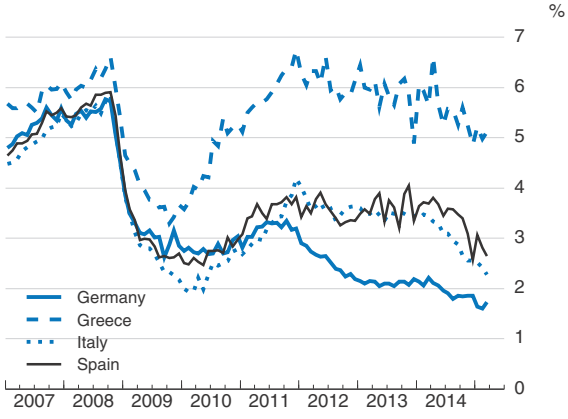
Reinvigorating private and public investment is crucial to lift the economy to a higher growth trajectory. The Investment Plan for Europe is expected to help. To create additional investment, projects with high social returns, and that would not be realised without public guarantees, should be selected. A key example is strengthening cross-border infrastructure in electricity, gas and rail networks. Complementary structural reform, supporting entrepreneurship and the full integration of European capital markets, would also help to unlock private investment.

Euro area

The pace of fiscal consolidation will ease
Changes in the underlying primary balance



Interest rates are declining
For loans to enterprises[1]



1. Interest rates on new loans to non-financial corporations (all maturities) except for Greece (maturity up to one year).
Source: European Central Bank; and *OECD Economic Outlook 97 database*.

StatLink http://dx.doi.org/10.1787/888933220978

Euro area: **Employment, income and inflation**

Percentage changes

	2012	2013	2014	2015	2016
Employment	-0.6	-0.6	0.6	0.9	1.1
Unemployment rate[1]	11.3	11.9	11.5	11.1	10.5
Compensation per employee[2]	1.1	1.4	1.4	1.5	2.0
Labour productivity	-0.4	0.3	0.3	0.6	1.0
Unit labour cost	1.3	1.0	1.2	0.8	0.5
Household disposable income	-0.3	0.9	1.8	2.0	2.6
GDP deflator	1.2	1.3	0.9	1.1	1.1
Harmonised index of consumer prices	2.5	1.3	0.4	0.0	1.3
Core harmonised index of consumer prices[3]	1.5	1.1	0.8	0.8	1.3
Private consumption deflator	1.9	1.1	0.5	0.2	1.1

Note: Covers the euro area countries that are members of the OECD.
1. As a percentage of labour force.
2. In the total economy.
3. Harmonised index of consumer prices excluding energy, food, drink and tobacco.
Source: OECD Economic Outlook 97 database.

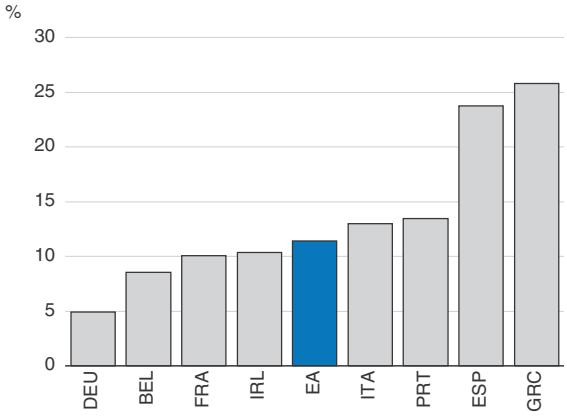
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A moderate upswing has set in

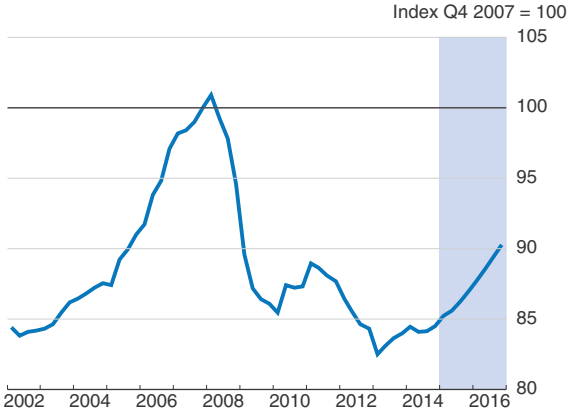
A moderate economic upswing continued in the first half of 2015 as domestic and external demand firmed. Still, business investment remains sluggish. Following significant recessions, some vulnerable economies now have quarterly growth rates above the area average. Unemployment is slowly declining from high levels, but still exceed pre-crisis levels by wide margins. Germany remains the main exception. In many countries, youth unemployment rates are at least twice the rate of the average. Still-high margins of economic slack and past declines in oil and food prices have kept inflation very low.

Euro area

Unemployment is high in almost all countries
Unemployment rate for Q4 2014



Investment is still low
Real total gross fixed capital formation



Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933220983

Euro area: **Financial indicators**

	2012	2013	2014	2015	2016
Household saving ratio, net[1]	6.3	6.8	7.1	7.0	7.0
General government financial balance[2]	-3.6	-2.9	-2.4	-2.1	-1.4
General government gross debt[2]	103.9	104.9	111.5	110.9	109.5
General government debt, Maastricht definition[2]	91.4	93.5	94.6	94.1	92.7
Current account balance[2]	2.2	2.8	3.4	3.9	4.1
Short-term interest rate[3]	0.6	0.2	0.2	0.0	0.0
Long-term interest rate[4]	3.7	2.9	2.0	1.0	1.0

Note: Covers the euro area countries that are members of the OECD.
1. As a percentage of disposable income.
2. As a percentage of GDP at market value.
3. 3-month interbank rate.
4. 10-year government bonds.
Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933222055

Highly expansionary monetary policy needs to go hand in hand with further structural reform

Subdued confidence, reflecting uncertainty about the underlying strength of the euro area economy and world economic prospects, is still weighing on economic activity and, notably, business investment. High private debt and unemployment are also restraining household demand. However, the large oil price decline and euro depreciation from earlier highs are boosting growth. The oil price effect alone could add about 0.2 percentage point to GDP growth this year and next.

Euro area: **Demand and output**

	2013	2014	2015	2016	Fourth quarter 2014	Fourth quarter 2015	Fourth quarter 2016
	Current prices € billion	Percentage changes from previous year, volume (2011 prices)					
GDP at market prices	9 853.3	0.9	1.4	2.1	0.8	1.8	2.2
Private consumption	5 521.3	1.0	1.8	1.8	1.5	1.8	1.8
Government consumption	2 079.1	0.6	0.7	0.4	0.8	0.5	0.6
Gross fixed investment	1 927.8	1.2	2.0	3.5	0.6	2.9	3.8
Final domestic demand	9 528.2	0.9	1.6	1.8	1.1	1.7	2.0
Stockbuilding[1]	- 10.3	-0.1	-0.1	0.0			
Total domestic demand	9 517.9	0.9	1.5	1.8	0.9	1.8	2.0
Net exports[1]	335.3	0.0	0.0	0.3			

Note: Detailed quarterly projections are reported for the major seven countries, the euro area and the total OECD in the Statistical Annex. Covers the euro area countries that are members of the OECD.
1. Contributions to changes in real GDP, actual amount in the first column.
Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933222069

Euro area: **External indicators**

	2012	2013	2014	2015	2016
			$ billion		
Foreign balance	334.2	445.3	497.9	504	552
Invisibles, net	- 60.2	- 83.5	- 52.9	- 53	- 63
Current account balance	274.0	361.8	445.0	451	489

Note: Covers the euro area countries that are members of the OECD.
Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933222074

Moreover, a number of fundamental factors have improved. Internal euro area rebalancing has progressed, supported by fiscal consolidation, adjustment in unit labour cost and improved export performance of vulnerable countries. All vulnerable countries now have current account surpluses, although it will require many years of strong current account positions to reduce their large foreign debt.

Structural reforms in vulnerable countries in recent years have been significant. However, there remains ample scope for competition-friendly reform to help further restoring competitiveness and resource reallocation, thus raising economic potential and making growth more inclusive. The core euro area countries can contribute to strengthening economic activity by reducing entry barriers in their service sectors. The euro area is still subject to various significant barriers affecting key areas such as entrepreneurship, labour mobility and energy efficiency. Completing a genuine Single Market could contribute substantially to boosting medium-term growth.

Financial conditions have improved. Credit to the private sector is gradually recovering as banks have begun relaxing their tight lending standards for loans to enterprises and non-residential loans to private households. Bank capitalisation has also increased, although non-performing loans are still high in many countries. The ECB's 2014 comprehensive assessment of banks' balance sheets should also contribute to further improvement in lending conditions as it reduced uncertainty.

The European Central Bank has embarked on a large open-ended asset purchase programme to move inflation back up towards its target. This policy has reduced interest rates and triggered a substantial depreciation of the euro, both of which are projected to increase euro area growth. However, such expansionary monetary policy poses risks for financial stability and macro-prudential measures will be important to help contain them.

Fiscal policy is set to be roughly neutral this year and next, which is appropriate as the recovery is still weak and significant consolidation gains have already been achieved in past years. However, strong fiscal positions will need to be maintained to reduce public debt ratios relative to GDP, and this will be made more difficult if spending pressures associated with population aging are not addressed. This requires credible and detailed multi-annual fiscal plans at the national level. The credibility of the EU fiscal governance framework should also be strengthened, with simplified fiscal rules.

Growth will firm gradually

GDP growth is projected to strengthen gradually to 2¼ per cent in 2016. Unemployment will decline only gradually, to a rate of 10¼ per cent end-2016, and inflation is projected to edge up to around 1½ per cent.

Risks are broadly symmetrical around the most likely scenario represented by these projections. Growth will depend on the evolution of the euro exchange rate and global energy prices, which could come in weaker or stronger than assumed. The effectiveness of, and risks associated with, the ECB quantitative easing programme are uncertain. More rapid progress in structural reform or stronger accelerator effects for investment would boost growth relative to the projection. Intensified geopolitical risks or insufficient progress on structural reforms could undermine confidence and weaken investment and activity overall. Uncertainty surrounding Greece poses a unique set of risks.

FINLAND

Economic growth is projected to resume in 2015 after three years of contraction. Nevertheless, sluggish incomes and high unemployment will continue to weigh on private consumption and remaining spare capacity will delay investments. A pick-up in exports on the back of the global economic recovery and the weaker euro should progressively spill over to the domestic economy.

The fiscal deficit exceeded 3% of GDP in 2014 for the first time since the mid-1990s and is expected to fall only slowly. The new government will need to restore fiscal sustainability without prejudice to the incipient recovery. Structural reforms to raise employment and enhance the efficiency of public services will be essential.

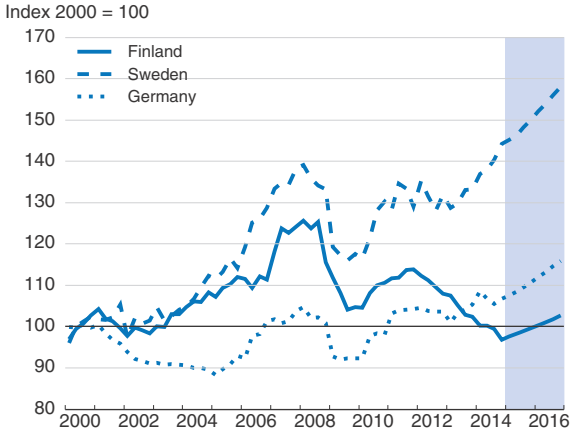
Business investment is expected to recover slowly, as demand picks up and capacity utilisation rises. Slow income growth, high unemployment and uncertainty hold back residential investment despite low borrowing costs. Public investment has been steadily growing since 2010 and will rise further in 2015, but is then set to weaken as fiscal constraints tighten.

Output has contracted further

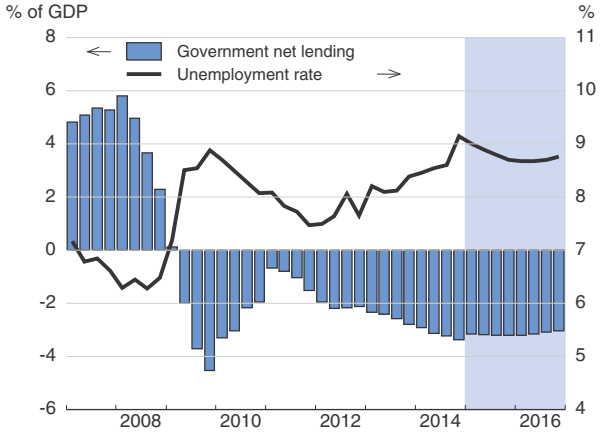
Real GDP declined in 2014 for the third consecutive year. Private consumption edged down and residential investment fell substantially, reflecting low consumer confidence as unemployment rose and real income growth remained weak despite lower energy prices. Total investment is now at its lowest level since 2000. Business investment plummeted, as ample spare capacity and uncertainties persisted, and public investment rose only modestly. Exports also shrank, but falling domestic demand meant that imports fell even more.

Finland

Total investment is below its 2000 level



Unemployment and the fiscal deficit have risen



Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933220993

Finland: **Demand, output and prices**

	2011	2012	2013	2014	2015	2016
	Current prices € billion	Percentage changes, volume (2010 prices)				
GDP at market prices	196.9	-1.4	-1.3	-0.1	0.4	1.3
Private consumption	105.8	0.3	-0.6	-0.2	0.6	1.2
Government consumption	46.5	0.5	0.6	0.2	0.5	0.0
Gross fixed capital formation	43.8	-2.2	-5.3	-5.1	-0.5	2.9
Final domestic demand	196.0	-0.2	-1.3	-1.1	0.3	1.2
Stockbuilding[1,2]	2.5	-1.1	0.0	0.3	0.0	0.0
Total domestic demand	198.5	-1.1	-1.3	-0.8	0.3	1.2
Exports of goods and services	77.1	1.2	-0.7	-0.4	1.2	3.9
Imports of goods and services	78.8	1.6	-1.6	-1.4	0.7	3.7
Net exports[1]	- 1.7	-0.2	0.4	0.4	0.2	0.1
Memorandum items						
GDP without working day adjustments	_	-1.4	-1.3	-0.1	..	..
GDP deflator	_	3.0	2.5	1.1	0.5	0.6
Harmonised index of consumer prices	_	3.2	2.2	1.2	0.2	0.7
Private consumption deflator	_	2.8	2.5	1.5	0.6	0.9
Unemployment rate	_	7.7	8.2	8.7	8.8	8.7
General government financial balance[3]	_	-2.1	-2.5	-3.2	-3.2	-3.0
General government gross debt[3]	_	63.0	65.1	71.4	73.6	76.2
General government debt, Maastricht definition[3]	_	52.9	55.8	59.3	61.6	64.1
Current account balance[3]	_	-1.9	-1.8	-1.9	-0.9	-0.8

1. Contributions to changes in real GDP, actual amount in the first column.
2. Including statistical discrepancy.
3. As a percentage of GDP at market value.

Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933222156

Policy makers face tough challenges and need to implement structural reforms

The government deficit exceeded 3% of GDP in 2014, and gross public debt (Maastricht definition) will move above 60% of GDP in 2015. Negative economic growth has undermined revenue, while expenditure has risen rapidly, not least owing to population ageing. As the economy remains weak, fiscal consolidation needs to proceed gradually. Structural reforms to contain age-related spending and enhance the efficiency of public services, notably in health care, will be critical to ensure fiscal sustainability over the long term.

In the face of demographic drag, mobilising labour resources is essential to boost growth. The employment rate is low compared with other Nordic countries, notably for youth and older people. Pension reform needs to push up the effective retirement age, by linking the minimum retirement age and pension benefits to life expectancy and continuing to limit opportunities for early retirement. Labour market reforms to enhance work incentives and stronger activation policies would raise employment. Beyond lifting potential output, pushing up employment would help to make growth more inclusive. Regulatory reforms to increase competition in retail trade and transport would boost the growth potential. Implementing this set of structural reforms would in turn contribute to fiscal sustainability.

Growth is projected to pick up

Exports will be the main source of growth in 2015, although domestic demand is also gathering momentum. The boost from a brighter global environment and the weaker euro is partly offset by the slump of the Russian economy. As wage moderation is necessary to improve competitiveness, household income growth is sluggish, leading to a slow recovery in private consumption and residential investment despite very low interest rates. Business investment, although damped by ample spare capacity, is projected to bottom out in 2015, with large-scale projects in the forest industry and the improving global economic outlook reviving capital spending thereafter. Public investment will be bolstered in 2015 by spending on transport, energy and water supply infrastructure. It is set to slow in 2016, partly because of tightening fiscal constraints.

Risks are mainly related to export developments. On the upside, improvements in cost competitiveness through wage moderation and the weak euro could boost exports more than expected. A stronger-than-expected recovery in global investment would benefit Finland's exports, which are skewed towards capital goods. A pick-up in exports would also help revive domestic investment as spare capacity is worked off. On the downside, Finland's loss of market share, largely related to non-cost factors, could continue. A further deterioration in the economic situation in Russia would also hurt Finnish exports.

FRANCE

Economic growth is projected to gain momentum in 2015 and 2016. Lower energy prices, improving financial conditions, slowing fiscal consolidation, strengthening external demand and a pro-competitive reform agenda should underpin an increase in consumption and export volumes. Stabilising energy prices and euro depreciation will raise the price level, although persistent and significant economic slack will continue to put downward pressure on inflation. However, weak business confidence is still weighing on investment, implying a delayed pick-up in hiring and only a marginal decline in unemployment.

Budget deficit reduction over 2015-16 will be based on spending restraint, while revenues are set to decline, notably social security contributions and corporate taxes. The resulting structural consolidation, including significant savings on interest payments, amounts to 1% of GDP over the two years. While this new structural consolidation path needs to be strictly adhered to if France is to achieve its deficit objectives, the automatic stabilisers should be allowed to play freely to avoid endangering the recovery. At the same time, the government should continue to pursue structural reforms to boost growth and to make it more inclusive.

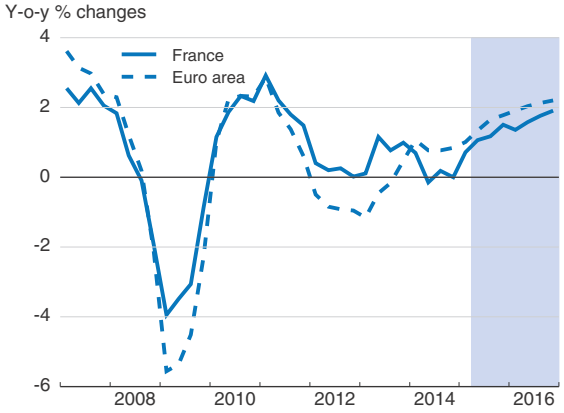
Investment in manufacturing and equipment more generally has been erratic and weak, hardly compensating for the depreciation of existing, and ageing, capital. This low pace of investment puts France's competitiveness at risk, though business managers foresee a moderate expansion of capital formation in 2015-16, partly boosted by ongoing structural reforms. The contraction in residential investment will ease despite house price decreases and regulatory uncertainty, while public investment will remain weak due to lower transfers from central government to local authorities, where most such outlays are made.

External conditions have improved

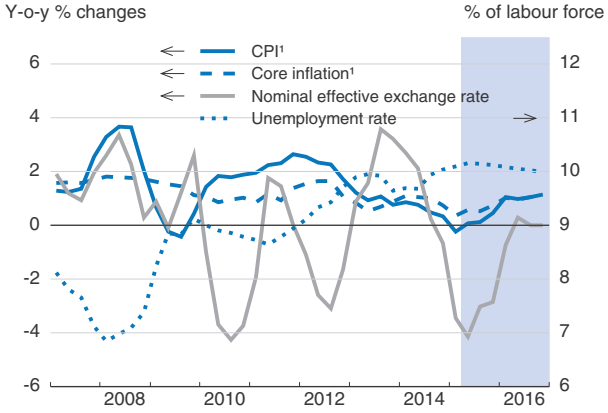
France is benefitting from a modest expansion, sustained by improving external and financial conditions. Exports picked up at the end of 2014 on the back of stronger world

France

Growth should recover as the euro area's economic prospects improve



Ample slack will continue to put downward pressure on inflation



1. Harmonised.

Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933221001

France: **Employment, income and inflation**

Percentage changes

	2012	2013	2014	2015	2016
Employment	0.0	0.0	0.1	0.2	0.6
Unemployment rate[1]	9.4	9.9	9.8	10.1	10.0
Compensation per employee[2]	2.2	1.6	1.4	1.6	2.1
Unit labour cost	2.0	0.6	1.5	0.7	1.0
Household disposable income	0.5	0.7	1.6	1.5	2.2
GDP deflator	1.2	0.8	0.6	1.0	0.8
Harmonised index of consumer prices	2.2	1.0	0.6	0.1	1.1
Core harmonised index of consumer prices[3]	1.5	0.7	1.0	0.5	1.0
Private consumption deflator	1.4	0.8	0.0	0.0	0.8
Memorandum item					
Unemployment rate[4]	9.8	10.3	10.2	10.5	10.4

1. As a percentage of labour force, metropolitan France.
2. In the total economy.
3. Harmonised index of consumer prices excluding food, energy, alcohol and tobacco.
4. As a percentage of labour force, national unemployment rate, includes overseas departments.

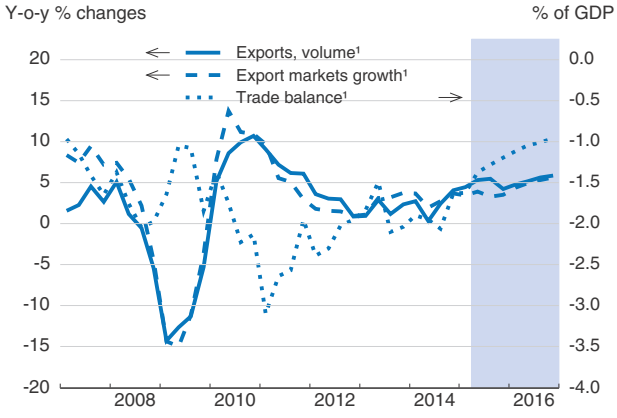
Source: OECD Economic Outlook 97 database.

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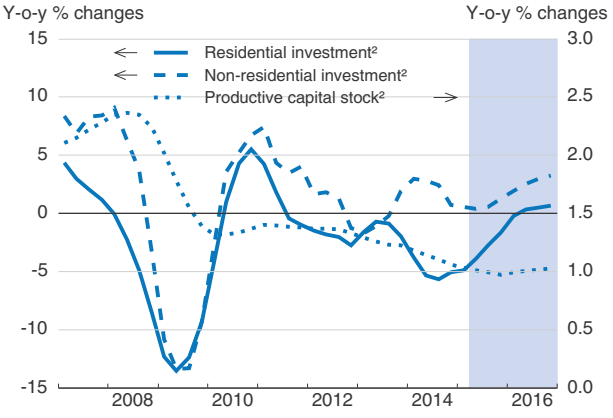
trade, and consumption rose in the first quarter, driven by income effects stemming from lower oil prices and weather-induced demand for energy. The rise in unemployment has slowed, mainly due to subsidised jobs in the non-market sector targeted at youth and the low skilled. However, high unemployment and ample economic slack have pushed inflation down further, despite very accommodative euro area monetary conditions.

France

Export performance and the trade balance are set to improve



Investment is set to strengthen



1. Goods and services.
2. In volume.

Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933221019

France: **Financial indicators**

	2012	2013	2014	2015	2016
Household saving ratio, gross[1]	14.9	14.7	15.6	15.5	15.1
General government financial balance[2]	-4.8	-4.1	-4.0	-3.8	-3.2
General government gross debt[2]	111.8	111.4	120.4	121.9	122.8
General government debt, Maastricht definition[2]	89.6	92.2	95.5	97.0	97.9
Current account balance[2]	-1.5	-1.4	-1.0	-0.5	-0.3
Short-term interest rate[3]	0.6	0.2	0.2	0.0	0.0
Long-term interest rate[4]	2.5	2.2	1.7	0.6	0.7

1. As a percentage of disposable income (gross saving).
2. As a percentage of GDP at market value.
3. 3-month interbank rate.
4. 10-year benchmark government bonds.

Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933221912

Euro depreciation is boosting French exports directly and strengthening France's euro-area export markets. The trade deficit is now around 1.6% of GDP, compared to a peak of 3% of GDP in 2011. Lower energy prices are also raising both domestic demand and demand from export markets. At the same time, household confidence and the business climate have improved considerably, although both indicators remain below their longer-term averages. Private consumption has started to recover gradually, even though high unemployment led to an increase in precautionary saving in 2014. Business investment

France: **Demand and output**

	2013	2014	2015	2016	Fourth quarter 2014	Fourth quarter 2015	Fourth quarter 2016
	Current prices € billion	Percentage changes from previous year, volume (2010 prices)					
GDP at market prices	2 117.9	0.2	1.1	1.7	0.0	1.5	1.9
Private consumption	1 176.3	0.7	1.6	1.7	0.6	1.7	2.1
Government consumption	508.1	1.5	1.2	0.3	1.6	0.6	0.3
Gross fixed investment	468.6	-1.2	-0.6	1.8	-2.1	0.5	2.2
Public	84.9	-6.9	-1.6	0.4	-7.3	0.6	0.4
Residential	113.9	-5.0	-3.3	0.3	-5.1	-1.6	0.7
Non-residential	269.8	2.2	0.7	2.7	0.7	1.3	3.2
Final domestic demand	2 153.0	0.5	1.1	1.4	0.2	1.2	1.7
Stockbuilding[1]	4.5	0.2	0.3	0.0			
Total domestic demand	2 157.4	0.7	1.3	1.3	0.4	1.6	1.7
Exports of goods and services	604.0	2.4	4.9	5.3	4.0	4.2	5.8
Imports of goods and services	643.6	3.9	5.5	4.2	5.0	4.3	4.9
Net exports[1]	- 39.6	-0.5	-0.3	0.3			

Note: Detailed quarterly projections are reported for the major seven countries, the euro area and the total OECD in the Statistical Annex.

1. Contributions to changes in real GDP, actual amount in the first column.

Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933221921

should follow as credit supply conditions ease further and uncertainty about demand and the reform agenda dissipates. Temporary national fiscal measures in 2015-16, a raft of structural changes designed to boost profitability (see below) and the Juncker plan for leveraged EU-wide investment in 2016 should also help kick-start business investment.

The pace of fiscal consolidation has eased

Fiscal imbalances have diminished, but further efforts will be necessary to ease the tax burden and put public debt on a firmly declining trend. The amount of structural consolidation over 2015-16 is set to fall to 1% of GDP, which is broadly appropriate given the weak recovery. On the spending side, low interest payments on public debt and the 2010 pension reform will bring some savings, as will the continuing freeze in base wages of central government civil servants and efforts to moderate health-care expenditures. However, these savings will be partly offset by the gradual ramping up of the competitiveness tax credit (CICE), which reduces labour costs on low and medium wages. At the same time, reductions in personal income tax for low-income households, in employers' social contributions on earnings and a moderate corporate tax cut are expected to depress government revenues.

The labour market should be the priority for structural reforms

Improving the labour market, simplifying administrative and regulatory procedures and further decreasing public spending as a share of GDP over the medium term are key to improving growth prospects, confidence and investment. The CICE and cuts in social contributions from the Responsibility and Solidarity Pact will lower labour costs by around 1.4% of GDP once fully effective in 2016. These measures will enhance international competitiveness though they may be partly offset by dynamic wage increases despite significant economic slack. Restoring competitiveness and improving productivity require more ambitious structural reforms, including further public spending restraint over the medium term to provide the fiscal space to cut taxes. Ongoing efforts to lighten the regulatory burden and increase competition are welcome and reinforce the effects of labour cost and business tax cuts. But they need to be taken significantly further. Skills have to be improved to foster long-term growth and to make growth more inclusive. In particular, the government should expand significantly apprenticeships in secondary education and develop an efficient quality-insurance system for adult training providers as planned.

The recovery will be led by exports and consumption

Improved financial conditions, the euro depreciation, income effects from lower energy prices and the slowing pace of fiscal consolidation should strengthen exports and private consumption growth. As uncertainties dissipate somewhat, a gradual acceleration in business investment will place the expansion on a sounder footing. The unemployment rate will edge up a little more before starting to decline slowly in the latter part of 2015. The current account deficit should continue shrinking as the energy import bill drops and France's export market share recovers moderately with euro depreciation and better cost competitiveness.

There are several risks around the central projection. The programme of structural reforms could raise confidence more than assumed, boosting consumption and business investment. The euro area quantitative easing could trigger further currency depreciation,

increasing demand from key export markets. Additional declines in oil prices would also have significant positive income effects. And the household saving rate remains high, allowing for a potential boost to private consumption once the turnaround takes hold. On the other hand, if structural reforms are poorly communicated or weakly implemented, and prove insufficient to restore confidence, the recovery could flag. In addition, the impact of low business profitability, housing market contraction and policy uncertainty could be larger than expected, while a higher-than-assumed exchange rate and oil prices would weigh on activity.

GERMANY

Economic growth is projected to strengthen, driven by both domestic and external demand. A robust labour market, low interest rates and low oil prices will underpin household spending, while the recovery of the euro area and the depreciation of the euro will boost exports. Business investment is expected to recover as capacity utilisation rises. The already low unemployment rate will fall further, while consumer price inflation is projected to rise in 2016. The current account surplus is projected to remain high.

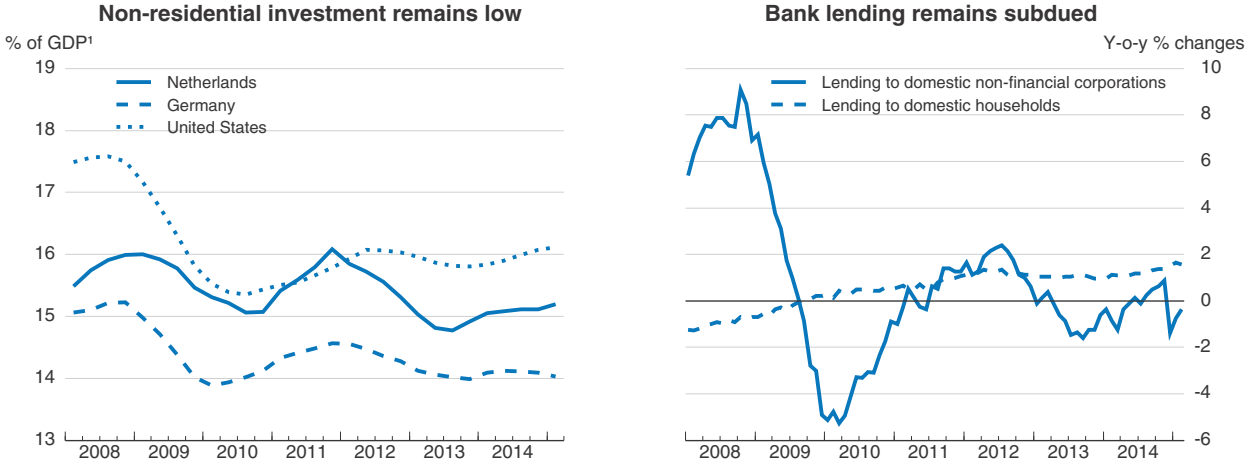
In the near term, the structural budget surplus could be reduced to increase long-term growth-enhancing government spending, in particular to improve childcare services and provide more support in the education system for youth with weak socio-economic background. Steps to reduce high taxes on second earners would remove a barrier to women who want to work full-time, and would help to offset the negative impact of demographic ageing on medium and long-term growth prospects.

While residential investment has expanded robustly since the outbreak of the global financial crisis, non-residential fixed investment and spending on knowledge-based capital has remained subdued, despite unusually favourable financing conditions. Structural reforms to strengthen competition in services sectors would raise potential growth and investment. In the government sector, investment has fallen short of depreciation over the past 10 years. Investment in transport infrastructure needs to be raised.

Household demand has sustained economic growth

Industrial production was weak in the first quarter, held back by subdued demand in major trading partners, notably in the euro area as well as in China and Russia. Activity expanded vigorously in services, boosted by household demand, which is growing on the back of real wage growth and lower oil prices. Wage growth has strengthened recently, as

Germany



1. Four-quarter moving average. Based on nominal series.
Source: OECD Economic Outlook 97 database; and Deutsche Bundesbank.

StatLink http://dx.doi.org/10.1787/888933221025

Germany: **Employment, income and inflation**

Percentage changes

	2012	2013	2014	2015	2016
Employment	1.0	0.9	0.9	0.9	0.7
Unemployment rate[1]	5.4	5.2	5.0	4.7	4.5
Compensation per employee[2]	2.5	1.9	2.5	3.2	3.3
Unit labour cost	3.2	2.6	2.1	2.4	1.4
Household disposable income	2.0	1.8	2.4	2.7	3.1
GDP deflator	1.5	2.1	1.7	1.8	1.5
Harmonised index of consumer prices	2.1	1.6	0.8	0.2	1.8
Core harmonised index of consumer prices[3]	1.3	1.2	1.1	1.1	1.8
Private consumption deflator	1.5	1.2	0.9	0.4	1.5

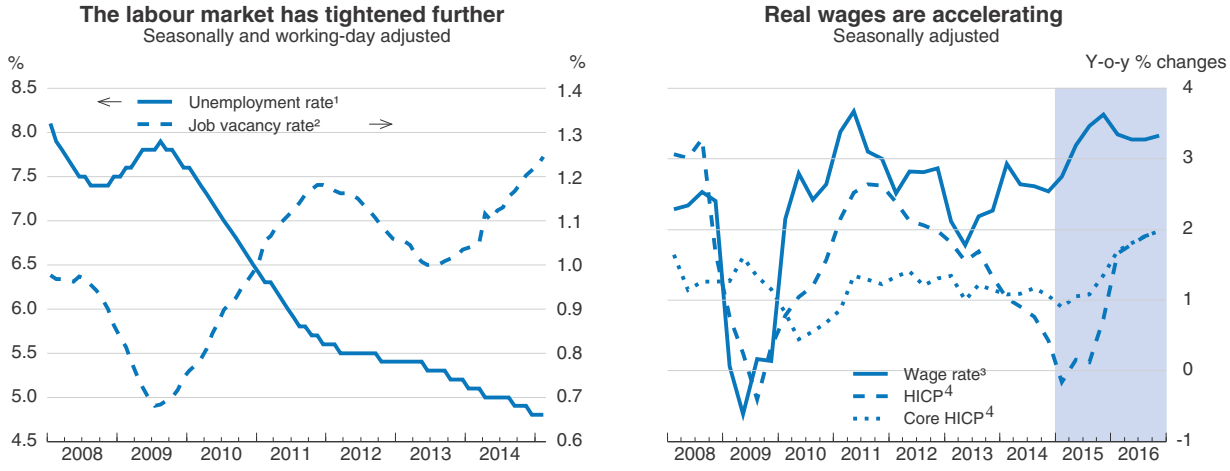
1. As a percentage of labour force, based on national accounts.
2. In the total economy.
3. Harmonised index of consumer prices excluding food, energy, alcohol and tobacco.

Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933221878

the labour market is tightening. The minimum wage of EUR 8.50 per hour is expected to raise wages by about ½ percentage point, mostly in 2015. The number of *minijobs* (low pay employment contracts with limited social security coverage and lower taxes) has fallen since the introduction of the minimum wage, as more workers on *minijobs* have moved to standard employment contracts. Employment has continued to grow, absorbing the substantial inflow of immigrants. The already low unemployment rate has continued to fall somewhat.

Germany



1. Population aged 15-74 years. Based on the German labour force survey.
2. Percentage of unfilled job vacancies relative to total employment.
3. Average nominal wage per employee.
4. Harmonised consumer price index. Core HICP excludes energy, food, alcohol and tobacco.

Source: OECD Economic Outlook 97 database; and Statistisches Bundesamt.

StatLink http://dx.doi.org/10.1787/888933221039

Germany: **Financial indicators**

	2012	2013	2014	2015	2016
Household saving ratio, net[1]	9.4	9.1	9.4	9.3	9.0
General government financial balance[2]	0.1	0.1	0.6	0.5	1.1
General government gross debt[2]	86.3	81.6	82.3	78.7	74.9
General government debt, Maastricht definition[2]	79.2	77.0	74.6	71.0	67.2
Current account balance[2]	6.9	6.6	7.8	8.5	8.3
Short-term interest rate[3]	0.6	0.2	0.2	0.0	0.0
Long-term interest rate[4]	1.5	1.6	1.2	0.3	0.4

1. As a percentage of disposable income.
2. As a percentage of GDP at market value.
3. 3-month interbank rate.
4. 10-year government bonds.

Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933221884

Historically low interest rates have strengthened residential investment, which grew by 4% in 2014. Nonetheless, lending growth has remained modest. House prices are rising more slowly and, on average, remain broadly aligned with fundamentals. Business investment has picked up somewhat recently, supported by high profitability and strong

Germany: **Demand and output**

	2013	2014	2015	2016	Fourth quarter 2014	Fourth quarter 2015	Fourth quarter 2016
	Current prices € billion	Percentage changes from previous year, volume (2010 prices)					
GDP at market prices	2 814.1	1.6	1.6	2.3	1.5	1.8	2.5
Private consumption	1 572.0	1.2	2.3	2.0	2.2	2.2	1.9
Government consumption	541.2	1.2	2.2	1.8	1.7	2.2	1.7
Gross fixed investment	558.1	3.3	2.5	4.3	0.9	4.4	4.5
Public	63.0	-2.0	0.5	3.0	-4.0	0.9	3.1
Residential	164.5	3.8	1.4	3.5	0.6	3.6	3.7
Non-residential	330.6	4.0	3.4	4.9	2.1	5.5	5.1
Final domestic demand	2 671.3	1.6	2.3	2.4	1.8	2.6	2.4
Stockbuilding[1]	- 22.4	-0.3	-0.3	0.0			
Total domestic demand	2 648.9	1.3	2.0	2.5	1.3	2.4	2.4
Exports of goods and services	1 285.0	3.7	3.9	5.2	3.5	3.8	5.9
Imports of goods and services	1 119.8	3.4	5.4	6.0	3.6	5.5	6.4
Net exports[1]	165.2	0.3	-0.3	0.0			
Memorandum items							
GDP without working day adjustments	2 809.5	1.6	1.8	2.4			

Note: Detailed quarterly projections are reported for the major seven countries, the euro area and the total OECD in the Statistical Annex.

1. Contributions to changes in real GDP, actual amount in the first column.

Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933221895

business balance sheets. However, the fixed investment share in GDP remains close to historic lows and spending on knowledge-based capital remains well below levels in leading OECD economies. Both of these factors have weakened productivity growth.

Exchange rate depreciation is boosting activity but uncertainty about structural policies to deal with long-term challenges and gaps in infrastructure hold back investment

Recent exchange rate depreciation has improved the competitiveness of German exports with respect to economies outside the euro area, to which 65% of German exports are directed. The effect on overall competitiveness is only partly offset by strong wage growth, which is raising unit labour costs in Germany more quickly than elsewhere in the euro area. Demand in euro area export markets is expected to recover gradually, although this is partly offset by weaker demand growth in emerging economies, notably China and Russia. The relatively muted recovery of foreign demand for investment goods, on which German industry is specialised, may also keep foreign demand growth lower than in previous global recovery periods.

Planned fiscal policy measures, mainly transfers to households, are expected to reduce the government budget surplus by 0.6 percentage point of GDP, mostly in 2015. More generous pension entitlements for some groups, additional funding for long-term care benefits, childcare benefits and child tax allowances account for about 0.3% of GDP of spending. Government investment spending for transport infrastructure investment, childcare facilities, universities and other research institutions will increase by 0.1 percentage point of GDP. Further improvement in childcare provision, including in its quality, and further investment in transport infrastructure would have benefits in terms of higher long-term inclusive growth. The recent pension reforms have also created incentives for workers with long contribution records to retire before the legal retirement age, contributing to shortages in the supply of skills.

Lower oil prices, rising capacity utilisation, stronger export prospects and pent-up investment demand provide favourable conditions for business investment. However, survey evidence suggests that the share of German businesses intending to invest abroad has risen, especially in regions with dynamic growth prospects, such as the United States and Asia. Still, policy uncertainty remains significant, damping investment. Uncertainty about macroeconomic and financial policies within the euro area is likely to play a significant role. Uncertainty about which policies will be adopted to deal with domestic long-term challenges may also hold back investment. These include achieving long-term CO_2 emission targets and dealing with the economic challenges of ageing. Bottlenecks in domestic infrastructure, notably in telecommunications and transport, damp business investment in physical and knowledge-based capital, for example on information and communication technology.

Growth is projected to strengthen further on the back of a robust labour market and strengthening exports

Growth is projected to strengthen in 2015 and 2016, initially mostly driven by private consumption. Exports and business investment will gain momentum gradually. Consumer price inflation is projected to remain close to zero in 2015, reflecting lower oil prices, but will rise in 2016. The unemployment rate, already the lowest in the European Union, is expected to fall somewhat further. Strong tax revenue growth will allow the government

surplus to rise. Lower oil prices as well as stronger exports and net foreign capital income will raise the current account surplus.

Renewed financial market turmoil in the euro area would weaken exports and domestic investment. Germany is significantly exposed to geopolitical tensions, notably in eastern Europe. On the other hand, recent policy action by the European Central Bank could reduce uncertainty about macroeconomic prospects in the euro area substantially, boosting exports and the attractiveness of Germany as a location to invest.

GREECE

Economic growth in 2015 remains weak, as uncertainty related to the reform programme and deteriorating liquidity conditions have undermined business confidence and investment. In 2016, growth will gain momentum and unemployment will decline somewhat as exports and investment recover while reform momentum is renewed. Deflation will continue in 2015 due to the very large degree of slack in the economy.

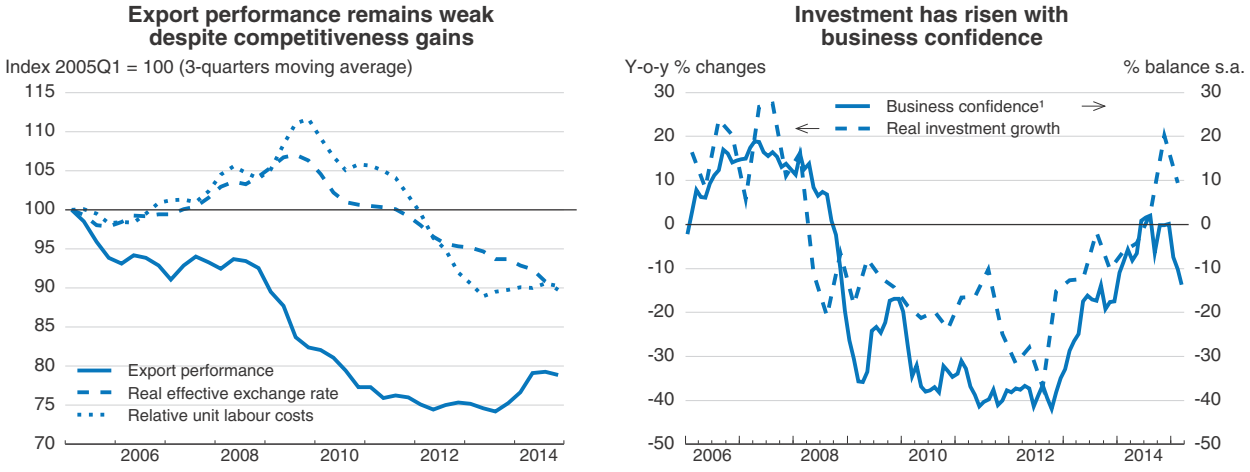
The debt burden will remain very high, and fiscal sustainability requires continued restraint for some time. Fiscal policy should aim at a small primary surplus. Reforms of the tax system and tax collection are essential to raise revenues, while further pension reforms would help contain spending. Structural reforms to lower barriers to competition and investment would boost exports and create more higher-quality jobs. Social policy reforms should aim at a fair sharing of the costs and benefits of adjustment.

The recovery of investment will depend critically on a return of business confidence and on stepping up the pace of structural reform implementation. Better access to credit is also essential. Stabilising the banking system by addressing the high level of non-performing loans is therefore critical.

Growth has very slowly turned around

Following a very deep recession, activity gained some momentum in 2014 due to a good performance in tourism, a rebound in private consumption and investment, and better business and consumer confidence. The unemployment rate started to decline but remains very high at 26%. Consumer inflation remains negative, reflecting large excess capacity, cuts to indirect taxes and rent-reducing product market reforms. Unit labour costs continue to decline but the gains in competitiveness have failed to boost exports much due to remaining barriers to competition and transport.

Greece



1. Unweighted average of data for manufacturing industry, construction, trade and business-related services.

Source: OECD Economic Outlook 97 database; and *OECD National Account Database*.

StatLink http://dx.doi.org/10.1787/888933221048

Greece: **Demand, output and prices**

	2011	2012	2013	2014	2015	2016
	Current prices € billion	Percentage changes, volume (2010 prices)				
GDP at market prices	208.0	-6.6	-4.0	0.7	0.1	2.3
Private consumption	145.1	-7.9	-2.2	1.4	0.9	1.1
Government consumption	44.2	-6.7	-5.1	-0.8	-1.7	-0.9
Gross fixed capital formation	32.2	-28.5	-9.5	3.0	0.6	5.0
Final domestic demand	221.5	-10.6	-3.6	1.2	0.3	1.1
Stockbuilding[1,2]	1.0	1.1	-1.2	-0.6	-0.5	0.0
Total domestic demand	222.4	-9.6	-4.5	0.6	0.0	1.2
Exports of goods and services	53.2	1.0	1.5	8.8	2.3	7.8
Imports of goods and services	67.7	-9.4	-2.9	7.4	3.5	4.0
Net exports[1]	- 14.5	3.3	1.4	0.2	-0.5	1.1
Memorandum items						
GDP deflator	_	0.0	-2.3	-2.6	-1.1	-0.2
Harmonised index of consumer prices	_	1.0	-0.9	-1.4	-1.4	0.3
Private consumption deflator	_	0.8	-1.6	-2.2	-0.6	0.1
Unemployment rate	_	24.4	27.5	26.5	25.7	24.7
General government financial balance[3,4]	_	-8.7	-12.3	-3.6	-3.4	-2.8
General government gross debt[5]	_	166.2	182.0	184.1	187.9	187.6
General government debt, Maastricht definition[3]	_	156.8	175.1	177.4	180.0	178.1
Current account balance[6]	_	-2.5	0.6	0.9	2.1	2.8

1. Contributions to changes in real GDP, actual amount in the first column.
2. Including statistical discrepancy.
3. National Accounts basis, as a percentage of GDP.
4. The data for the years 2012 and 2013 include the total impact of government support to financial institutions. Data also include Eurosystem bank profits on Greek government bonds remitted back to Greece.
5. As a percentage of GDP at market value.
6. On settlement basis, as a percentage of GDP.

Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933222169

Public debt is above 175% of GDP and remains extremely high. While debt service is relatively low, large debt principal payments pose a short-term risk to macroeconomic and financial stability. Fiscal consolidation brought the primary surplus to 0.4% of GDP in 2014 and the fiscal deficit down to 3.6%. This was, however, short of target, as tax collection remains a challenge. Non-performing loans in the banking system continue to restrain credit growth and uncertainty regarding the agreement with creditors has led to large deposit withdrawals in recent months.

More structural reforms are needed to foster inclusive growth

Fiscal consolidation will moderate, even as the government appropriately aims at a small primary surplus**.** Further reforms to enhance the efficiency of public administration and the composition of consolidation can mitigate the growth impact of fiscal restraint and also can make growth more inclusive. A tax reform is needed to tackle tax evasion and increase revenues. A broader well-designed social safety net would help the most vulnerable and sharing the costs and benefits of adjustment more fairly. Reforming the

pension system by limiting the special regimes of some professional groups would enhance fiscal sustainability and reduce inequalities.

If Greece fails to address non-performing loans in the banking sector, credit conditions can deteriorate further, reducing investment and consumption growth. A significant amount of non-performing loans could probably be recovered from the private sector, whose leverage is relatively low. Streamlining bankruptcy procedures and enhancing outside-court settlements would help resolve the non-performing loans problem. Reducing regulation in network industries, especially in the energy and transport sectors, would boost competition, exports and job creation. The overall business climate also needs to be improved further.

Uncertainty weighs on growth prospects

Assuming an agreement with creditors is found, growth in 2015 will nonetheless remain weak. Investment and consumption growth will be undermined by deteriorating credit conditions and low confidence. Gains in competitiveness will not be enough to boost exports in the absence of structural reforms to lower barriers to trade and investment. In 2016, the recovery is expected to gain strength. Exports, especially tourism, and investment will benefit from structural reforms and from the recovery in the euro area. Inflation will still be negative in 2015 reflecting large excess capacity but is likely to edge up gradually in 2016 with the economy recovering.

Implementation of reforms remains a challenge and failure to do so will hurt growth. By contrast, strong and credible implementation of reforms would boost growth. Exports can be higher than expected as the impacts of competitiveness gains may be underestimated. A threat hovering over the projection is the possibility that Greece will not arrive at a satisfactory agreement with official creditors. In the short term, at least, such an outcome would cause a significant contraction in output as well as household incomes.

HUNGARY

Economic growth is projected to slow but remain fairly robust, and unemployment will decline somewhat further. As the effects of cheaper energy wane and the labour market tightens, inflation should gradually increase. In contrast to slowing internal demand, export growth will remain dynamic, which, with terms-of-trade gains, will widen the already large current account surplus.

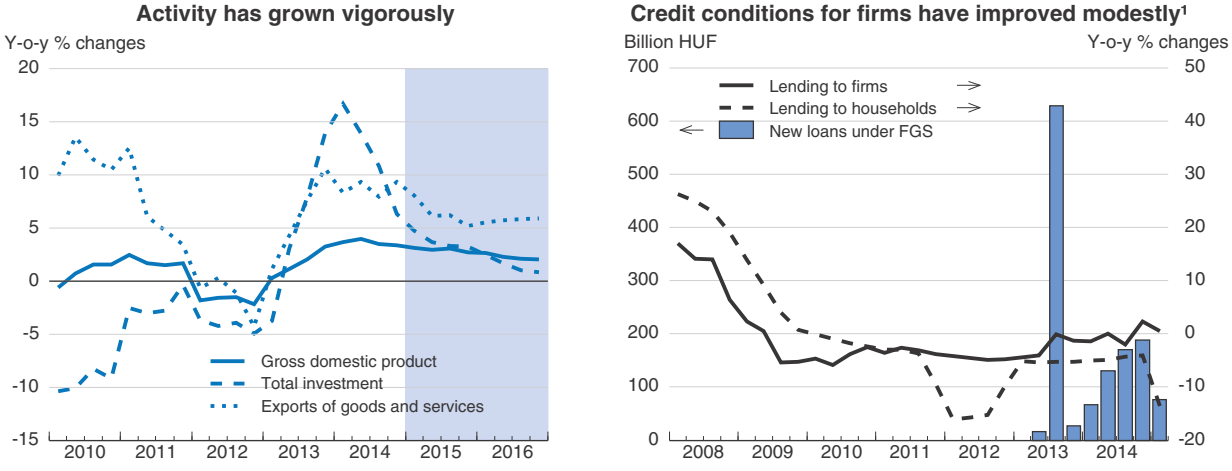
After a marked deterioration of the structural fiscal deficit in 2014, the authorities should return to a process of improving their underlying budget position to sustainably reduce debt and expand the fiscal manoeuvre room. By the end of the projection period, there will be little economic slack left, which may require the central bank to raise policy rates to contain inflation pressures. Pro-competitive structural reforms in product markets are the key to stronger and more inclusive growth. Further lowering of labour tax wedges would boost employment. Planned measures to improve the business environment for banks and foster a clean-up of their portfolios should be fully implemented.

Gross fixed capital formation has grown vigorously over the past two years, mainly on the back of public investment and foreign direct investment in export-oriented manufacturing. In contrast, investment in housing and in sectors reliant on the domestic market has recovered less. Public investment is set to slow and even decline. The reforms outlined above in banking and product markets will be key to broad-based private investment growth.

Growth has been strong and broad-based

The Hungarian economy has continued to enjoy strong and broad-based growth going into 2015. Exports are benefitting from expanded car-making capacity, gradually improving economic performance in Europe and euro depreciation, as major exporters are well

Hungary



1. Year-on-year percentage change series cover transactions only. Lending to households refer to seasonally unadjusted data with rolling exchange rate adjustment. FGS: Funding for Growth Scheme.

Source: OECD Economic Outlook 97 database; and Magyar Nemzeti Bank.

StatLink http://dx.doi.org/10.1787/888933221050

Hungary: **Demand, output and prices**

	2011	2012	2013	2014	2015	2016
	Current prices HUF billion	Percentage changes, volume (2005 prices)				
GDP at market prices	28 158.5	-1.8	1.7	3.6	3.0	2.2
Private consumption	14 720.7	-1.9	-0.1	1.6	2.4	2.0
Government consumption	5 832.8	-1.3	3.2	2.4	2.0	0.3
Gross fixed capital formation	5 551.7	-4.2	5.2	11.7	3.7	1.5
Final domestic demand	26 105.1	-2.3	1.7	4.0	2.6	1.5
Stockbuilding[1]	326.1	-0.8	-0.5	0.4	-0.3	0.0
Total domestic demand	26 431.3	-3.0	1.2	4.1	2.3	1.5
Exports of goods and services	24 540.1	-1.5	5.9	8.7	6.4	5.7
Imports of goods and services	22 812.9	-3.3	5.9	10.0	5.7	5.2
Net exports[1]	1 727.2	1.4	0.4	-0.4	1.0	0.9
Memorandum items						
GDP deflator	_	3.6	3.2	3.0	1.7	2.8
Consumer price index	_	5.7	1.7	-0.2	-0.2	2.7
Private consumption deflator	_	6.3	2.6	0.8	0.1	2.8
Unemployment rate	_	11.0	10.2	7.7	6.9	6.2
General government financial balance[2]	_	-2.3	-2.4	-2.5	-2.3	-2.2
General government gross debt[2]	_	98.2	96.7	99.8	99.6	98.3
General government debt, Maastricht definition[2]	_	78.2	76.8	76.5	76.2	75.0
Current account balance[2]	_	1.8	4.0	4.1	5.4	5.6

1. Contributions to changes in real GDP, actual amount in the first column.
2. As a percentage of GDP at market value.
Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933222174

inserted into the supply chains of German firms selling to the rest of the world. Investment growth has remained robust, if decelerating, as the surge in EU–funded public investment will soon run its course. Compensation to households paid by banks (for past unilateral interest rate hikes and differences between buying and selling exchange rates), mandated by law, is spurring private consumption. In addition, an import financial risk for households was removed with the forced conversion of foreign to domestic denominated mortgage debt. Lower energy prices have further supported real incomes, but also resulted in a temporary bout of deflation. The size of the public works programme has been kept broadly stable, but is set to expand again, and the decline in unemployment has slowed since mid-2014.

Monetary and fiscal policies remain supportive but structural reforms are needed

In March, the central bank resumed cuts to the policy rate, which had been stable since last July. Furthermore, the authorities extended again the Funding for Growth Scheme, which provides banks with free central bank refinancing for lending to SMEs, by another 1.5% of GDP, and added a new feature of limited risk-sharing with the central bank for losses on loans. After strong expansion in 2014, the fiscal stance is projected to ease slightly further in 2015, and then remain broadly neutral in 2016.

The authorities have committed to a gradual reduction of the levy on financial institutions' balance sheets, starting in 2016, and more broadly to providing a better operating environment for the sector. A central bank-owned agency is also to start buying bad commercial real estate loans and properties from banks later this year (up to 1% of GDP), thus speeding up the process of strengthening banks' portfolios. Implementation of these steps should help unclog lending. However, investment in mainly non-tradable sectors, such as energy and retail, remains hampered by restrictive and frequently changing regulation. Structural reforms aimed at further lowering the internationally high tax wedge on low salaries would bolster job creation and would make growth more inclusive.

Growth will decelerate somewhat

As stimulus to consumption and investment fades, growth is projected to moderate, although to remain quite strong. Exports will remain the most dynamic demand component, and the large current account surplus will rise further. Unemployment is expected to decline slightly further over the projection horizon and, as the effects of cheaper energy wane, inflation will gradually converge to the 3% target.

Forint depreciation has become a smaller downside risk than in the past, due to a decline in foreign-currency indebtedness (in part due to large-scale conversion of foreign-denominated loans into forints) and to the weakness of the euro. The growing specialisation of manufacturing in the automobile sector is now strengthening growth, but could increase output volatility. A better operating environment for banks could result in faster credit growth than assumed, increasing domestic demand growth.

ICELAND

The economy has entered its seventh year of economic growth, with a pick-up in private consumption and fixed investment and a boom in tourism. Large investments in energy-intensive projects and fiscal support for households will sustain growth in 2015 and 2016. Inflationary pressures will mount as the labour market tightens.

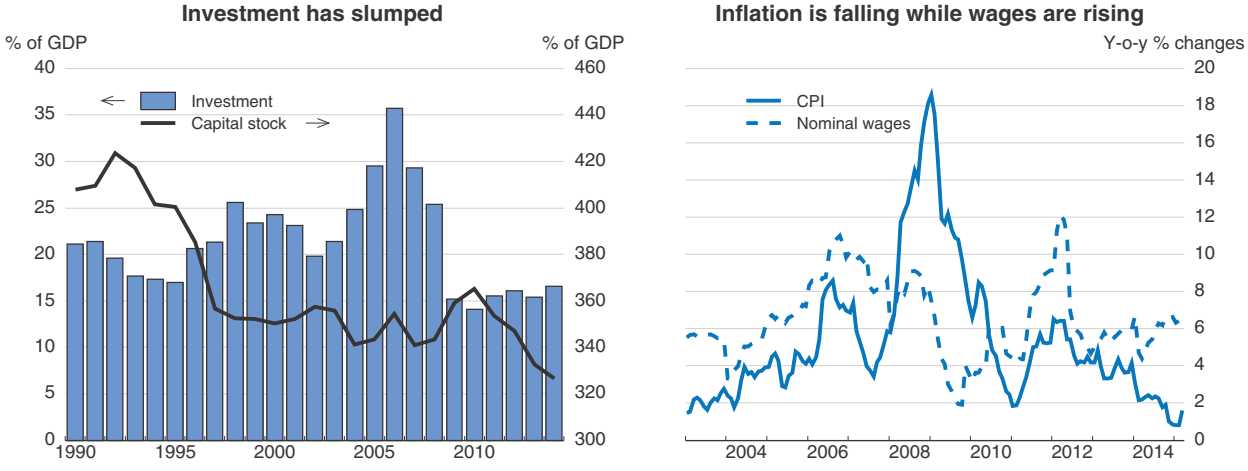
Fiscal policy has made significant progress in reducing government debt. The pace of fiscal consolidation will slow in 2015, but debt will still fall further under current plans. Containing public spending pressures will be important in maintaining an appropriate budgetary stance. With spare capacity disappearing, interest rates will need to rise as sizeable wage settlements unleash inflationary pressures. Structural reforms are needed to enhance the investment environment.

Investment slumped after the crisis and is now beginning to recover, but insufficiently to prevent the capital stock from eroding. Public investment was boosted in the 2015 budget, mainly in transportation projects. Making gradual progress in lifting of capital controls would send a positive signal to investors.

The economy is running out of spare capacity

The Icelandic economy has performed well and in 2014 real GDP returned to its pre-crisis level. The composition of growth has more recently switched towards domestic demand as investment and private consumption have recovered from depressed levels. Progress in household deleveraging has been considerable thanks to special resolution measures, but indebtedness remains high for some families. With the economic recovery, the unemployment rate has fallen and the labour market has tightened, encouraging high wage settlements in the current wage bargaining round after widespread strikes in the private and public sectors. Capital controls remain in place; they may be distorting investment decisions and uncertainty about how they will be eased is probably damaging to investment.

Iceland



Source: OECD Economic Outlook 97 database; and Statistics Iceland.

StatLink http://dx.doi.org/10.1787/888933221062

Iceland: **Demand, output and prices**

	2011	2012	2013	2014	2015	2016
	Current prices ISK billion	Percentage changes, volume (2005 prices)				
GDP at market prices	1 703.2	1.3	3.6	1.9	3.7	2.9
Private consumption	879.0	2.0	0.5	3.7	3.9	2.8
Government consumption	419.4	-1.7	0.7	1.8	0.7	1.2
Gross fixed capital formation	263.7	5.6	-1.0	13.7	13.4	14.5
Final domestic demand	1 562.0	1.6	0.4	4.9	4.7	4.6
Stockbuilding[1]	3.4	0.0	0.0	0.0	-0.2	0.0
Total domestic demand	1 565.4	1.5	0.4	4.7	4.5	4.6
Exports of goods and services	959.9	3.7	6.9	3.1	3.9	3.2
Imports of goods and services	822.1	4.7	0.3	9.9	7.6	6.7
Net exports[1]	137.8	-0.2	3.7	-3.0	-1.5	-1.4
Memorandum items						
GDP deflator	_	3.2	2.0	4.0	5.9	3.3
Consumer price index	_	5.2	3.9	2.0	1.6	3.8
Private consumption deflator	_	5.6	3.4	2.7	1.4	2.8
Unemployment rate	_	6.0	5.4	4.9	3.9	4.1
General government financial balance[2]	_	-3.7	-2.0	-0.2	0.2	0.5
General government gross debt[2]	_	95.2	87.7	85.4	81.9	79.0
General government net debt[2]	_	28.9	27.4	26.1	23.6	21.7
Current account balance[2]	_	-4.4	5.8	3.6	3.1	2.4

1. Contributions to changes in real GDP, actual amount in the first column.
2. As a percentage of GDP at market value. Includes unfunded liabilities of government employee pension plans, which amounted to about 25% of GDP in 2012.

Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933222188

Monetary policy needs to tighten, fiscal policy to remain neutral and structural policy to lift investment

Monetary policy faces challenges. Inflation expectations are not well anchored in Iceland. Accordingly, they declined in line with energy prices, but may be rising again. The central bank has consistently warned against granting excessive wage demands and indicated that it will raise interest rates if wage increases risk rekindling inflationary pressures. As large pay awards are being granted, the central bank will likely react firmly.

Fiscal policy has made considerable progress in moving towards an overall budgetary surplus and bringing down debt. The government policy of reducing mortgage-related debt will support household consumption in 2015. However, with risks of the economy overheating, fiscal policy should not relax further but rather continue to bring down still-high public debt and contingent liabilities. Reducing the size of the government balance sheet as planned by selling shares in Landsbankinn, a state-owned bank, and using the proceeds to retire expensive government financial liabilities would be helpful in this regard.

Structural reforms can help lift investment by reforming product market regulation, such as by reducing the number of licences and permits required and relaxing legal barriers to entry in certain sectors.

Output growth is strong

With support from fiscal policy and recovering asset prices, private consumption is set to grow strongly in 2015. Investment is picking up, driven by a recovery of residential investment and the beginning of new investments in the energy-intensive industries. Inflation will pick up as domestic inflationary pressures mount, which is assumed to provoke a rise in interest rates to cool the economy. As a consequence, the unemployment rate will edge up. Fiscal policy should nonetheless remain on target to record central government surpluses in both 2015 and 2016.

Large increases in negotiated minimum wages could push up inflation before monetary policy begins to regain control. The needed lifting of capital controls could also involve financial turbulence with knock-on effects on growth. On the other hand, greater wage moderation, progress in lifting capital controls in an orderly way and a pick-up in investment would boost growth.

INDIA

Economic growth will remain high, supported by a revival in investment. The FY 2015-16 fiscal consolidation target has been relaxed to allow for increased infrastructure investment while structural reforms to improve the ease of doing business and the *Make in India* initiative should boost corporate investment. Export growth will be held back by the currency appreciation. The decline in oil prices will reduce pressures on the current account deficit, inflation and subsidies.

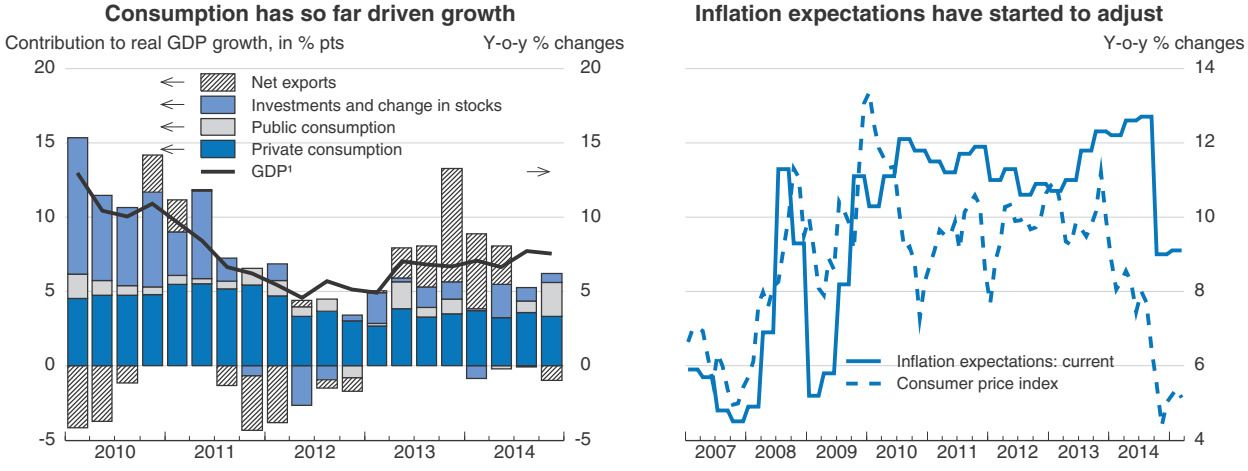
Improved public spending efficiency and increased revenue are required to fund needed public investment in physical and social infrastructure. Fiscal consolidation would also make room for the authorities to reduce requirements on banks to hold government bonds, which would release funds for private credit. Subsidy to food, fertiliser and oil products should be better targeted, and the envisaged sales tax (GST) and corporate tax reforms should be implemented swiftly. The reduction in inflation expectations provides room for monetary easing. Addressing non-performing loans would strengthen monetary policy transmission.

Investment failed to rebound in 2014, reflecting poor infrastructure and delays in administrative procedures. The government has deregulated the coal sector, taken measures to improve the business environment and opened up new sectors – including construction, rail and insurance — to foreign direct investment. The 2015/16 Budget raises investment in the rail sector. To revive corporate investment, further reforms are needed to reduce uncertainties surrounding land acquisition and tax regulations and to improve the quality of electricity and transport systems.

Growth is driven by public and private consumption

India has become one of the fastest growing countries in the world. Growth, which was substantially revised upwards by the adoption of the new national accounts

India



1. Year-on-year percentage changes; at market price in volume terms.
Source: Central statistics Office; and Reserve Bank of India.

StatLink http://dx.doi.org/10.1787/888933221072

India: **Demand, output and prices**

	2011	2012	2013	2014	2015	2016
	Current prices Indian Rupee trillions	Percentage changes, volume (2012 prices)				
GDP at market prices	85.6	5.1	6.9	7.2	7.3	7.4
Private consumption	48.9	5.5	6.2	6.0	6.9	6.9
Government consumption	9.5	1.7	8.2	8.1	6.8	6.1
Gross fixed capital formation	28.7	-0.3	3.0	4.7	7.0	8.2
Final domestic demand	87.1	3.2	5.4	5.8	6.9	7.2
Stockbuilding[1]	3.3	0.1	-0.1	0.0	0.0	0.0
Total domestic demand	90.4	5.0	2.4	6.6	6.7	7.2
Exports of goods and services	20.5	6.7	7.3	1.3	6.9	7.3
Imports of goods and services	25.3	6.0	-8.4	-0.5	4.6	6.1
Net exports[1]	- 4.8	0.0	1.2	0.1	0.1	0.1
Memorandum items						
GDP deflator	_	7.6	6.3	3.8	4.8	5.1
Consumer price index	_	10.2	9.5	6.4	5.7	5.3
Wholesale price index (WPI)[2]	_	7.4	6.0	2.6	2.9	4.1
General government financial balance[3,4]	_	-6.8	-7.1	-6.6	-6.2	-5.9
Current account balance[3]	_	-4.8	-1.7	-1.4	-1.2	-1.4

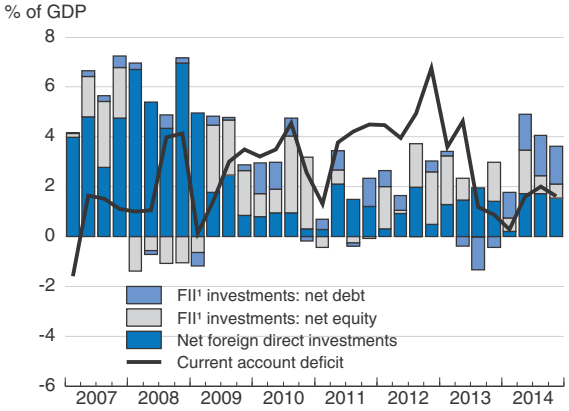
Note: Data refer to fiscal years starting in April.
1. Contributions to changes in real GDP, actual amount in the first column.
2. All commodities index.
3. As a percentage of GDP at market value.
4. Gross fiscal balance for central and state governments.
Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933222373

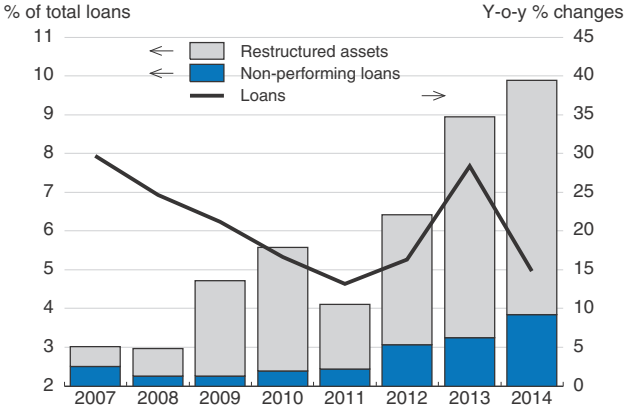
methodology, has been driven by public and private consumption. But investment and exports have languished, especially during the last two quarters of 2014.

India

The current account deficit has narrowed while capital inflows have risen



Stressed assets have risen while loans have languished



1. FII stands for foreign institutional investor.
Source: Central Statistics Office; Securities and Exchange Board of India; and Reserve Bank of India.

StatLink http://dx.doi.org/10.1787/888933221085

Inflation has continued to decline, reflecting lower oil and commodity prices, subdued Minimum Support Price increases, and low agricultural wage increases. Headline CPI inflation has fluctuated around 5% since the end of 2014, about half its average since 2008, and core inflation is falling, reflecting second-round effects from lower oil prices. Inflation expectations have also started to fall.

External vulnerability has declined. The current account deficit has shrunk, due to the drop in oil and commodity prices and lower gold imports, but also to weak investment. The rupee has appreciated in real effective terms and exports have been weak. The deficit was fully financed by net foreign direct investment flows late in 2014. Portfolio, in particular debt, inflows have also boomed but India's overall foreign liabilities as a share of GDP remain low compared to other emerging economies. Foreign exchange reserves have been replenished.

Policies are becoming more favourable to investment

The combined deficit for the central government and states remains high but its composition is improving. The government abolished diesel subsidies and hiked energy taxes in 2014, as international oil prices declined. In its FY 2015-16 Budget, the central government postponed fiscal consolidation and set out plans to increase infrastructure investment, notably in transport. The government also envisages cutting the corporate income tax rate from 30 to 25% over the next four years. Together with the planned implementation of the GST (a common sales tax for all India) from April 2016, these measures should help boost corporate investment.

More reforms are needed to improve the effectiveness of public spending. Subsidies – in particular fertiliser, food and non-diesel energy subsidies – continue to absorb a significant share of public resources. Moving to better targeted and cash-based transfers should be a priority. The policy of granting a unique personal identification number and providing bank accounts to the poor will reduce subsidy "leakages" and improve targeting. Public spending could be redirected to social infrastructure, including public health care spending which remains very low. To pursue fiscal consolidation, the government will need to broaden the tax base and improve tax compliance.

The flexible inflation targeting framework for monetary policy has been formally adopted, strengthening the credibility of the Reserve Bank of India. The Bank has cut the repo rate twice since the start of 2015 to 7.5%, and the Statutory Liquidity Ratio (SLR) requiring banks to hold public bonds to 21.5% of their portfolio. However, real interest rates have increased, lending rates have been slow to adjust to cuts in repo rates, and credit growth has been anaemic. Monetary policy transmission would be improved by reducing the SLR further and addressing the rising burden of non-performing loans.

Structural reforms would boost investment and help reallocate resources towards more productive sectors. The recent auctioning of coal mines in public ownership, partial privatisation of Coal India and deregulation of FDI in several sectors should boost investment. More is needed. Streamlining bankruptcy procedures, which are very long, would reduce the backlog of non-performing loans, freeing banks to finance new projects. Reforming the land acquisition process and speeding up environmental and social clearances would also reduce delays in investment.

New efforts are required to make growth more inclusive. Labour laws are stringent and complex. *De facto*, most workers are not covered by core labour laws and social protection.

Reforming and simplifying labour law would reduce barriers to formal and better employment, and help to ensure equal work opportunities for women. Extending female quotas to state and national parliaments and enhancing the implementation of existing laws against gender discrimination would raise the very low female labour force participation, thereby including women in economic and social life. Expanding the number of health professionals and raising public spending on health care, with a focus on rural areas and urban slums, which are underserved, would improve health outcomes for all.

Growth depends on progress in structural reforms

Growth is projected to remain strong. Industrial production is firming up. Survey data suggest that stalled investment projects are gradually being cleared, in particular in the electricity and transport sectors as well as in the manufacturing sector. Business sentiment and household confidence are improving. Overall, growth is projected to become more balanced, with a shift from consumption to investment, in particular for the public sector. The recovery in investment will boost imports while exports will benefit from better prospects from trading partners. Still, the rupee appreciation in real effective terms will weigh on trade performance. Inflation will remain subdued, although it may be volatile.

The economy could grow by more than 8% if ambitious structural reforms, in particular the GST, land acquisition and labour laws, were to be approved by the parliament. Poor weather conditions would depress rural incomes and demand, exacerbate poverty and put pressure on both inflation and the budget. The decline in external vulnerability could raise confidence and improve growth, but because some corporations remain highly leveraged and have large unhedged foreign positions, large exchange rate movements could undermine growth.

INDONESIA

Economic growth has weakened in recent quarters, but activity is projected to pick up later in 2015 and strengthen further in 2016, as public spending gathers pace, confidence recovers and the expansionary impact of the depreciation of the rupiah takes hold. After spiking, following the removal of fuel subsidies, inflation is now moderating, in large part because of the fall in energy prices. Inflation is likely to stay high, as the recent currency weakness offsets lower energy prices. The exchange rate may remain fragile as the external imbalance persists.

Should the economy decelerate further, there is ample room for fiscal support while respecting the rule that the deficit remains under 3% of GDP. After a ¼ percentage point cut in February, official interest rates are assumed to remain unchanged through 2015 and then fall slightly in 2016. Structural reforms to improve the business environment and the fight against corruption need to continue and are crucial to make growth more inclusive.

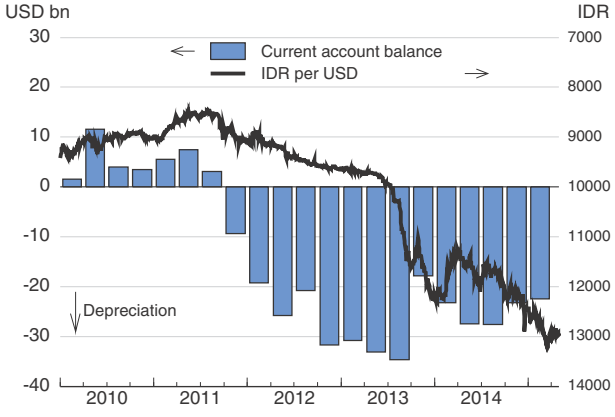
Indonesia's future development is being hobbled by critical infrastructure bottlenecks, particularly in transport and logistics, but also in electricity and water treatment. The abolition of fuel subsidies has provided the necessary fiscal space for increased public infrastructure investment. Accelerating the government's investment plans, which is a priority, will require overcoming significant political, administrative and implementation impediments.

Activity remains sluggish

Weak domestic and external demand have both contributed to a continuing trend of slowing economic growth. Household consumption is supporting activity but has slowed in recent quarters. Both investment and exports have been sluggish, in part due to weaker commodity prices. Government expenditure has yet to recover, despite plans to ramp up spending on education and investment using the space created by recent fuel subsidy cuts.

Indonesia

The rupiah continues to depreciate on the back of the current account deficit



Growth in investment has remained weak



Source: Statistics Indonesia (BPS); *OECD Economic Outlook 97 database*; and Bank Indonesia.

StatLink http://dx.doi.org/10.1787/888933221095

Indonesia: **Demand, output and prices**

	2011	2012	2013	2014	2015	2016
	Current prices Rupiah trillions	Percentage changes, volume (2010 prices)				
GDP at market prices	7 831.7	6.0	5.6	5.0	4.9	5.5
Private consumption	4 340.6	5.5	5.4	5.3	4.9	5.4
Government consumption	709.5	4.5	6.9	2.0	2.9	3.9
Gross fixed capital formation	2 451.9	9.1	5.3	4.1	5.0	6.0
Final domestic demand	7 502.0	6.6	5.5	4.6	4.8	5.5
Stockbuilding[1]	135.9	1.2	-0.4	0.8	-0.3	0.0
Total domestic demand	7 637.9	7.7	5.0	5.3	4.4	5.5
Exports of goods and services	2 061.9	1.6	4.2	1.0	4.6	6.0
Imports of goods and services	1 868.1	8.0	1.9	2.2	2.5	5.9
Net exports[1]	193.8	-1.5	0.6	-0.3	0.5	0.1
Memorandum items						
GDP deflator	_	3.8	4.7	5.4	5.2	4.5
Consumer price index	_	4.3	6.4	6.4	6.2	5.0
Private consumption deflator	_	6.1	6.5	5.1	3.8	4.4
General government financial balance[2]	_	-1.8	-2.1	-2.2	-2.1	-2.0
Current account balance[2]	_	-2.7	-3.1	-3.0	-2.1	-2.2

1. Contributions to changes in real GDP, actual amount in the first column.
2. As a percentage of GDP at market value.
Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933222384

The exchange rate has continued its trend depreciation, declining by a further 8% against the US dollar over the past six months. However, the currency has recently stabilised with the growing expectations of a delay in US rate hikes and a better-than-expected trade surplus in March, the largest in 15 months. This is the result of imports falling more quickly than exports in dollar terms, in large part reflecting lower energy prices. Weaker external demand is also putting a damper on growth in export volumes.

Inflation is abating, but monetary policy remains cautious

The spike in inflation, which was due to the almost complete removal of government fuel subsidies at the end of 2014, is now dissipating, but the effect of the depreciating rupiah and higher administered prices are keeping inflation high for the time being. In February, Bank Indonesia cut official interest rates by 25 basis points, as concerns mounted over slowing economic growth. However, in March core inflation exceeded the central bank's target range (4% ± 1%) for the first time of late, and strong pressure remains on the exchange rate. No further cuts in official interest rates are assumed until 2016, when rates will need to be lowered to prevent prices from undershooting. The 2015 budget deficit is assumed to be 2.1% of GDP, slightly larger than in 2014. This mild expansion is sustainable and appropriate, and leaves room for further supportive measures, if needed, particularly measures targeting poverty and enhancing access to services for poorer households.

The backlog of much-needed structural reform is growing

The government has appropriately identified a number of priority areas for reform, including improving the business climate, boosting infrastructure investment and refocusing education. Infrastructure especially needs urgent attention, particularly in the areas of logistics and transportation. Bottlenecks in roads, rail and ports are holding back business investment and engagement in international trade. The government has committed a large part of the saving from the almost complete abolition of fuel subsidies last year to spending on public infrastructure investment. However, implementation is slow, and priority needs to be given to overcoming significant political, administrative and implementation impediments.

Growth is projected to pick up gradually

Economic growth is expected to pick up in the course of 2015 and strengthen further in 2016. The government's plans to lift spending should get traction and help confidence to recover, boosting private consumption and investment. Moreover, the lower rupiah will lift net exports. Inflation is likely to remain elevated for some time as the recent currency weakness offsets lower energy prices.

Political impediments to the implementation of the government's economic agenda constitute a major downside risk both in the short and long-term. Developments in the external sector continue to be highly uncertain, including weakening demand in major trading partners. That said, FDI inflows have been strong, and, if commodity prices recover, a rebound in private investment is likely, and this would raise growth. Moreover, if the currency remains weak, the rebound in exports may be stronger than expected.

IRELAND

Economic growth is projected to be robust and broadly based in 2015 and 2016. Exports will continue to be strong due to increasing demand in trading partners and the depreciation of the euro. Household consumption will gather pace with employment and wages rising steadily and with low energy prices.

Fiscal policy is expected to exert a smaller drag on activity than in past years. Strong revenue growth and low interest costs should be used for more rapid reduction of still-high public debt. Financial conditions have become favourable, but the problem of non-performing loans persists, impeding the full return to normal credit supply. Structural reforms should prioritise getting more people back into work, by making the tax and benefit system more efficient and enhancing activation policy.

Business investment will continue to rebound, expanding the capital stock at a pace consistent with robust long-term growth. The performance of government–supported financing tools, designed to help improve credit supply, should be carefully evaluated. Fast-rising property prices, both in the housing and office-building markets, are reminiscent of the bubble period of a decade ago. Further macro-prudential tools should be used, if necessary, to prevent investors becoming excessively exposed.

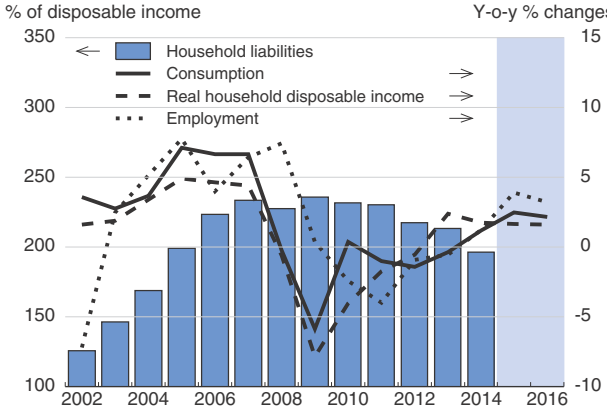
Growth is becoming steady and broad based

The Irish economy grew by 4.8% in 2014, the fastest in the OECD. This reflected in part some temporary factors, such as rebounding from the patent cliff (the expiry of a number of drug patents) which weighted on exports and growth in the previous year. Exports have sustained the recovery so far, owing to the outstanding performance of highly productive multi-national companies and to improved cost-competitiveness.

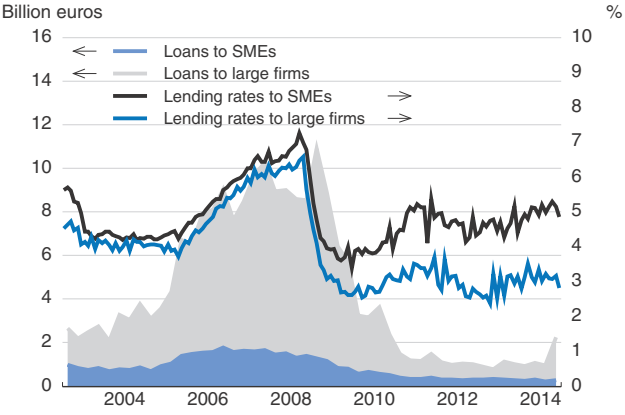
Domestic demand contributed to growth in 2014 for the first time since the crisis. Business investment has increased as firms rebuilt their capital stock. Both employment and wages, which had gone through significant downward adjustments, began to increase

Ireland

Household consumption will gather pace



Financing conditions for SMEs remain tight



Source: OECD Economic Outlook 97 database; Central Bank of Ireland; Central statistics office, Ireland; and European Central Bank.

StatLink http://dx.doi.org/10.1787/888933221103

Ireland: **Demand, output and prices**

	2011	2012	2013	2014	2015	2016
	Current prices € billion	Percentage changes, volume (2012 prices)				
GDP at market prices	171.0	-0.3	0.2	4.8	3.5	3.3
Private consumption	79.8	-1.4	-0.4	1.2	2.4	2.2
Government consumption	29.2	-1.3	-0.1	0.3	-0.4	1.3
Gross fixed capital formation	24.8	4.3	-1.9	11.7	10.5	9.6
Final domestic demand	133.8	-0.4	-0.6	3.0	3.6	3.7
Stockbuilding[1]	2.5	-0.3	0.3	0.7	0.0	0.0
Total domestic demand	136.3	-0.5	-0.2	3.9	3.4	3.6
Exports of goods and services	167.1	4.7	1.1	12.6	6.5	6.4
Imports of goods and services	132.4	6.9	0.6	13.2	7.2	6.6
Net exports[1]	34.7	-0.8	0.6	2.2	0.8	1.3
Memorandum items						
GDP deflator	_	1.3	1.0	1.2	2.2	1.8
Harmonised index of consumer prices	_	1.9	0.5	0.3	0.1	1.7
Private consumption deflator	_	1.2	1.4	1.6	0.7	1.7
Unemployment rate	_	14.7	13.1	11.3	9.9	9.2
General government financial balance[2,3]	_	-8.1	-5.8	-4.1	-2.5	-1.9
General government gross debt[2]	_	120.8	128.9	116.5	114.5	111.4
General government debt, Maastricht definition[2]	_	121.8	123.2	109.7	107.7	104.6
Current account balance[2]	_	1.6	4.4	6.2	5.7	5.4

1. Contributions to changes in real GDP, actual amount in the first column.
2. As a percentage of GDP at market value.
3. Includes the one-off impact of recapitalisations in the banking sector.

Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933222190

steadily, while the unemployment rate has fallen from its high level. The growth of household disposable real income turned positive, and household consumption is picking up.

There will be less fiscal drag than in previous years and financial conditions have improved

Thanks to strong economic growth, the fiscal deficit is projected to decline to 2.5% of GDP in 2015, but then only slightly more in 2016. Under current plans, public debt should decline gradually relative to GDP. Nevertheless, it will still be well over 100% of GDP in 2016, and therefore fiscal gains from strong output growth and low interest costs should be used for more rapid debt reduction.

Financial conditions have improved on the back of monetary easing. The banking sector returned to profitability in 2014, improving its capacity to provide new lending. However, the private sector has to further reduce its still-high debt. Non-performing loans are also still a problem, especially in the SME sector.

The economy will grow robustly and structural policy should make growth more inclusive

Growth is expected to be robust and broadly based with inflation gradually rising. Exports will continue to be strong due to increasing demand in trading partners. The depreciation of the euro will help, in particular regarding exports of traditional goods to the UK market which are produced mainly by SMEs. Investment will grow solidly with an improvement in profitability and low financing costs. Household consumption will gather pace, with strong wage and employment growth. Low energy prices will also help to lift household consumption in the short run.

The benefits of this positive outlook should be widely distributed by getting more people back to work. Those remaining out of the labour market still account for a large share of the working-age population. The authorities should revamp the tax-benefit system to encourage more participation, notably by reducing high marginal effective tax rates arising from the family income supplement. They should also improve activation policy to upgrade the skills of the unemployed and strengthen their attachment to the labour market.

Pent-up demand after a long crisis may result in stronger household consumption than projected. Housing investment may accelerate faster than expected as property prices rise rapidly, although this would increase vulnerabilities if it were associated with further indebtedness. However, still-elevated joblessness and indebtedness may weigh on private spending more than expected. Investment by SMEs may also be very sluggish due to tight financing conditions.

ISRAEL[1]

Economic growth slowed in 2014, picked up strongly at the end of the year and should strengthen to around 3.5% in 2015 and 2016, helping to keep unemployment low. Lower oil prices, further cuts in interest rates and a significant revaluation of the minimum wage should shore up domestic demand, while the gradual improvement of the global economy boosts exports.

An accommodative monetary policy is still appropriate to support current growth and prevent undesirable appreciation of the shekel. But the likely temporary nature of the price falls in early 2015 argues against further relaxation involving unconventional measures. The public debt reduction policy is still needed to increase the room for fiscal manoeuvre, but it must draw more on revenue increases, and the current rule constraining spending should be reviewed. Structural reforms are also crucial to enhance competition on product markets and formal education and skills, especially among the Ultra-Orthodox and Arab populations, to stimulate productivity and to make growth more inclusive.

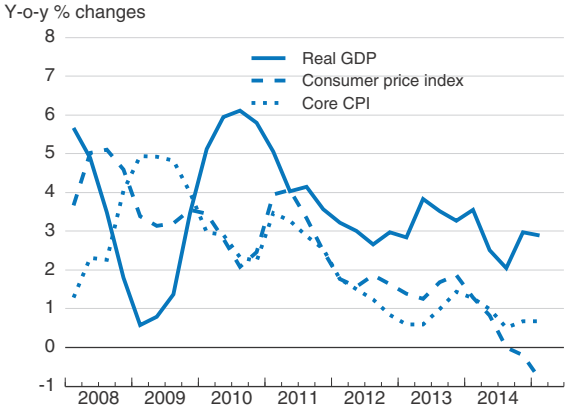
Increased investment in infrastructure – especially public transport and the natural gas distribution network, but also education – is needed to lift some of the barriers to private investment and boost potential growth. The government should pursue efforts to improve the co-ordination of public intervention in the property sector to better respond to housing demand by increasing supply and thus reducing prices.

Growth has picked up

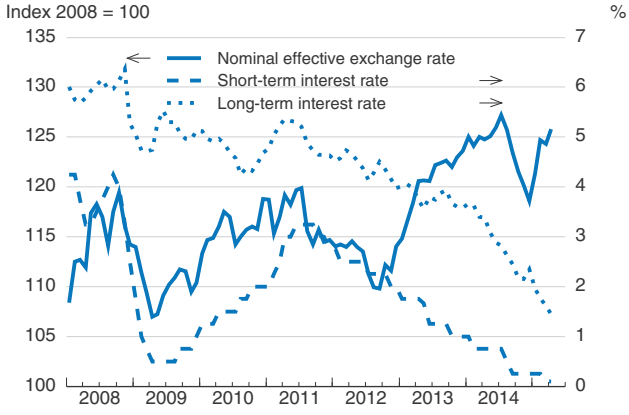
After an upswing in late 2014, growth slowed somewhat in early 2015. The economy was supported by an increase in defence spending and exports, buoyed by revitalised

Israel

Core inflation and growth have stopped declining



Monetary policy has eased further and the shekel has broadly stabilised



Source: Bank of Israel; and *OECD Economic Outlook 97 database*.

StatLink http://dx.doi.org/10.1787/888933221117

1 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.

Israel: **Demand, output and prices**

	2011	2012	2013	2014	2015	2016
	Current prices NIS billion	Percentage changes, volume (2010 prices)				
GDP at market prices	924.6	3.0	3.4	2.8	3.4	3.5
Private consumption	533.2	3.0	3.5	4.0	5.2	3.7
Government consumption	207.2	3.6	3.5	4.2	3.1	1.9
Gross fixed capital formation	185.9	3.2	1.1	-2.9	0.7	5.4
Final domestic demand	926.3	3.2	3.0	2.7	3.8	3.6
Stockbuilding[1]	2.8	0.3	-0.2	0.4	0.0	0.0
Total domestic demand	929.2	3.5	2.8	3.1	3.8	3.6
Exports of goods and services	327.9	1.0	1.5	1.2	3.7	5.0
Imports of goods and services	332.4	2.5	-0.1	2.4	4.7	5.5
Net exports[1]	- 4.5	-0.5	0.6	-0.4	-0.3	0.0
Memorandum items						
GDP deflator	_	4.2	2.3	1.0	2.9	1.1
Consumer price index	_	1.7	1.6	0.5	-0.3	1.0
Private consumption deflator	_	2.1	2.1	0.4	-0.3	1.0
Unemployment rate[2]	_	6.8	6.3	6.0	5.5	5.4
General government financial balance[3,4]	_	-5.0	-4.1	-3.7	-3.2	-2.5
General government gross debt[3]	_	68.3	67.6	67.5	65.4	63.7
Current account balance[3]	_	0.6	2.6	3.0	4.3	4.1

1. Contributions to changes in real GDP, actual amount in the first column.
2. Employment and unemployment data prior to Q1 2012 are derived from a quarterly labour-force survey that has since been replaced by a monthly survey, which included a number of methodological changes. The data prior to Q1 2012 have been adjusted to be compatible with the new series
3. As a percentage of GDP at market value.
4. Excluding Bank of Israel profits and the implicit costs of CPI-indexed government bonds.

Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933222206

external markets and a weakening shekel in late 2014. Private consumption was also very dynamic and remained strong in early 2015, but activity was restrained by a decline in business investment in the first quarter of 2015 due to temporary factors, which offset the gradual increase in housing investment. The unemployment rate fell below 5% at the beginning of 2015, and year-on-year underlying inflation stabilised at around 0.7%. The decline in overall prices gathered pace, however, to around -0.5% year on year, as a result of the drop in oil prices and temporary factors such as falls in the prices of water and electricity.

Further fiscal consolidation should be complemented by structural reforms

In March 2015, the Bank of Israel again cut its rate, bringing it to a historic low of 0.10%, and continued to intervene in the currency market. After appreciating in early 2015, the shekel is now at its average 2014 level in nominal effective terms. This very flexible policy continues to foster lower long-term interest rates and higher prices for financial and real-estate assets. The result is to increase household wealth and support demand, but also to increase the risk of a speculative property bubble, whose effects should nevertheless be limited by the Bank's macro-prudential measures.

The state reached its target of reducing the deficit to 2.8% of GDP in 2014. Strict spending control in the interim budget (enacted in 2015 because of early elections) should bring the deficit down to the target of 2.5% of GDP. But this will further weaken civil expenditure, which is very low by international standards. For 2016, the next parliament is likely to struggle to contain fiscal spending growth below 2.6% in real terms and reduce the state's deficit to the 2% of GDP, as targeted. However, maintaining the strategy of debt reduction should continue to create more fiscal space. This would be helped by avoiding further tax cuts and preserving the integrity of the value added tax system, which has served the country well in the past. In addition, structural reforms are needed to improve competition in many sectors, in particular the food and electricity industries. Increasing state funding for education and making it conditional on whether schools teach a minimum core curriculum (including mathematics and foreign languages) would boost educational standards and earning capacities among the disadvantaged communities.

Activity should remain close to potential

An ongoing accommodative monetary policy, falling oil prices, a planned 16% increase in the minimum wage over three years and the recovery of external markets will all boost the economy in 2015 and 2016. Investment will also be supported by the launch of major new projects in the technology sector and the lifting of previous uncertainty surrounding property tax. Given these conditions, unemployment will remain low, as will inflation, although the latter should gradually edge back into the lower part of the official 1%-3% target range.

A further deterioration in the geopolitical situation would lower growth and fuel deflationary pressure, which might necessitate recourse to unconventional monetary measures. The new coalition government has agreed to some spending increases, which, if not offset by additional revenue, would stimulate the economy but weaken the budgetary position.

ITALY

After a long recession, the Italian economy has started its gradual recovery. Output is projected to grow by 0.6% in 2015 and by 1.5% in 2016. Exports will continue to support growth, but the recovery will broaden to private consumption. Sluggish private investment will be countered by rising public infrastructure spending. Economic growth will result in employment gains and lead to a decrease in the unemployment rate, which will still remain high. Consumer price and wage inflation will remain moderate due to persistently large economic slack.

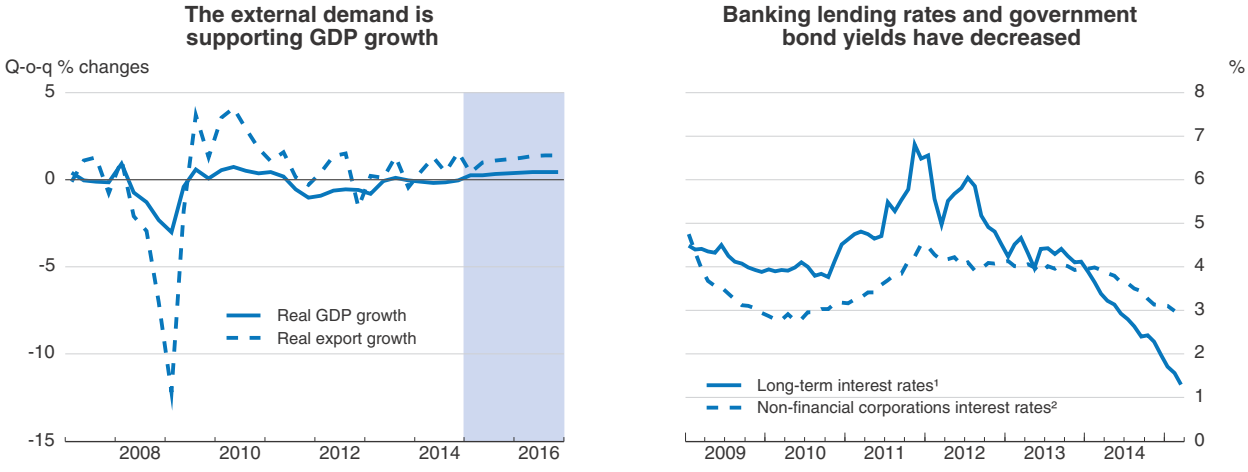
Fiscal policy should continue to aim for gradual but steady fiscal consolidation, so as not to strangle the incipient economic recovery, while fully respecting EU fiscal rules and reducing the large debt-to-GDP ratio. The government should continue to push forward its comprehensive plan of structural reforms, which will boost confidence and lead to higher sustainable and more inclusive growth. Improving the efficiency of the public administration will be key to raising productivity growth by removing obstacles to firms' growth and entrepreneurship.

The crisis hit investment especially hard and gross fixed capital formation declined by 30% since 2007. To revive private investment, further action is needed to effectively deal with the still-mounting non-performing loans, which are weakening the banking system's health and restricting the supply of credit. The planned increase in public infrastructure spending is welcome, but if this investment is to be productive the effectiveness of public spending and procurement will have to improve markedly.

A recovery is incipient

In 2014, the decline in GDP growth slowed considerably as export performance improved and private consumption revived. This positive trend continued in the first quarter of 2015 as GDP increased by 0.3% with respect the previous quarter, the largest

Italy



1. 10-year benchmark government bond yields.
2. Annualised agreed rate (AAR).

Source: OECD Economic Outlook 97 database; European Central Bank; and Datastream.

StatLink http://dx.doi.org/10.1787/888933221126

Italy: **Employment, income and inflation**

Percentage changes

	2012	2013	2014	2015	2016
Employment[1]	-0.3	-1.8	0.1	0.5	1.0
Unemployment rate[1,2]	10.6	12.2	12.7	12.7	12.1
Compensation of employee[3]	-1.1	0.6	0.8	0.7	1.0
Unit labour cost	1.6	0.6	1.3	0.6	-0.1
Household disposable income	-2.9	0.1	0.2	0.5	0.6
GDP deflator	1.4	1.4	0.8	0.5	0.9
Harmonised index of consumer prices	3.3	1.3	0.2	0.2	1.3
Core harmonised index of consumer prices[4]	2.0	1.3	0.7	0.8	1.3
Private consumption deflator	2.7	1.1	0.2	0.0	0.9

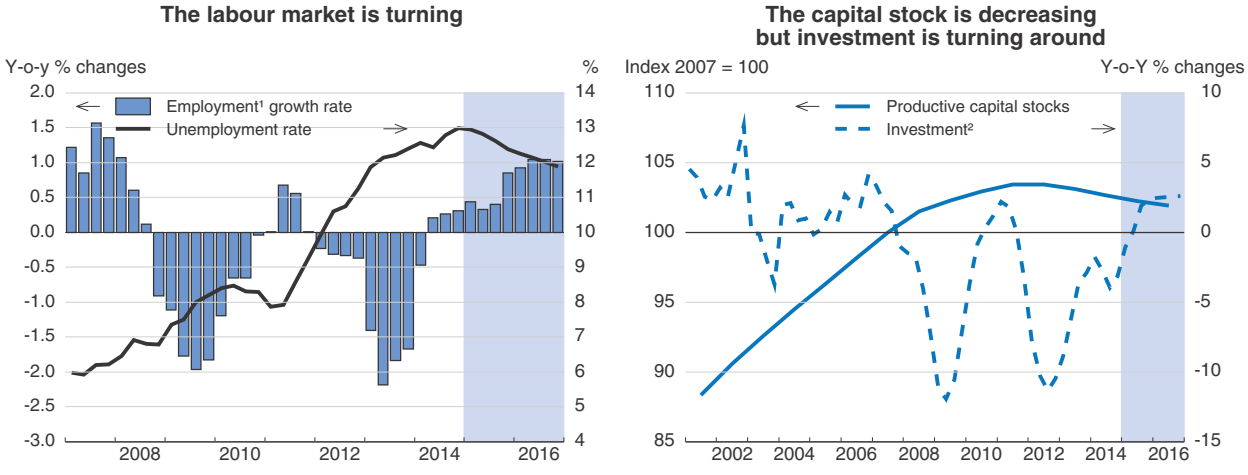
1. Data for whole economy employment are from the national accounts. These data include an estimate made by Istat for employment in the underground economy. Total employment according to the national accounts is higher than labour force survey data indicate, by approximately 2 millions or about 10%. The unemployment rate is calculated relative to labour force survey data.
2. As a percentage of labour force.
3. In the total economy.
4. Harmonised index of consumer prices excluding food, energy, alcohol and tobacco.

Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933221934

quarterly increase in the latest four years. Cost-competiveness gains are beginning to reverse external market share losses. Private consumption is being supported by employment and real wage gains, although it slowed down in the first quarter of 2015. The employment growth rate has turned positive after a long period of decline and the improved growth prospect is starting to encourage workers back to the labour market. However, the unemployment rate remains high. Investment growth is finally showing

Italy



1. National Accounts definition.
2. Data refer to private non-residential and government fixed capital formation.

Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933221131

Italy: **Financial indicators**

	2012	2013	2014	2015	2016
Household saving ratio, net[1]	2.0	3.8	3.4	3.4	3.0
General government financial balance[2]	-3.0	-2.9	-3.0	-2.6	-2.0
General government gross debt[2]	138.1	144.8	158.5	159.6	158.4
General government debt, Maastricht definition[2]	123.2	128.6	132.0	133.2	132.0
Current account balance[2]	-0.4	1.0	1.8	2.6	3.4
Short-term interest rate[3]	0.6	0.2	0.2	0.0	0.0
Long-term interest rate[4]	5.5	4.3	2.9	1.5	1.6

1. Net saving as a percentage of net disposable income. Includes "famiglie produttrici".
2. As a percentage of GDP at market value. These figures are national accounts basis; they differ by 0.1% from the frequently quoted Excessive Deficit Procedure figures.
3. 3-month interbank rate.
4. 10-year government bonds.

Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933221948

some signs of recovery, which however remains uncertain due to still large spare industrial capacity, restricted credit supply, and past public-investment cuts to achieve budget targets. Bank lending to non-financial companies has continued to fall in the first months of 2015, although at a somewhat slower pace than in the past. Residential investment is weak and property prices have been falling.

Macroeconomic and structural policies could reinforce growth prospects

The array of factors supporting Italy's growth is the most propitious for some years. Consumer confidence is improving as the government makes progress on implementing

Italy: **Demand and output**

	2013	2014	2015	2016	Fourth quarter 2014	Fourth quarter 2015	Fourth quarter 2016
	Current prices € billion	Percentage changes from previous year, volume (2010 prices)					
GDP at market prices	1 609.1	-0.4	0.6	1.5	-0.5	1.2	1.7
Private consumption	978.0	0.3	0.4	1.1	0.5	0.6	1.2
Government consumption	315.7	-0.9	-0.5	-0.9	-0.3	-1.6	0.4
Gross fixed investment	280.3	-3.2	1.6	1.9	-3.0	2.9	2.0
Final domestic demand	1 574.1	-0.6	0.4	0.9	-0.3	0.5	1.2
Stockbuilding[1]	- 2.8	-0.1	-0.1	0.0			
Total domestic demand	1 571.3	-0.6	0.4	0.9	-1.1	1.0	1.2
Exports of goods and services	464.9	2.4	3.4	5.1	3.8	3.4	5.5
Imports of goods and services	427.0	1.6	2.9	3.3	2.0	2.8	4.4
Net exports[1]	37.8	0.3	0.3	0.7			

Note: Detailed quarterly projections are reported for the major seven countries, the euro area and the total OECD in the Statistical Annex.

1. Contributions to changes in real GDP, actual amount in the first column.

Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933221959

its comprehensive reform plan and as rising employment and lower energy prices add to household purchasing power. The "Jobs Act" has the potential to drastically improve the labour market by reducing duality and providing universal unemployment benefits, thus increasing risk sharing and markedly improving the social safety net. The depreciation of the euro has further improved Italy's international competitiveness and continues to support the external contribution to GDP growth.

However, the banking sector is still fragile and is not in a good position to fully support private investment. Surveys suggest that a large share of companies face unchanged conditions to access credit notwithstanding declining interest rates. Lending rates remain higher than in other euro area countries, probably owing to perceived risks relating to the rising amounts of non-performing loans on banks' balance sheet. Investment would therefore be strengthened by enhancing the insolvency regime, expanding the use of specialised courts and out-of-court debt workouts, and by establishing a specialised asset management company to acquire bad loans. The government is concretely considering some of these measures so as to create a secondary market for non-performing loans in compliance with EU regulations on state aid.

To improve growth prospects over the medium term, the government should continue to press ahead with its ambitious and comprehensive plan of institutional and structural reforms. This includes the efficiency of the public administration and judicial system, reforming the school system, speeding up major public infrastructure projects and enhancing competitiveness through reducing barriers to entry in some service sectors. The recent approval of the new electoral law is a positive development as it is likely to result in more stable governments and reduce political uncertainty. More needs to be done to close gender gaps and to encourage female labour force participation, through strengthening the provision of good quality care for children and the elderly, so as to boost labour supply and reduce entrenched gender inequality.

Over the projection period, the fiscal stance will only be mildly contractionary. The government's budget deficit is projected at 2.6% in 2015 and 2% in 2016. The underlying consolidation path should be implemented, but the automatic stabilisers should be allowed to work. Pension reimbursements due to the recent constitutional court's ruling on the 2011 reform will not affect the projected budget deficit as reimbursements will be progressive and phased in. The ongoing ECB's quantitative easing programme is helping to keep debt servicing costs low and the resulting savings are being partly used to forestall previously planned tax hikes and to boost public investment. However, continued efforts to enhance the transparency and effectiveness of public spending and procurement, and an unremittent fight on corruption will be paramount to ensure the planned increase in public infrastructure spending is not wasteful.

The recovery is still fragile

GDP growth is set to increase to 0.6% in 2015 and 1.5% in 2015, and price and wage inflation pressures are expected to remain moderate because of large, but declining, slack in output and labour markets. Unemployment is expected to remain broadly stable in 2015, as employment rises and improved prospects encourage workers back into the labour market. In 2016, as the recovery firms and labour market reforms take hold, the unemployment rate is projected to begin to decline. The current account surplus is poised

to reach more than 3% of GDP. Gross fixed capital formation will turn positive in 2015, but will remain moderate.

The rebound in investment could be stronger than predicted, especially if residential property prices reverse course and the banking system is strengthened. The improving labour market could raise household confidence more than assumed, raising consumption growth. On the downside, Italy would be vulnerable to the effects of renewed financial turmoil in the euro area. A weaker-than-expected economic growth in Italy's main trading partners could result in lower exports.

JAPAN

The economy has now rebounded from the contraction in the wake of the 2014 tax hike. Supported by the fall in oil prices and real wage gains, output growth is projected to reach ¾ per cent in 2015 and 1½ per cent in 2016. Export growth is projected to remain buoyant, reflecting the weaker yen and a gradual pick-up in world trade. Inflation, which has fallen close to zero, is projected to begin rising in the second half of 2015, reaching 1½ per cent by the end of 2016, while the unemployment rate continues to fall.

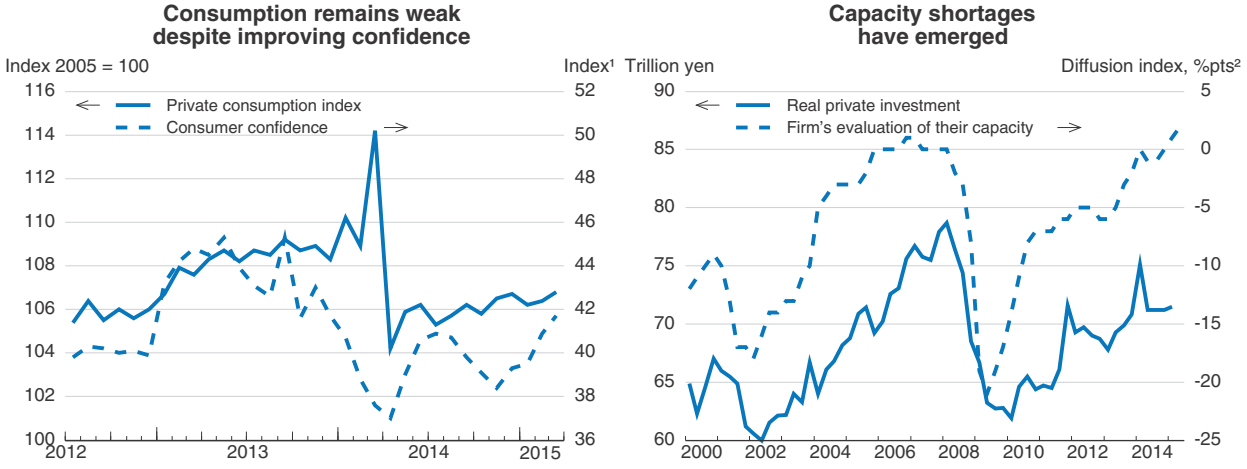
The Bank of Japan's "quantitative and qualitative monetary easing" should continue until the 2% inflation target has been sustainably achieved. The reduction of public debt remains a top priority as gross public debt reaches 230% of GDP. To achieve fiscal sustainability, a detailed and credible fiscal consolidation plan to attain the target of a primary budget surplus by FY 2020 is required, as well as faster output growth through bold structural reforms, including those in Japan's growth strategy, which is aimed at boosting private-sector investment.

Business investment is a key to raising labour productivity, which is a quarter below the average of the top half of OECD countries. The planned cuts in Japan's relatively high corporate income tax rate are expected to spur investment, but other measures are needed. Further improving the corporate governance framework and accelerating product market reforms to create new business opportunities would encourage firms to invest their large cash holdings. Raising Japan's relatively low rate of firm creation, in part by promoting venture capital investment, is another priority.

Output growth has resumed following the tax hike

Output growth resumed in late 2014, led by exports, thanks in part to the weaker yen, which is nearly 30% below its level of late 2012 in trade-weighted terms. The recovery in

Japan



1. A seasonally-adjusted average of four indicators of overall livelihood, income growth, employment, and willingness to buy durable goods. If all respondents answered '' improving'' (''worsening'') for the four indicators, the index would be 100 (0).
2. The number of firms responding that they had a capacity shortage minus those reporting excess capacity. A positive number thus indicates an overall capacity shortage. Numbers for the second quarter in 2015 are companies' projections made in March 2015.

Source: Cabinet Office; and *OECD Economic Outlook 97 database*.

StatLink http://dx.doi.org/10.1787/888933221142

Japan: **Employment, income and inflation**

Percentage changes

	2012	2013	2014	2015	2016
Employment	-0.3	0.7	0.6	0.3	0.1
Unemployment rate[1]	4.3	4.0	3.6	3.5	3.3
Compensation per employee[2]	0.4	-0.1	0.8	1.5	2.8
Unit labour cost	-1.4	-0.8	1.6	1.2	1.6
Household disposable income	-0.2	0.4	1.1	1.8	2.8
GDP deflator	-0.9	-0.6	1.7	2.2	1.1
Consumer price index[3]	0.0	0.4	2.7	0.7	1.1
Core consumer price index[4]	-0.5	-0.1	1.9	0.9	1.1
Private consumption deflator	-0.9	-0.3	2.0	0.2	1.1

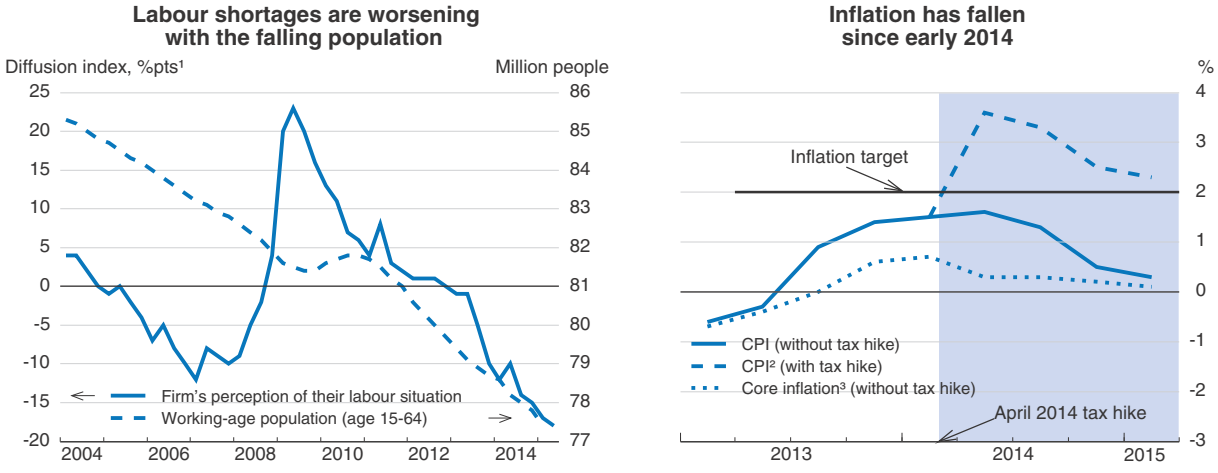
1. As a percentage of labour force.
2. In the total economy.
3. Calculated as the sum of the seasonally adjusted quarterly indices for each year.
4. Consumer price index excluding food and energy.

Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933221831

private consumption following the large drop associated with the April 2014 tax hike has been modest, despite improving consumer confidence, rising bonus payments and the deceleration of inflation. After reaching 1½ per cent (year-on-year) in early 2014, consumer price inflation (excluding the impact of the tax hike) fell to close to zero in early 2015. Business investment has been sluggish since the second quarter of 2014 despite the

Japan



1. The number of firms responding they had an excess number of workers minus those reporting a shortage. A negative number thus indicates an overall labour shortage. Numbers for the second quarter in 2015 are companies' projections made in March 2015.
2. In April 2014, the consumption tax was raised from 5% to 8%. The tax hike added 2 percentage points to inflation according to estimates by the Bank of Japan and the Cabinet Office.
3. OECD measure, which excludes food and energy.

Source: OECD Economic Outlook 97 database; Bank of Japan; and OECD calculations.

StatLink http://dx.doi.org/10.1787/888933221150

Japan: **Financial indicators**

	2012	2013	2014	2015	2016
Household saving ratio, net[1]	1.2	-0.2	0.3	1.6	1.3
General government financial balance[2]	-8.7	-8.5	-7.7	-6.8	-5.8
General government gross debt[2]	215.4	220.3	226.0	229.2	231.7
General government net debt[2]	129.2	122.9	128.7	131.8	134.4
Current account balance[2]	1.0	0.8	0.5	2.8	3.0
Short-term interest rate[3]	0.2	0.2	0.1	0.1	0.1
Long-term interest rate[4]	0.8	0.7	0.6	0.4	0.4

1. As a percentage of disposable income.
2. As a percentage of GDP at market value.
3. 3-month interbank rate.
4. 10-year government bonds.

Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933221849

weaker yen, record high earnings in the corporate sector and large cash holdings that exceed 60% of GDP. In addition, firms report capacity and labour shortages.

Raising labour productivity and participation rates requires a number of structural reforms

Recent reforms to strengthen corporate governance are expected to prompt firms to use their large cash holdings more productively. In 2014, the government introduced a

Japan: **Demand and output**

	2013	2014	2015	2016	Fourth quarter 2014	Fourth quarter 2015	Fourth quarter 2016
	Current prices ¥ trillion	Percentage changes from previous year, volume (2005 prices)					
GDP at market prices	480.1	-0.1	0.7	1.4	-0.8	1.9	1.3
Private consumption	293.5	-1.3	0.3	2.0	-2.4	1.9	2.0
Government consumption	98.8	0.3	0.9	0.1	0.6	1.1	-1.2
Gross fixed investment	104.3	2.6	-0.6	0.1	-1.6	1.0	0.5
Public[1]	22.9	3.8	-4.4	-17.8	1.6	-10.6	-17.8
Residential	15.3	-5.1	-2.0	8.3	-15.7	7.8	9.2
Non-residential	66.1	3.9	0.8	4.0	0.6	3.6	4.0
Final domestic demand	496.6	-0.1	0.2	1.2	-1.6	1.6	1.0
Stockbuilding[2]	- 2.9	0.1	0.3	0.0			
Total domestic demand	493.8	-0.1	0.5	1.2	-1.8	2.1	1.0
Exports of goods and services	77.5	8.4	7.2	5.8	11.2	5.7	6.7
Imports of goods and services	91.2	7.4	4.9	4.6	3.6	6.4	4.9
Net exports[2]	- 13.6	0.0	0.3	0.2			

Note: Detailed quarterly projections are reported for the major seven countries, the euro area and the total OECD in the Statistical Annex.

1. Including public corporations.
2. Contributions to changes in real GDP, actual amount in the first column.

Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933221853

Japan: **External indicators**

	2012	2013	2014	2015	2016
			$ billion		
Goods and services exports	877.1	794.7	816.5	781	835
Goods and services imports	991.9	933.9	960.8	829	875
Foreign balance	- 114.8	- 139.2	- 144.3	- 48	- 40
Invisibles, net	176.7	178.8	167.2	163	170
Current account balance	61.9	39.6	22.9	116	130
			Percentage changes		
Goods and services export volumes	- 0.2	1.2	8.4	7.2	5.8
Goods and services import volumes	5.3	3.1	7.4	4.9	4.6
Export performance[1]	- 4.1	- 3.3	4.9	2.6	0.0
Terms of trade	- 1.5	- 2.0	- 1.0	8.4	0.2

1. Ratio between export volume and export market of total goods and services.
Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933221860

Stewardship Code to encourage institutional investors to constructively engage with the companies in which they invest. In addition, a corporate governance code that requires listed companies to have at least two independent directors (on a comply or explain basis) is being introduced. Its effectiveness will depend on the extent to which these directors are independent in practice. Another priority is to reduce product market regulation, which would boost investment, the diffusion of knowledge, managerial performance and the creation of new firms. Policies to revitalise venture capital investment, notably by ensuring second chances and developing entrepreneurial education, would also increase firm creation. The corporate income tax rate is to be cut from 34.6% in FY 2014 to 31.3% in FY 2016 to encourage investment. Higher business investment would offset the decline in public investment, which is expected to fall as reconstruction spending following the 2011 Great East Japan Earthquake fades.

The working-age population (15-64) is already falling by more than one million per year and is projected to decline by 17% by 2030. Raising women's participation rate, which is 20 percentage points below that of men, is thus another priority to sustain growth. The large gender gap reflects the fact that only 38% of women remain in the labour force after having a baby. To narrow the gap, it is essential to expand childcare and improve work-life balance by changing the culture of long working hours. Aspects of the tax and social security systems that reduce work incentives for second earners should also be reformed. In addition, it is important to break down labour market dualism in order to reduce the large gender wage gap of 27% at the median earnings, which reflect women's high share of relatively low paid non-regular employment.

Fiscal consolidation should continue, while monetary policy remains very supportive

The expected decline in government investment, from 4.7% of GDP in 2014 to around 3½ per cent in 2016, is the major factor driving fiscal consolidation during the projection period. The general government budget deficit is projected to narrow by 2 percentage

points of GDP to 5¾ per cent in 2016. Nevertheless, Japan is not on track to achieve its target of a primary surplus (central and local governments) by FY 2020, even after the planned hike in the consumption tax to 10% in 2017. To maintain confidence in Japan's fiscal sustainability, the fiscal plan to be announced by the summer of 2015 should set out a detailed and credible strategy to achieve a primary surplus by FY 2020, including additional measures to constrain government spending and raise revenues. Even at 10%, the consumption tax will remain about half the average value-added tax rate in OECD countries. Additional tax revenue should come from broadening the personal and corporate income tax bases and increasing environmental taxes. It is also essential to reform pension and health and long-term care to constrain the growth of social spending by measures such as raising the pension eligibility age, shortening hospital stays and increasing use of generic drugs.

The recalibration of the Bank of Japan's "quantitative and qualitative monetary easing" (QQE) in October 2014 raised the target increase in the monetary base to around 80 trillion yen per year, primarily through larger purchases of government bonds. Quantitative easing has already boosted the central bank's balance sheet to 65% of GDP, and has helped boost inflation expectations. QQE should continue until the 2% inflation target is durably achieved.

The expansion is projected to strengthen through 2016

Despite continued fiscal consolidation, output growth is projected to pick up to around ¾ per cent in 2015 and 1½ per cent in 2016. The fall in the working-age population will further tighten labour markets. Recent wage settlements, combined with the slowdown in inflation, have pushed up real wages, supporting private consumption. Labour and capacity shortages, higher profits and improved corporate governance will support business investment. The sustained recovery is projected to increase inflation to 1½ per cent by the end of 2016. Given the weaker yen, Japan is well positioned to maintain export growth as world trade picks up, lifting the current account surplus to around 3% of GDP.

Sustained output growth requires a virtuous circle of rising prices, wages and corporate earnings. Sluggish nominal wage growth is the key risk in this respect. Japan's unprecedentedly high level of public debt implies that, in the absence of a credible plan to achieve its fiscal target, Japan could face a loss of confidence in its fiscal sustainability, which in turn could destabilise the financial sector and the real economy with large spillovers to the world economy. Japan's export prospects depend on growth in emerging markets, especially China, Japan's largest trading partner. On the positive side, private consumption may increase more rapidly if the shrinking labour force led to faster wage increases than projected. Likewise, firms might invest more strongly than projected.

KOREA

Output growth is projected to slow to around 3% in 2015, reflecting sluggish private consumption in the context of high household debt and stagnant wages. Inflation has fallen to less than 1%, well below the target range of 2.5% to 3.5%, while weak domestic demand is boosting the current account surplus to around 7% of GDP. Lower oil prices are projected to support stronger consumption and investment, boosting output growth to 3½ per cent in 2016.

With output projected to remain below potential for the fourth straight year, fiscal stimulus is needed to support economic activity and complement monetary policy easing, which has reduced the policy interest rate to a record low. Korea also needs wide-ranging structural reforms, including those in the 2014 Three-year Plan for Economic Innovation, to support its growth potential.

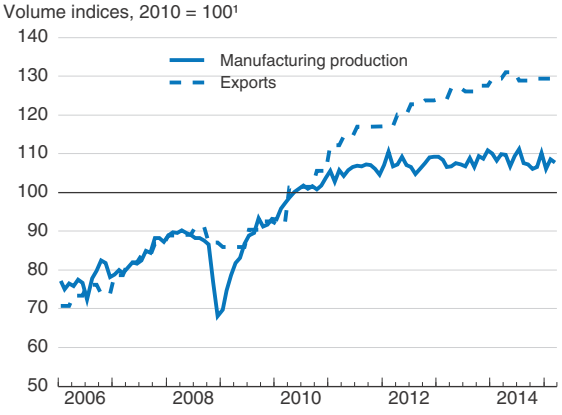
A top priority is to raise investment to reverse the declining contribution of capital growth to productivity and GDP growth. Implementation of the government reform agenda, which focusses on relaxing regulations and promoting the development of a creative economy, is key to supporting business investment and boosting inclusive growth.

Economic activity has been sluggish

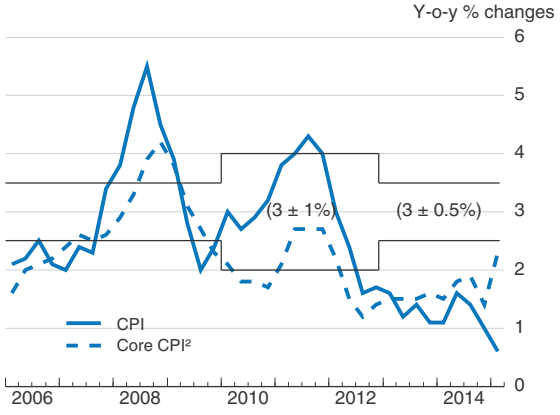
Private consumption continues to be a drag on the economy, growing more slowly than output in 2014 for the ninth consecutive year. This reflects the lack of real wage growth in 2014, and rising household debt to over 160% of disposable income. Export growth has weakened sharply, reflecting the appreciation of the Korean won by 17% in trade-weighted terms since late 2012, and falling shipments to China in early 2015. Sluggish output growth and lower oil prices reduced consumer price inflation to 0.6% (year-on-year) in the first quarter of 2015.

Korea

Exports and industrial production have stagnated



Headline inflation has fallen further below the central bank's target zone



1. Seasonally-adjusted for production and exports (on a national accounts basis).
2. Corresponds to the OECD measure of core inflation, which excludes food and energy.

Source: Statistics Korea; *OECD Economic Outlook 97 database*; and Bank of Korea.

StatLink http://dx.doi.org/10.1787/888933221165

Korea: **Demand, output and prices**

	2011	2012	2013	2014	2015	2016
	Current prices KRW trillion	Percentage changes, volume (2010 prices)				
GDP at market prices	1 332.7	2.3	2.9	3.3	3.0	3.6
Private consumption	679.1	1.9	1.9	1.8	2.3	2.8
Government consumption	194.4	3.4	3.3	2.8	3.2	4.0
Gross fixed capital formation	403.0	-0.5	3.3	3.1	4.0	4.4
Final domestic demand	1 276.6	1.4	2.5	2.4	2.9	3.5
Stockbuilding[1]	36.2	-0.6	-1.0	0.5	0.5	0.0
Total domestic demand	1 312.8	0.7	1.4	3.0	3.5	3.5
Exports of goods and services	742.9	5.1	4.3	2.8	1.7	5.9
Imports of goods and services	723.0	2.4	1.7	2.1	2.6	5.9
Net exports[1]	19.9	1.5	1.5	0.5	-0.3	0.4
Memorandum items						
GDP deflator	_	1.0	0.9	0.6	1.1	1.0
Consumer price index	_	2.2	1.3	1.3	0.8	1.8
Private consumption deflator	_	2.2	1.0	1.1	0.8	1.9
Unemployment rate	_	3.2	3.1	3.5	3.6	3.5
Household saving ratio, net[2]	_	3.9	5.6	7.0	7.0	6.9
General government financial balance[3]	_	1.0	1.3	1.6	1.0	1.0
General government gross debt[3]	_	34.8	34.8	34.5	34.9	35.5
General government net debt[3]	_	-35.9	-36.0	-36.3	-35.8	-35.2
Current account balance[3]	_	4.1	6.2	6.4	7.0	6.6

1. Contributions to changes in real GDP, actual amount in the first column.
2. As a percentage of disposable income.
3. As a percentage of GDP at market value.

Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933222218

Monetary easing is supporting the economy

The Bank of Korea has responded by reducing its policy rate to 1¾ per cent through three cuts since mid-2014. In addition, the government has relaxed macro-prudential measures that have constrained mortgage lending in order to revitalise the housing market. Such measures, though, have led to a rise in real housing prices and risk further increasing household debt. Government spending is to rise by 5.7% in 2015 in an effort to boost demand. However, government consumption increased by less than 1% in the first quarter of 2015.

Structural reforms are needed to boost investment and labour force participation

The government's Three-year Plan for Economic Innovation aims to increase business investment, which has fallen from more than 40% of GDP prior to the 1997 crisis to around 20%. To some extent, the decline reflects a welcome increase in firms' focus on profitability and balance-sheet risks. Even with the decline, total fixed investment as a share of GDP in Korea is the highest in the OECD. The government aims to increase business investment primarily by capping the total burden of regulations by introducing a welcome "one-in, one-out" system: whenever a new regulation is introduced or existing regulations are

strengthened, other regulations should be abolished or relaxed. Reducing product market regulation would also boost investment, the diffusion of knowledge, managerial performance and the creation of new firms.

With Korea's working-age population (15-64) set to peak in 2016, it is increasingly important to reduce gender gaps and to boost the employment rate of women, which at 54% in 2013, was 21 percentage points below that of men. The low rate reflects the withdrawal of a majority of women at the time of marriage or childbirth, indicating the importance of improving work-life balance by reducing working hours, which are more than 20% higher than the OECD average. In addition, the 37% gender wage gap at median earnings is the highest in the OECD, discouraging female employment. The gap reflects the large share of women in non-regular jobs and the low share in management. It is necessary to create better job opportunities for women, notably by breaking down labour market dualism and expanding the role of performance, rather than seniority, in setting wages. In short, reforms are needed to offer women the hours, jobs, wages and careers that would encourage them to work.

Growth will pick up thanks in part to lower oil prices

Output growth is projected to pick up from 3% in 2015 to around 3½ per cent in 2016, as exports rise owing to the projected recovery in world trade and Korea's free trade agreements with Australia, Canada, China and New Zealand in 2014. Faster export growth should promote fixed investment, although the operating profits of listed companies fell in 2014. Despite the high level of debt, private consumption is expected to gradually strengthen thanks to the impact of lower oil prices and real wage gains. Stronger growth, along with the assumed stability of oil prices and the won, is projected to push up inflation towards 2% in 2016.

Korea is particularly vulnerable to developments in the Chinese economy, as its exports to China account for 14% of Korean GDP. A rebound in private consumption could be stalled by continued stagnation in real wages and a further rise in household debt in response to lower interest rates and the measures to revitalise the housing market. On the upside, with the resolute implementation of structural reforms, Korea could once again regain its export dynamism.

LATVIA

Growth is expected to improve only slightly in 2015, but more robustly in 2016. Exports will continue to be weakened by the severe recession in Russia, but this will be partly offset by the recovery in the euro area. Private consumption will remain strong, supported by further increases in household disposal income. However, the pick-up in investment will be delayed due to the regional geopolitical tensions and the resulting high level of uncertainty.

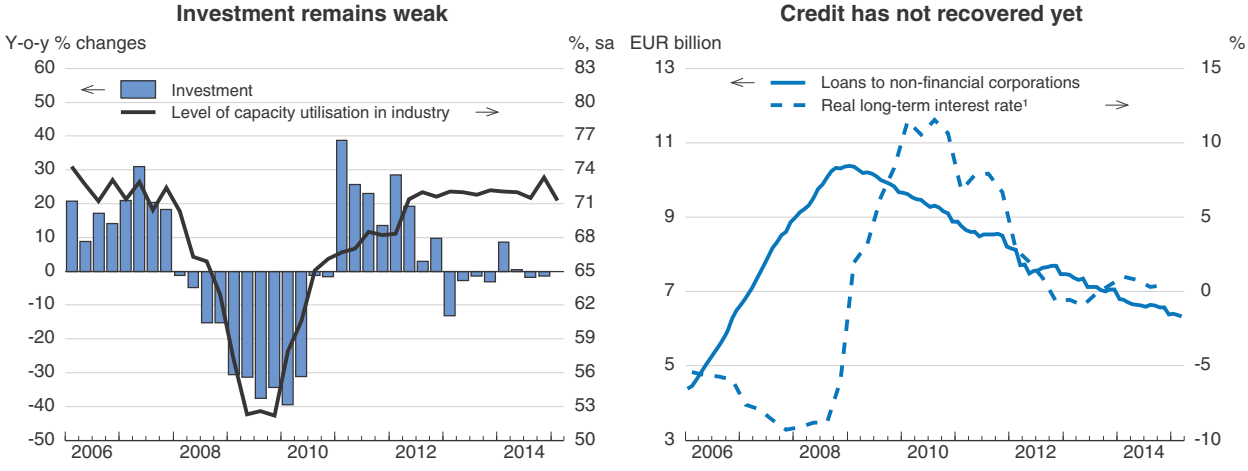
The accommodative stance of monetary policy in the euro area is expected to underpin growth by easing access to credit. Fiscal policy will also be supportive, but needs to remain prudent to ensure there is room to cope with potential adverse external shocks. Poverty could be reduced by better targeting social benefits, reducing taxes on low wages and fighting informality.

Despite the rapid recovery, business investment has decreased as a share of GDP since 2012 and bank credit continues to contract. To increase Latvia's attractiveness for investors and support business confidence, regulatory procedures should be simplified further and the enforcement of competition law strengthened. Enhancing the quality of transport infrastructure and the interconnectivity of energy networks to the rest of the European Union is also crucial. Accelerating the absorption of EU funds could support public investment.

Private consumption is the main growth driver

GDP growth has slowed but remains among the strongest in the euro area. The recession in Russia, Latvia's third largest trading partner, has weighed on exports. Investment has remained subdued due to the deterioration of the regional business climate and uncertainty about economic developments in the euro area. Meanwhile, private consumption has sustained economic activity. The continuous fall in unemployment and strong increases in real disposable income, backed by the decline in oil

Latvia



1. Real long-term interest rate based on lagged GDP deflator.

Source: OECD Economic Outlook 97 database; European Commission; and Central Bank of Latvia.

StatLink http://dx.doi.org/10.1787/888933221177

Latvia: **Demand, output and prices**

	2011	2012	2013	2014	2015	2016
	Current prices € billion	Percentage changes, volume (2010 prices)				
GDP at market prices	20.3	4.8	4.2	2.4	2.4	3.6
Private consumption	12.7	3.0	6.2	2.3	2.8	3.6
Government consumption	3.7	0.4	2.9	3.4	3.0	2.8
Gross fixed capital formation	4.5	14.5	-5.2	1.3	1.1	4.3
Final domestic demand	20.9	4.9	2.8	2.3	2.5	3.7
Stockbuilding[1]	0.4	-2.6	0.3	-0.3	0.5	0.0
Total domestic demand	21.3	2.3	3.2	2.0	2.9	3.6
Exports of goods and services	11.7	9.8	1.4	2.2	0.9	4.6
Imports of goods and services	12.7	5.4	-0.2	1.6	1.7	4.6
Net exports[1]	- 1.0	2.3	1.0	0.4	-0.5	-0.1
Memorandum items						
GDP deflator	_	3.6	1.1	1.2	1.1	2.4
Harmonised index of consumer prices	_	2.3	0.0	0.7	0.5	2.4
Private consumption deflator	_	3.4	0.4	0.6	0.5	2.4
Unemployment rate	_	15.0	11.9	10.8	10.0	9.1
General government financial balance[2]	_	-0.8	-0.7	-1.4	-1.4	-1.2
General government gross debt[2]	_	45.9	43.3	46.2	43.1	45.9
General government debt, Maastricht definition[2]	_	40.9	38.2	40.0	36.9	39.7
Current account balance[2]	_	-3.3	-2.3	-3.1	-3.1	-3.0

1. Contributions to changes in real GDP, actual amount in the first column.
2. As a percentage of GDP at market value.
Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933222429

prices and another significant hike in the minimum wage, have supported consumer confidence and spending.

Monetary and fiscal policies will be supportive but structural policies are needed to reduce inequality

Quantitative easing by the European Central Bank will keep interest rates low over the projection period. Financing conditions should improve over the next two years and sustain investment. Uncertainty created in the banking sector by recent changes in the insolvency law, notably the introduction of non-recourse loans which limit the liability of mortgage borrowers to collateral in March 2015, has faded gradually. Nevertheless, credit will recover only slowly as debt reduction is still on-going. Loan standards will remain relatively tight in the short run. Demand for credit is also expected to remain weak in 2015 because of uncertain prospects in real estate and export markets.

Fiscal policy will support domestic demand in 2015, notably with another cut in the personal income tax rate. As a result, the structural deficit is set to widen and consolidation measures will be needed to comply with the national fiscal rule – a structural deficit of 0.5% of GDP – in 2016. Fiscal policy should remain prudent and build up a precautionary buffer. As for public investment, the priority should be to address infrastructure bottlenecks in transport and the energy sector. In the latter, lack of

interconnected supply networks raises competition issues, and undermines both firms' price competitiveness and energy security. Investment in infrastructure could be supported by an effective use of EU funds, which amount to around 2.8% of GDP per year in 2014-2020. Further streamlining procedures and reducing the administrative burden on funding recipients could help to make the most of these resources.

Latvia is one of the most unequal societies in the OECD and a relatively high share of the population is at risk of poverty or social exclusion. The estimated structural unemployment rate is 10% and long-term unemployment is very high. To better protect the most vulnerable against poverty and improve labour market performance, the tax and benefit system should be made more redistributive and barriers to employment eliminated. Social benefits - including family benefits - should be more targeted at those most in need and the tax burden on labour should be reduced. Government plans to increase the personal income tax basic allowance and phase it out for higher income would be a step in the right direction. Fighting informality is also crucial as it excludes part of the population from the social security system, lowers their contributions and their entitlement to contribution-based social benefits and diminishes tax revenues that are needed for growth-enhancing spending.

Growth will be closely linked to the recovery in Latvia's trading partners

Exports are set to recover over the projection period, backed by a rebound in the euro area. The large steel producer JSC "KVV Liepajas Metalurgs" restarted production at the beginning of the year, which will also boost exports. Investment should progressively pick up, driven by exports growth, increases in capacity utilisation and the absorption of EU funds. Private consumption will contribute significantly to growth as wages further rise. As a result, GDP growth is set to reach 3.6% in 2016. Inflation will remain contained because firms are expected to continue to absorb some of the wage increases by lowering their margins. Rising unit labour costs will limit employment growth but unemployment will continue to decline steadily as the labour force shrinks.

The main risks relate to growth of Latvia's biggest trading partners. A flare-up of regional tensions could further weigh on trade and investment. Conversely, a stronger recovery in the euro area could spur more activity. Domestically, the capacity of exporters to further diversify markets and the impact of wage developments on competitiveness is uncertain. Policies that improve the business environment by simplifying procedures, strengthening the enforcement of competition law or easing the use of EU funds would accelerate the recovery of investment.

LUXEMBOURG

Growth is projected to remain robust at just below 3%, notwithstanding the shift in the EU VAT regime for e-commerce (which makes Luxembourg less attractive for certain export-oriented activities) and higher domestic VAT rates (introduced to partially offset the loss of revenue from e-commerce). Lower oil prices, a weaker euro and an ongoing recovery in the euro area will support exports and investment. The higher VAT will boost prices in 2015, and the backward-looking wage indexation could add to upward price pressures in 2016.

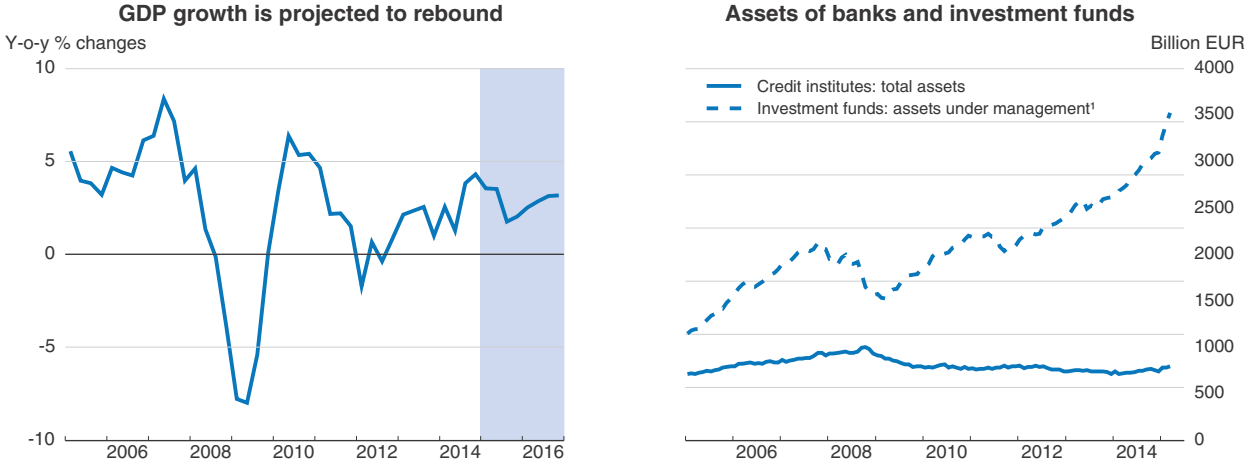
The government is determined to keep the debt-to-GDP ratio low. This effort would be facilitated by introducing more effective spending control, including a spending ceiling for the general government in the medium-term budgeting framework. Structural reforms should focus at bringing people back to work by adjusting the tax and benefit system and enhancing active labour market policies. Structural reforms in education would improve the attainment of students from disadvantaged backgrounds and raise the pool of workers able to work in the higher value-added activities.

Going forward, gross fixed investment will contribute positively to GDP growth. The share in GDP of non-residential gross fixed investment is above the OECD average. On the other hand, investment in knowledge-based capital, including overall and business spending on research and development, is lower than in many other OECD countries, pointing to unexploited growth and employment potential. Stepping up investment in knowledge-based capital and unlocking enterprise innovation can help Luxembourg raise productivity and keep its high living standards.

Economic activity remains robust

Economic growth in 2014 remained significantly higher than the euro area average, supported by resilient domestic demand and robust activity in the financial sector. However, unemployment has continued to rise and the youth unemployment rate reached

Luxembourg



1. Undertakings for collective investment, net assets.

Source: OECD Economic Outlook 97 database; Commission de Surveillance du Secteur Financier; and Banque Centrale du Luxembourg.

StatLink http://dx.doi.org/10.1787/888933221181

Luxembourg: **Demand, output and prices**

	2011	2012	2013	2014	2015	2016
	Current prices € billion	Percentage changes, volume (2005 prices)				
GDP at market prices	42.4	-0.1	2.0	3.0	2.7	2.9
Private consumption	13.3	1.9	1.5	2.7	2.0	2.8
Government consumption	6.9	3.8	5.1	3.2	1.2	2.4
Gross fixed capital formation	7.6	2.7	-4.4	5.5	6.8	1.1
Final domestic demand	27.9	2.6	0.8	3.6	3.1	2.2
Stockbuilding[1]	0.5	-1.6	-0.1	-0.8	-0.2	0.0
Total domestic demand	28.4	0.3	0.6	3.9	3.2	2.3
Exports of goods and services	78.5	3.0	5.6	2.5	3.6	4.0
Imports of goods and services	64.5	3.8	5.8	2.1	4.0	4.0
Net exports[1]	14.0	-0.3	1.6	1.5	0.7	1.5
Memorandum items						
GDP deflator	_	3.4	1.4	1.6	1.7	1.4
Harmonised index of consumer prices	_	2.9	1.7	0.7	0.1	1.5
Private consumption deflator	_	1.9	0.3	0.0	0.5	1.4
Unemployment rate	_	6.1	6.9	7.1	7.1	7.0
General government financial balance[2]	_	0.1	0.9	0.6	0.1	0.4
General government gross debt[2]	_	29.6	29.7	31.3	33.2	34.7
General government debt, Maastricht definition[2]	_	21.4	23.6	25.1	27.0	28.5
Current account balance[2]	_	5.7	4.9	5.7	4.1	4.4

1. Contributions to changes in real GDP, actual amount in the first column.
2. As a percentage of GDP at market value.
Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933222223

22% at the end of 2014. Luxembourg's external position is strong, characterised by persistent current account surpluses and a net international asset position of 219% of GDP. The general government budget is in surplus and general government gross debt, at 25% of GDP on the Maastricht definition, low.

Financial risks should be monitored and structural reforms made to budgeting

The authorities should continue to monitor financial risks by using a comprehensive risk assessment framework that accounts for linkages between banks and non-bank financial intermediaries, notably investment funds. Continued co-operation with regulatory authorities in other jurisdictions outside the EU is also needed to develop resolution plans and to undertake resolvability assessments that facilitate effective cross-border resolution.

The new EU VAT regime for e-commerce that started in January 2015 is expected to reduce government revenues by about 1.5% of GDP in 2015, as VAT is now collected in the buyer country instead of the seller country. In anticipation, the government has taken compensatory tax and spending measures. An increase in the VAT rates by 2 percentage points is expected to raise revenues by about 0.5% of GDP. In addition, the government has taken significant measures to reduce spending, estimated to generate net saving of 0.4% of GDP in 2015. These measures could be complemented by strengthening the fiscal

framework by adding a spending ceiling to manage medium-term budgeting pressures. The newly established fiscal council could be charged with evaluating budgets from the perspective of the medium-term budget developments and, if it were adopted, the spending ceiling.

Growth is projected to recover

Growth is projected to slow just slightly in 2015 as the shift of the EU VAT regime for e-commerce weakens export growth and higher value-added tax rates bear on demand, and then to strengthen again in 2016. Throughout the projection, activity will be supported by very accommodative monetary conditions, domestic demand growth and improvements in trade of services. The unemployment rate will peak at 7.1% in 2015 and edge down in 2016. The VAT hike and a round of wage indexation expected to take place in 2016 will keep inflation above the euro area average.

Given Luxembourg's trade and financial linkages, much depends on the strength of the ongoing recovery in the euro area. The negative effect of the new EU VAT regime on Luxembourg's position in e-commerce could be larger than expected. High cross-border financial linkages between domestic banks, their groups' foreign banks and investment funds could transmit external shocks, including enhanced financial volatility in the euro area, into the domestic economy. On the other hand, the solid reputation of the Luxembourg's financial sector could also result in larger safe haven capital inflows. A sustained drop in the oil price and the euro depreciation might also support stronger growth via higher net exports.

MEXICO

Mexico's economic recovery is strengthening, led by US import demand for manufactures and a weaker currency. Real GDP is projected to grow by 2.9% in 2015 and 3.5% in 2016. Firming exports have finally allowed the rebound to gain speed, and investment has begun to regain lost ground. Notwithstanding lower oil prices, new tenders are attracting considerable interest in the wake of the recent energy-sector reforms. Wide-ranging reforms to competition, energy and market regulation have helped boost confidence while monetary policy has been supportive.

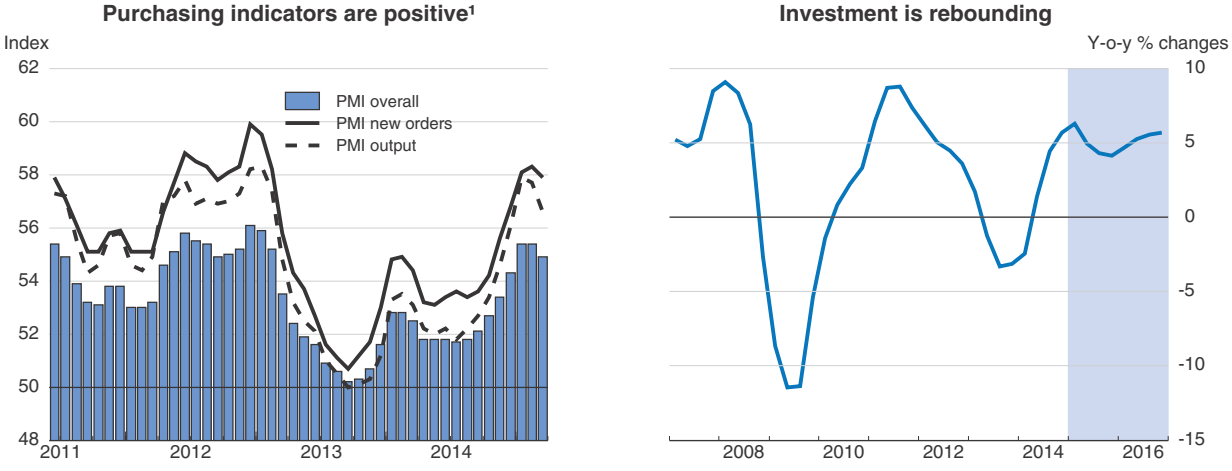
While monetary policy has remained on hold so far, interest rates will need to be raised once the US Federal Reserve raises its rates to forestall potential capital outflows. Spending was tightened early in 2015 and a balanced budget is still foreseen in 2017.

Overall investment spending has been picking up strongly, particularly for durable equipment, while residential construction is also rising, albeit more gradually. Determined efforts to implement the wide-ranging recent structural reforms offer the best chance to boost investment and productivity, helping to ensure more rapid and sustainable gains in well-being going forward.

The rebound in activity is gaining momentum

The Mexican economy has faced repeated delayed recoveries over the past few years due to a combination of weak global demand, domestic financial problems in the construction sector and, until last year, insufficient structural reforms. The ongoing strengthening of the US economy, an easing of the construction sector's problems, and a recent comprehensive package of structural reforms are all improving the investment climate. Investment has picked up substantially, and manufacturing activity has been growing still faster, supporting a robust formal job market and boosting household incomes and consumption growth.

Mexico



1. Based on a 3-month moving average of the Markit Purchasing Managers' Index (PMI) for Mexico. Readings above 50.0 signal an improvement in business conditions on the previous month, while readings below 50.0 signal a deterioration.

Source: Markit and *OECD Economic Outlook 97 database*.

StatLink http://dx.doi.org/10.1787/888933221196

Mexico: **Demand, output and prices**

	2011	2012	2013	2014	2015	2016
	Current prices MXN billion	Percentage changes, volume (2008 prices)				
GDP at market prices	14 544.4	3.8	1.7	2.1	2.9	3.5
Private consumption	9 658.3	4.7	2.5	2.0	2.7	3.1
Government consumption	1 683.0	3.3	1.6	2.5	-0.3	-0.2
Gross fixed capital formation	3 156.9	4.8	-1.5	2.2	4.9	5.1
Final domestic demand	14 498.2	4.5	1.5	2.1	2.8	3.2
Stockbuilding[1]	225.1	0.3	-0.1	0.3	-0.1	0.0
Total domestic demand	14 723.3	4.8	1.4	2.4	2.7	3.2
Exports of goods and services	4 543.3	5.9	2.1	7.3	8.5	7.6
Imports of goods and services	4 722.2	4.6	2.9	6.3	6.4	6.8
Net exports[1]	- 178.9	0.4	-0.3	0.2	0.6	0.3
Memorandum items						
GDP deflator	_	3.6	1.5	3.6	3.1	3.0
Consumer price index	_	4.1	3.8	4.0	3.5	3.1
Private consumption deflator	_	3.9	2.7	3.6	3.1	2.9
Unemployment rate[2]	_	4.9	4.9	4.8	4.7	4.6
Public sector borrowing requirement[3,4]	_	-3.5	-3.8	-4.7	-4.0	-3.5
Current account balance[4]	_	-1.3	-2.4	-2.1	-2.0	-2.1

1. Contributions to changes in real GDP, actual amount in the first column.
2. Based on National Employment Survey.
3. Central government and public enterprises.
4. As a percentage of GDP at market value.

Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933222233

Monetary policy remains supportive

The central bank's target interest rate remains at an all-time low of 3%. Inflation has fallen closer to the centre of the Bank's target band, easing concerns that interest rates will need to be raised soon. Moreover, inflation expectations are well anchored. At the same time, the Mexican peso has depreciated by almost 20% in nominal effective terms in recent months, helping to boost external competitiveness.

Fiscal policy was accommodative until earlier this year, with the public sector borrowing requirement (PSBR) expanding by almost one percentage point of GDP from 2013 to 2014. However, following the collapse in oil prices, given the budget's heavy dependence on oil, the government announced measures to reduce 2015 expenditures by 0.7% of GDP, which will decrease the fiscal cliff associated with a return to "traditional" budget balance by 2017, defined as approximately 3% of GDP in terms of the PSBR.

Demand is strengthening

As US imports and domestic demand continue to grow, activity will gain further momentum and start absorbing excess capacity. The early implementation of structural reforms by the administration – most notably in the energy, financial and telecommunications sectors – is already helping business confidence and the climate for private sector investment, while public sector reforms are helping as well. These reforms

should boost potential growth through increases in the capital stock and gains in productivity. Residential investment is picking up as the housing sector recovers. Capital investment should surge this year and next, boosting manufacturing activity.

The main downside risk to growth comes from possible volatility associated with the withdrawal of US monetary policy accommodation. Mexico has fared well so far, but a bout of emerging market gloom could trigger capital outflows that would drive up longer-term interest rates. Record-high foreign exchange reserves and the Flexible Credit Line offer important backstops against possible shocks. On the positive side, the major structural reforms that have passed could have effects on productivity and investment that occur earlier and are larger than assumed, helping to support gains in well-being.

NETHERLANDS

Economic growth is projected to increase to 2% in 2015 and 2.2% in 2016. Real wage gains will support higher private consumption, while the improved business outlook and the ongoing recovery of the housing market will support investment. Exports are set to continue to increase steadily, boosted by the recovery in the European Union and the low value of the euro. Employment is set to rise significantly and the unemployment rate to fall gradually.

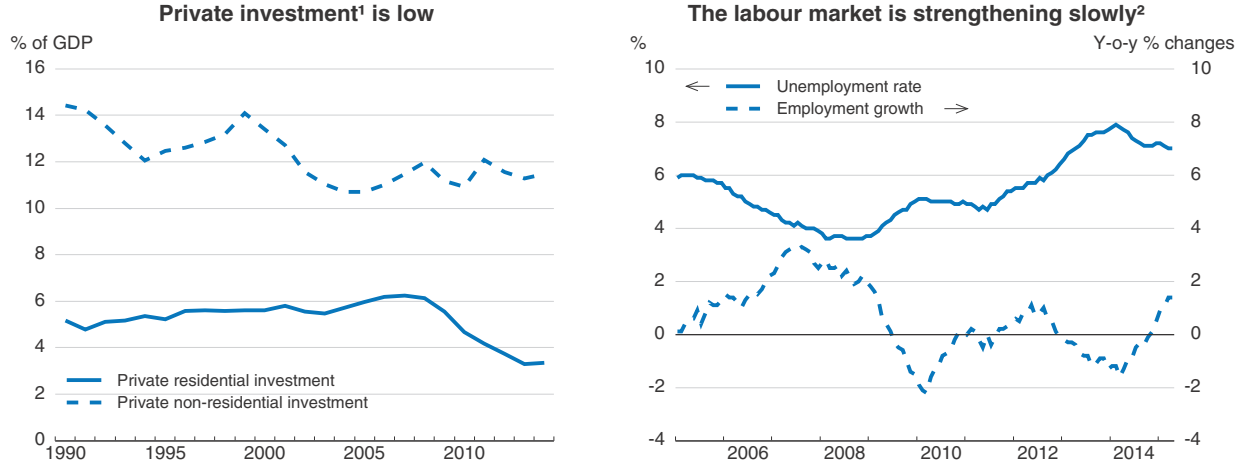
The planned slow pace of structural fiscal consolidation is appropriate given the strengthening but still uncertain recovery. Further reforming employment protection would support job creation and benefit labour reallocation to more productive uses. If the recovery of the housing market proves durable, policy makers should accelerate the reduction of mortgage interest tax relief. Tax and benefit reforms to improve work incentives for second earners would remove a disincentive to women working longer, thus boosting their earnings. The return to trend-based budgetary policy should contribute to budgetary discipline during the government term while allowing automatic stabilisers to operate on the revenue side.

Investment is almost 20% lower than it was before the crisis, mostly due to lower residential investment. Business investment has held up quite well since the crisis, although its share of GDP remains moderate compared to other European Union countries, and growth in the capital stock has fallen significantly since the late 1990s. Access to finance for SMEs is improving, but related policy instruments, in particular public loan guarantees, could be further developed. Relaxing the tight land use regulations could boost residential investment.

The pick-up in growth has been broad-based

The economic recovery has gained traction due to a continuing expansion of private consumption and robust growth of business investment. Exports have also performed strongly, benefitting from improving economic conditions in the European Union and the

Netherlands



1. In nominal terms.
2. Population aged between 15 and 75.

Source: *OECD Economic Outlook 97 database*; and Statistics Netherlands (CBS).

StatLink http://dx.doi.org/10.1787/888933221209

Netherlands: **Demand, output and prices**

	2011	2012	2013	2014	2015	2016
	Current prices € billion	Percentage changes, volume (2010 prices)				
GDP at market prices	642.7	-1.6	-0.7	0.9	2.0	2.2
Private consumption	289.0	-1.5	-1.5	0.1	1.5	1.6
Government consumption	167.1	-1.5	-0.2	-0.3	0.0	-0.3
Gross fixed capital formation	130.3	-6.0	-3.9	3.5	7.0	4.0
Final domestic demand	586.4	-2.5	-1.7	0.7	2.2	1.6
Stockbuilding[1]	1.6	0.1	-0.2	-0.1	-1.0	0.0
Total domestic demand	588.0	-2.4	-1.9	0.5	1.1	1.6
Exports of goods and services	497.3	3.2	2.2	4.0	3.0	5.2
Imports of goods and services	442.6	2.8	1.0	4.0	1.9	5.0
Net exports[1]	54.7	0.6	1.1	0.4	1.1	0.8
Memorandum items						
GDP deflator	_	1.3	1.1	1.1	0.3	1.4
Harmonised index of consumer prices	_	2.8	2.6	0.3	0.1	1.4
Private consumption deflator	_	1.4	1.9	1.3	0.2	1.4
Unemployment rate	_	5.8	7.3	7.4	6.9	6.5
Household saving ratio, net[2]	_	6.5	7.8	8.3	8.5	8.0
General government financial balance[3]	_	-4.0	-2.3	-2.3	-1.8	-1.1
General government gross debt[3]	_	77.9	77.0	81.8	81.6	81.2
General government debt, Maastricht definition[3]	_	66.5	68.6	68.8	68.6	68.2
Current account balance[3]	_	11.0	11.0	10.3	10.0	10.3

1. Contributions to changes in real GDP, actual amount in the first column.
2. As a percentage of disposable income, including savings in life insurance and pension schemes.
3. As a percentage of GDP at market value.

Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933222243

depreciation of the euro. The government deficit in 2014 was 2.3% of GDP, the same as the year before, as outlays fell slightly and lower gas revenues, mainly resulting from the government's decision to reduce production, were broadly offset by higher tax revenues.

Consumer confidence has improved to levels last seen in 2007, which reflects falling unemployment, low inflation, increasing real wages and the ongoing recovery of the housing market. Producer confidence is above the historical average as well. Nevertheless, both indicators have been quite volatile in recent months, indicating that substantial uncertainty remains about the economic outlook.

Slower fiscal consolidation should be accompanied by further structural reforms

The budget plan for 2015 foresees a further reduction of the deficit, mostly as result of the improving economic situation. The implied limited fiscal consolidation strikes an appropriate balance between curbing negative effects on the economic recovery and reducing public debt.

Historically high unemployment indicates that the effects of the crisis are still widely felt. The inclusiveness of the recovery could be deepened by further easing the protection of regular contracts and reducing work disincentives through tax and benefit reforms,

notably by making childcare support more dependent on second earners' income rather than family income. Introducing tighter income conditions for social housing eligibility and accelerating the reduction in mortgage interest tax relief would improve the functioning of the housing market.

Growth will continue to strengthen

Economic activity is expected to accelerate further, supported by increasing domestic demand and strong exports. Inflation will edge up during 2015, but remain below wage growth. Households will use part of the substantial rise in real disposable income to step up consumption and the remainder to increase savings. Job creation will raise employment, but remains weak relative to the expanding labour force, making the decrease in unemployment very gradual. Public finances will improve due to the better economic climate and the foreseen spending restraint.

A halt in the housing market revival, either in the form of disappointing price developments or low sales volumes, could negatively affect consumer spending, mainly through lower confidence. In addition, if the government decides to further reduce gas production, growth could be lower and the budget deficit larger. The low interest rates could pose a risk for the financial position of pension funds and insurance companies. On the other hand, economic activity could expand faster if a tax reform is approved in the coming months. Growth would also benefit from higher than anticipated economic growth in the euro area or lower commodity prices.

NEW ZEALAND

Economic growth is projected to moderate as the fall in the terms of trade depresses domestic demand, the boost from the Canterbury rebuild wanes and immigration slows. Still, the unemployment rate should continue to edge down and wage gains to increase modestly. With economic slack fully absorbed, consumer price inflation is projected to rise to 1.8% by late 2016.

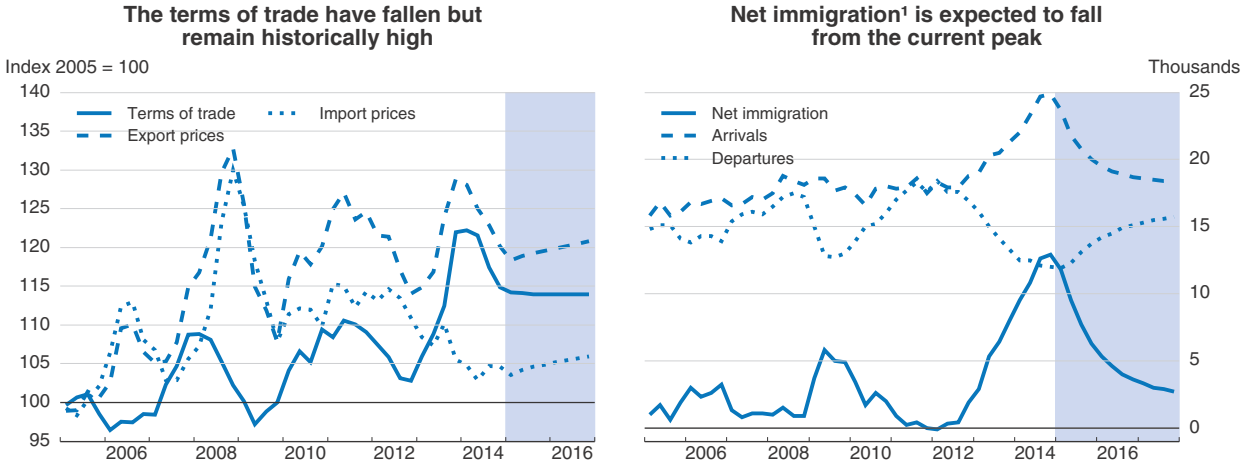
Monetary accommodation should continue so as to allow inflation to return to the middle of the 1%-3% target range. To take pressure off the booming Auckland house market, unwarranted barriers to supply should be reduced, macro-prudential measures tightened, and the taxation of trading gains on property extended and more strongly enforced, as planned. Fiscal policy should continue gradually to reduce the debt-GDP ratio over the medium term, while allowing the automatic stabilisers to operate fully. Fiscal priority should be given to continuing efforts to improve the well-being of the most vulnerable members of society.

Residential investment is 13% above its pre-recession peak, boosted by the Canterbury rebuild and demand pressures in Auckland. Business investment has also grown solidly, reaching 10% above the pre-recession peak, buoyed by diminishing spare capacity, high levels of business confidence and the low cost of capital. Growth in government investment has been more modest.

Economic growth remains strong

Economic growth appears to have eased somewhat in 2015, but the robust expansion continues to be driven by construction activity in Canterbury and Auckland, high and rising levels of net immigration, low interest rates, and still relatively high terms of trade. Intensifying capacity constraints are boosting business investment. Employment growth has been very strong, yet, wage pressures remain subdued, reflecting very high net immigration, and firms' reported difficulty in finding labour is close to its long-term

New Zealand



1. Permanent and long-term, working-age population, quarterly data seasonally adjusted.

Source: Reserve Bank of New Zealand (2015), Monetary Policy Statement, March; and *OECD Economic Outlook 97 database*.

StatLink http://dx.doi.org/10.1787/888933221217

New Zealand: **Demand, output and prices**

	2011	2012	2013	2014	2015	2016
	Current prices NZD billion	Percentage changes, volume (2009 prices)				
GDP at market prices	208.5	2.9	2.5	3.1	3.4	3.0
Private consumption	120.8	2.8	2.9	3.2	3.7	2.8
Government consumption	41.3	-0.9	1.9	3.6	1.4	0.3
Gross fixed capital formation	41.5	7.9	8.6	8.6	7.5	6.1
Final domestic demand	203.6	3.1	3.9	4.5	4.2	3.1
Stockbuilding[1]	0.6	0.0	0.1	0.2	0.0	0.0
Total domestic demand	204.1	3.1	3.9	4.7	4.1	3.1
Exports of goods and services	65.1	1.7	1.1	2.7	3.0	3.9
Imports of goods and services	60.7	2.7	6.3	7.9	5.6	4.2
Net exports[1]	4.4	-0.2	-1.5	-1.4	-0.7	-0.1
Memorandum items						
GDP deflator	_	-0.4	2.8	2.5	-0.8	1.5
Consumer price index	_	1.1	1.1	1.2	0.4	1.7
Core consumer price index[2]	_	1.0	1.2	1.4	1.1	1.7
Private consumption deflator	_	0.7	0.5	0.8	0.2	1.3
Unemployment rate	_	6.9	6.2	5.8	5.6	5.3
Household saving ratio, net[3]	_	2.3	2.2	3.0	3.0	3.0
General government financial balance[4]	_	-1.6	0.3	1.4	1.9	2.3
General government gross debt[4]	_	41.8	40.8	39.2	37.2	34.7
Current account balance[4]	_	-4.0	-3.2	-3.3	-5.4	-5.7

1. Contributions to changes in real GDP, actual amount in the first column.
2. Consumer price index excluding food and energy.
3. As a percentage of disposable income.
4. As a percentage of GDP at market value.

Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933222258

average. Falling oil prices have driven headline CPI inflation down to 0.1%, but excluding vehicle fuels and cigarettes (on which excise tax again increased sharply), inflation is still only 0.7%. World prices for dairy products, New Zealand's largest export, have fallen by half since the early-2014 peak, reversing most of the rise in recent years. But the resulting terms-of-trade decline has been attenuated by the oil price drop.

Fiscal policy is mildly contractionary, but monetary policy remains accommodative

The underlying primary surplus is projected to rise cumulatively by 0.5% of potential GDP over 2015-16, a similar annual rate of increase as in 2014. The government is right to continue to strengthen its fiscal position, as New Zealand faces potentially large macroeconomic shocks and long-term pensions and health-care spending pressures. Fiscal consolidation will also help to mitigate upward pressure on interest and exchange rates. Appropriately, planned consolidation is not to come at the expense of efforts to improve the well-being of the most vulnerable members of society. Certain groups, notably Maori and Pasifika, face long-term barriers to employment and income growth, and suffer

from poor health outcomes, a situation that calls for policies to increase the inclusiveness of growth.

The central bank is maintaining an accommodating monetary policy stance to drive CPI inflation up towards the midpoint of the 1-3% target range. It has announced that it would be appropriate to lower the Official Cash Rate, which at 3.5% is already below the estimated neutral rate, if demand weakens and wage and price-setting outcomes settle at levels lower than is consistent with the inflation target. To counter house price inflation in Auckland, the bank favours removal of unwarranted barriers to supply, which would have most impact in the medium term, supported by restraints on short-term demand. It has announced new macro-prudential measures to rein in investor purchases that take effect from 1 October 2015. These are to be complemented by a government decision to extend the tax on trading gains on property.

Growth should moderate

Growth is projected to moderate to 3% in 2016 as the boost from construction eases and increases in private consumption slow. The maturing of the Canterbury rebuild and the assumed slowdown in net immigration (as the strength in the labour market relative to Australia's diminishes) are set to curb the pace of the expansion. The unemployment rate should fall to near 5%. Wage increases are projected to rise only modestly, but headline inflation to pick up to 1.8% by late 2016. The current account deficit may reach 5¾ per cent of GDP, which is too high to stabilise net external liabilities as a share of GDP.

Prospects depend significantly on the evolution of global dairy prices. Further declines would reduce incomes and could put pressure on highly leveraged producers; but prices could also recover, in particular as China rebalances towards urban consumers, who tend to purchase milk products. Global interest rates could rise faster than assumed, perhaps as US monetary policy begins to normalise. For New Zealand, this could raise the cost of funds needed to finance the large negative international investment position. Continued house price appreciation would boost household wealth and consumption but also pose a growing risk of correction if prices deviate from fundamentals.

NORWAY

Growth is projected to weaken in 2015 as the fall in oil prices dents petroleum sector activity and investment, with spillovers on the mainland economy. A gradual recovery in 2016 will be supported by firming business investment in non-oil activities and stronger external demand. The unemployment rate is expected to drift up to slightly above 4% and wage growth is set to moderate. Inflation will remain low given the economic slack.

Monetary policy should remain accommodative, given the absence of inflationary pressures. An expansionary fiscal policy is appropriate in current circumstances. Rising house prices and mortgage lending require continued monitoring given high household debt levels. Improvements in competitiveness and productivity, including through product market reforms and education system improvements, are vital for broad-based growth.

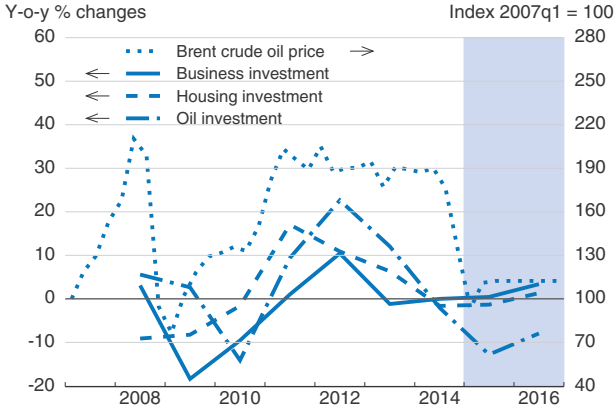
The strong rise in petroleum investment in recent years has come to a halt amid cost-reductions by oil companies, the completion of several large-scale projects and the oil-price plunge. Stimulating investment in the non-resource sector hinges upon a more business-friendly tax system, lower administrative burdens and a more modern infrastructure. Planned improvements in transport and communication networks are hence welcome. Greater public spending efficiency would benefit growth potential.

Activity is slowing in both oil and non-oil sectors

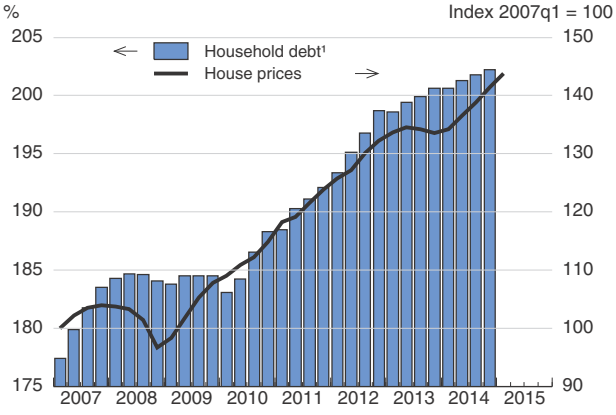
The mainland economy is weakening with the oil-price fall curbing activity in the offshore sector, with spillovers on domestic demand and employment in non-oil sectors. However, exchange rate depreciation and slower wage growth are helping the competitiveness of non-oil exporters, while lower interest rates support private consumption. House prices remain high, despite a weaker economy, and household debt levels rose to over 200% of disposable income.

Norway

Investment has been affected by falling oil prices



Household debt and house prices remain high



1. Loan debt as a percentage of disposable income.

Source: OECD Economic Outlook 97 database; Statistics Norway; and Norges Bank.

StatLink http://dx.doi.org/10.1787/888933221228

Norway: **Demand, output and prices**

	2011	2012	2013	2014	2015	2016
	Current prices NOK billion	Percentage changes, volume (2012 prices)				
GDP at market prices	2 792.0	2.7	0.7	2.2	1.2	1.5
Private consumption	1 125.0	3.5	2.1	2.0	1.8	1.9
Government consumption	587.6	1.6	1.7	2.7	2.4	2.4
Gross fixed capital formation	595.5	7.6	6.8	0.6	-3.6	0.5
Final domestic demand	2 308.1	4.1	3.3	1.8	0.4	1.6
Stockbuilding[1]	125.3	-0.3	0.5	0.2	0.6	-0.1
Total domestic demand	2 433.4	3.5	3.6	1.9	1.2	1.4
Exports of goods and services	1 154.1	1.4	-3.0	2.7	1.8	2.2
Imports of goods and services	795.6	3.1	4.3	1.9	1.3	1.6
Net exports[1]	358.5	-0.3	-2.4	0.5	0.3	0.3
Memorandum items						
Mainland GDP at market prices[2]	_	3.8	2.3	2.2	1.4	2.1
GDP deflator	_	3.4	2.7	0.4	-0.5	2.5
Consumer price index	_	0.7	2.1	2.0	2.1	2.2
Private consumption deflator	_	1.1	2.8	2.3	2.3	2.3
Unemployment rate	_	3.1	3.4	3.5	4.1	4.2
Household saving ratio, net[3]	_	8.4	8.5	9.3	9.2	9.2
General government financial balance[4]	_	13.8	11.3	9.1	6.4	6.3
General government gross debt[4]	_	34.5	35.0	32.6	34.5	35.4
Current account balance[4]	_	12.4	10.0	8.5	6.9	6.9

1. Contributions to changes in real GDP, actual amount in the first column.
2. GDP excluding oil and shipping.
3. As a percentage of disposable income.
4. As a percentage of GDP at market value.

Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933222265

Monetary and fiscal policies support growth

The central bank cut its policy rates by 0.25 percentage point to 1.25% in December 2014 on concerns about the weakening domestic outlook. Monetary policy should remain accommodative for some time to support recovery, given that inflation is below target. Rising house prices and mortgage lending will require continued close monitoring in view of high household debt levels and risks of housing market overheating. Further macro-prudential measures should be considered to reduce risks to financial stability. The financial supervisory authority's proposals for further tightening banks' mortgage lending practices go in the right direction.

The interim budget for 2015 entails a fiscal stimulus equivalent to half a percentage point of mainland GDP. An expansionary fiscal policy is appropriate given current circumstances. Prudence with respect to the "4% rule" governing the use of oil revenues needs to continue, as this will provide a buffer if growth falters.

Structural policies should promote transition to broader-based growth

The government has already taken some steps to this end, including targeted tax reductions, new infrastructure investment and efforts to reduce government bureaucracy.

The interim 2015 budget proposes measures to make tax collection simpler. Going forward, product market reforms and improvements to the education system are key to boosting competitiveness and productivity. In addition, further lightening of taxation and greater public-spending efficiency, through for example more extensive use of cost-benefit analysis for the selection of public-investment projects, would also help.

Continuing structural reforms to sustain inclusive growth is essential. Norway benefits from high labour-force participation, thanks largely to strong female participation, and low unemployment rates. However, the generous sickness and disability system has led to a significant number of people withdrawing from the labour market. The government has a quantitative goal to reduce sickness absence and has announced specific reforms towards this end, including a new medical assessment. Providing clear guidelines on disability assessment and monitoring compliance are important to lower the take-up of disability benefits.

Growth will pick up gradually

Growth is projected to rise in 2016, as business investment and exports increase and new oil investment projects partially offset the decline in ongoing projects. Housing construction will also contribute to the recovery on the back of low interest rates and relatively high house prices. The unemployment rate will edge up further but then start declining towards the end of the projection period. Inflation will remain low given economic slack, slowing wage growth and fading impact of imported inflation. The current account will continue to be in surplus.

Norway remains vulnerable to terms of trade shocks. Oil prices may rise from their current levels, boosting producers' and government's revenues. By contrast, a further decline could see cuts in oil production, further reduction in exploration activity and damp the mainland recovery through second-round effects on incomes and business demand. Domestically, the high level of household debt remains a risk, leaving households, and potentially the banking sector, vulnerable to interest-rate or house-price shocks. However, the slowdown in wage growth and progress in structural reforms may boost competitiveness and growth more than expected.

POLAND

Output growth, supported by strengthening private consumption, is projected to continue to rise, reaching 3.7% in 2016. The labour market will make further progress, and exports will benefit from firmer international trade and faster growth in the euro area. Energy and food prices have started to turn around following sharp falls, and, after several months of deflation, consumer prices should gradually pick up again.

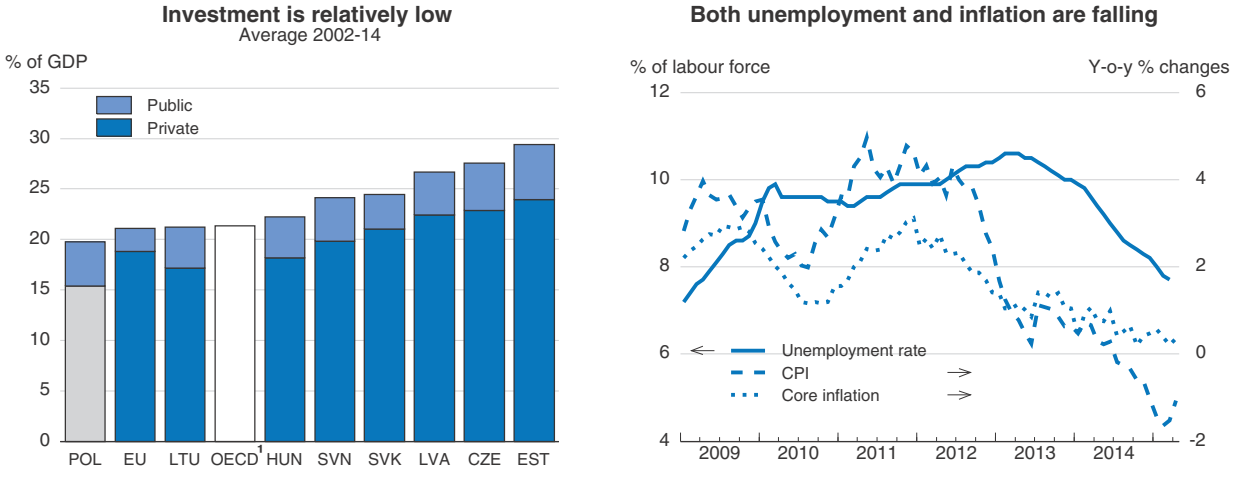
Monetary policy should remain supportive, and it is assumed that the central bank will not start to raise interest rates before late-2016. The slightly restrictive fiscal stance is broadly appropriate and the European Council is likely to approve Poland's exit from the EU's Excessive Deficit Procedure in June 2015, but some further medium-term consolidation would help prepare for rising pension and health-care spending.

Notwithstanding remarkable GDP increases over the past 25 years and solid investment growth in 2014, the private-sector investment share of GDP has been lower than in neighbouring countries with similar income per capita. To sustain rising living standards and move to higher value-added production activities, regulatory investment barriers need to be lifted and skills upgraded. Investment policies should be better targeted at strengthening workers' mobility, and thus productivity, as well as at greening the economy through improved energy and transport infrastructure and access to more affordable and better insulated housing.

Output growth has been robust

Real GDP has been growing at a firm pace. Household consumption is being supported by an improving labour market and rising real incomes related to falling food and energy prices. Exports have been resilient, notwithstanding the Russia-Ukraine crisis. Still, despite favourable financial conditions and a better euro area outlook, business investment intentions remain below their historical average, curbed by uncertainty about future demand.

Poland



1. Only total investment data are available for the OECD aggregate.

Source: OECD Economic Outlook 97 database; Eurostat; and National Bank of Poland.

StatLink http://dx.doi.org/10.1787/888933221231

Poland: **Demand, output and prices**

	2011	2012	2013	2014	2015	2016
	Current prices PLN billion	Percentage changes, volume (2010 prices)				
GDP at market prices	1 553.6	1.8	1.7	3.4	3.5	3.7
Private consumption	954.2	0.9	1.0	3.0	3.5	3.6
Government consumption	281.4	0.2	2.1	2.8	2.9	2.5
Gross fixed capital formation	315.6	-1.5	0.9	9.5	6.4	6.0
Final domestic demand	1 551.1	0.3	1.2	4.2	4.0	3.9
Stockbuilding[1]	29.8	-0.6	-0.9	0.4	0.1	0.0
Total domestic demand	1 581.0	-0.3	0.2	4.6	4.1	3.9
Exports of goods and services	670.2	4.3	5.0	5.6	6.0	7.7
Imports of goods and services	697.5	-0.6	1.8	8.7	7.6	8.3
Net exports[1]	- 27.4	2.1	1.4	-1.3	-0.6	-0.1
Memorandum items						
GDP deflator	_	2.2	1.1	0.3	0.1	1.4
Consumer price index	_	3.6	1.0	0.1	-0.5	1.3
Private consumption deflator	_	3.2	0.8	-0.3	-1.1	1.1
Unemployment rate	_	10.1	10.3	9.0	7.8	7.4
General government financial balance[2]	_	-3.7	-4.0	-3.2	-2.7	-2.4
General government gross debt[2]	_	61.2	62.3	65.8	66.7	66.7
General government debt, Maastricht definition[2]	_	54.4	55.7	50.2	51.2	51.2
Current account balance[2]	_	-3.5	-1.3	-1.4	-1.1	-1.1

1. Contributions to changes in real GDP, actual amount in the first column.
2. As a percentage of GDP at market value.
Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933222273

Macroeconomic policies are appropriate, but structural reforms are needed to promote investment

Owing to subdued inflationary pressures coupled with steep declines in food and energy costs, headline consumer prices have been falling in annual terms since July 2014. Underlying inflation and inflation expectations are very low. In response, the central bank cut official interest rates further in March 2015 to 1.5%. As food and energy prices have started to turn around and the labour market is tightening, headline consumer prices are projected to start rising again. Once the central bank starts to normalise monetary policy it will have to proceed with caution, as this could lead to potentially destabilising capital inflows and upward pressure on the zloty as long as monetary policy in the euro area remains extremely supportive.

The general government deficit is projected to fall from 3.2% of GDP in 2014 to 2.4% of GDP in 2016. This is in part due to continued economic growth and increased social contributions (many members of private pension funds switched to the state social security system following the recent pension reform). Growth in social transfers will be subdued by indexation to currently low inflation and wage growth and the government is expected to continue restraint on public-sector wages. This is only partially offset by increases in a few social expenditure items.

To support business investment in modern production capacity and innovation, barriers to firm entry and exit need to be reduced, contract enforcement facilitated and taxes simplified. This also requires building on ongoing efforts to improve university and vocational education, reinforcing links to business and practical experience. Energy generation capacity is ageing and very reliant on coal. Lowering barriers to entry into energy markets and raising energy prices to account for environmental damage and pollution would promote a more efficient and greener energy sector. Now that roads have been substantially upgraded, the focus should shift to investment in railways and urban public transport, also promoting green growth. Along with policies addressing local housing shortages, this would help workers move and commute, thereby improving the people's welfare and productivity. By enabling workers to find higher-quality jobs, it would enhance inclusiveness.

Growth will pick up

A further pick-up in employment and real wage growth will support a gradual increase in private consumption. Exports are projected to rise as world trade strengthens. Investment will remain solid but somewhat limited by the slowdown in disbursement of EU structural funds that typically occurs at the switchover of budget periods. The faster projected GDP growth should gradually eliminate remaining spare capacity.

Growth depends on the pace of the recovery in the euro area, and intensification of tensions in Russia and Ukraine could depress exports and increase energy prices. By contrast, private consumption and investment could respond more substantially to swifter confidence improvements and income gains.

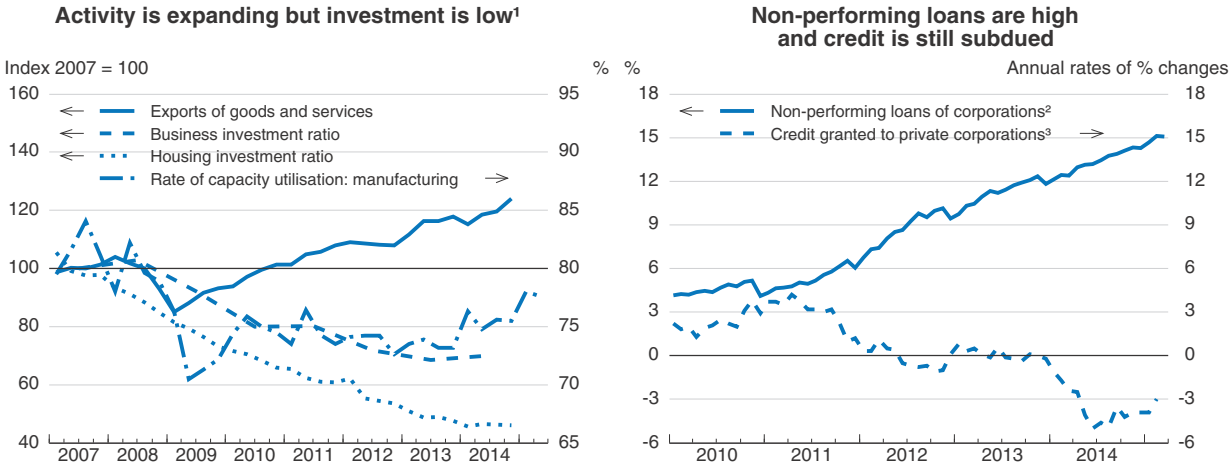
PORTUGAL

The recovery is projected to strengthen in 2015 on the back of strong external demand, a weaker euro and lower oil prices. After having contracted for three years, domestic demand has started to rise, and business investment is projected to pick up further in 2016. However, considerable economic slack will remain, as the unemployment rate will continue to fall only moderately.

As the recovery remains fragile, the more moderate pace of fiscal consolidation is welcome. Further tax reforms, such as an additional, revenue-neutral, reduction in the effective corporate tax rate could strengthen business investment. Further reductions of the high unemployment rate would help to reduce income inequality. Despite progress, the competitiveness of the tradable sectors is held back by weak competition in upstream services sectors, which could be addressed through further structural reforms in the electricity and gas sectors and curbing unnecessary restrictions in professional services. Notwithstanding some progress in deleveraging, reducing still high private-sector indebtedness, including through an assessment of the performance of new insolvency procedures, remains a priority for raising bank credit and investment.

Investment fell by nearly 35% between 2007 and 2014, more than twice the decline in the European Union as a whole. Business investment has started to increase again, driven by stronger prospects for internal and external demand, higher capacity utilisation and the need to renew depleted capital stock. Still, the pick-up in investment observed in key euro area economies has yet to materialise in Portugal. Public and residential investment will continue to stay subdued, reflecting fiscal consolidation needs and high leverage ratios of households and firms in the construction sector.

Portugal



1. Exports of goods and services in volume. Business investment ratio is calculated as the ratio of gross fixed capital formation of financial and non-financial corporations to GDP.
2. Data refer to non-financial corporations. As a percentage of total loans of other monetary financial institutions to non-financial corporations. Excludes securities.
3. Data refer to non-financial corporations. Adjusted for securitisation operations, reclassifications, write-offs/write-downs, exchange rate changes and price revaluations.

Source: OECD Economic Outlook 97 database; *OECD Main Economic Indicators Database*; Statistics Portugal (INE); and Banco de Portugal.

StatLink http://dx.doi.org/10.1787/888933221246

Portugal: **Demand, output and prices**

	2011	2012	2013	2014	2015	2016
	Current prices € billion	Percentage changes, volume (2011 prices)				
GDP at market prices	176.2	-4.0	-1.6	0.9	1.6	1.8
Private consumption	116.0	-5.5	-1.5	2.1	1.8	1.5
Government consumption	35.0	-3.3	-2.4	-0.3	-0.5	0.2
Gross fixed capital formation	32.5	-16.6	-6.7	2.5	2.9	3.1
Final domestic demand	183.4	-7.1	-2.5	1.7	1.5	1.5
Stockbuilding[1]	0.3	-0.3	0.0	0.4	-0.5	0.0
Total domestic demand	183.7	-7.3	-2.5	2.1	1.0	1.5
Exports of goods and services	60.4	3.4	6.4	3.4	6.2	5.4
Imports of goods and services	68.0	-6.3	3.9	6.4	4.7	4.8
Net exports[1]	- 7.5	3.6	0.9	-1.1	0.6	0.3
Memorandum items						
GDP deflator	_	-0.4	2.2	1.2	0.5	0.4
Harmonised index of consumer prices	_	2.8	0.4	-0.2	0.1	0.7
Private consumption deflator	_	1.8	1.0	0.7	0.1	0.7
Unemployment rate	_	15.5	16.2	13.9	13.2	12.6
Household saving ratio, gross[2]	_	8.3	9.2	7.4	7.6	8.6
General government financial balance[3,4]	_	-5.6	-4.8	-4.5	-2.9	-2.8
General government gross debt[3]	_	137.0	141.8	150.4	148.0	144.5
General government debt, Maastricht definition[3]	_	125.8	129.7	130.2	127.7	124.2
Current account balance[3]	_	-2.1	1.4	0.6	0.7	0.6

1. Contributions to changes in real GDP, actual amount in the first column.
2. As a percentage of disposable income.
3. As a percentage of GDP at market value.
4. Based on national accounts definition.

Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933222288

The recovery is continuing

Growth turned positive in 2014, reflecting a pick-up in private consumption and investment. The recovery is now getting firmer and gaining strength. Exports continue to support growth as market shares rise, and the current account remains in surplus. Employment is increasing at a modest pace, reversing the downward trend observed since 2009. However, the unemployment rate is still high, even though it is lower than at the peak of the crisis. Inflation will remain subdued and below the euro area average. Private debt continues to restrain domestic demand.

The pace of fiscal consolidation has slowed but credit remains weak

The government has moderated the pace of fiscal consolidation, but the fiscal deficit should fall below 3% of GDP in 2015, allowing Portugal to exit the Excessive Deficit Procedure. Recent progress towards a more growth-friendly tax structure should be continued by further reducing the effective corporate tax rate while broadening its base by reducing tax expenditures and by extending the scope of the standard VAT rate. A comprehensive evaluation of recent tax reforms, together with their effects on distortions

and revenue-raising capacity seems warranted, and could set the basis for further improvements in tax administration as well as for raising more revenue from environmental and equity-enhancing inheritance taxes.

The credit channel remains impaired by high levels of corporate debt, in particular for small and medium enterprises, and high ratios of non-performing loans. The effectiveness of recent reforms to the corporate insolvency and restructuring framework should be assessed as part of an effort to accelerate corporate debt reductions.

Efforts to reduce inequality should be stepped up

Benefit levels in the minimum income support scheme are low and the coverage of unemployment benefits is narrow. Overlaps and insufficient targeting in transfer programmes should be addressed to reduce inequality and poverty levels.

Growth will gradually strengthen

The recovery will gain momentum, driven by growing exports, which will in turn stimulate investment, employment and consumption, underpinning a more broad-based and sustained recovery. Low oil prices and the weak euro will ensure robust export growth, more than offsetting lower exports to Angola.

Prospects depend in large part on the evolution of growth in the euro area and especially Spain (Portugal's main export destination). They also depend on Portugal's ability to exploit new export markets, and therefore on the success of structural reforms to improve competitiveness. The high public and private debt levels remain an important source of vulnerability. Notwithstanding the successful fiscal consolidation over the last years, a failure to meet fiscal targets or financial market stress could make access to external finance more difficult for public borrowers. By contrast, continued improvement in the fiscal position could cement gains in confidence.

RUSSIAN FEDERATION

GDP is projected to fall by around 3% in 2015, and to grow less than 1% in 2016. This weak turnaround is supported by the recovery of oil prices, better international relations achieved in the first half of 2015 and on the success of import substitution programmes. A spike in consumer price inflation, which has peaked at around 17%, resulted in a sharp fall in real wages, weighing on private consumption. The current account remains in surplus because lower revenues from oil and gas exports are more than offset by falling imports, which reflect weak domestic demand and sanctions.

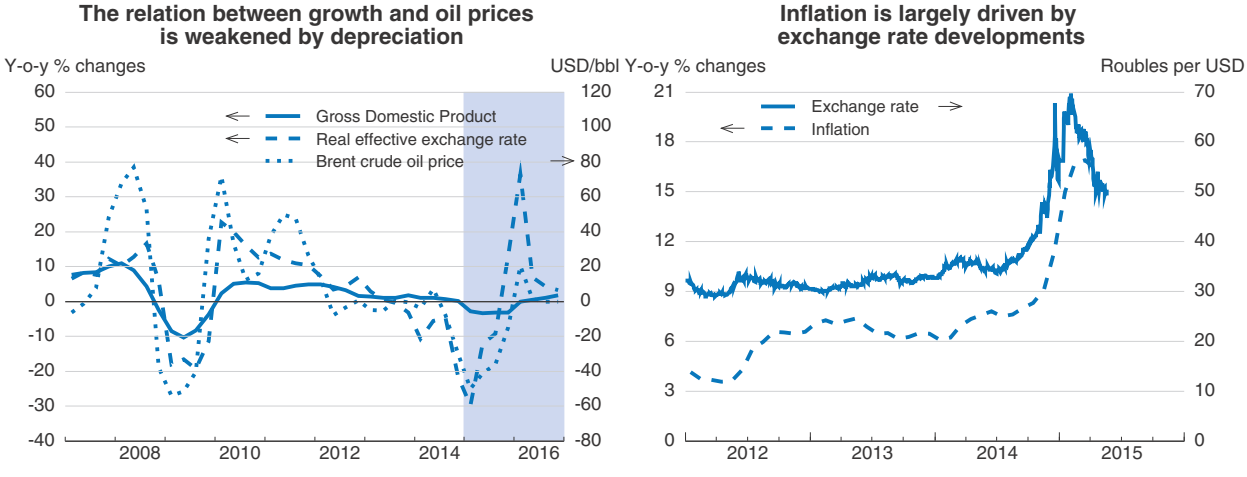
The planned widening of the budget deficit, which is due to the automatic stabilisers, is appropriate. Particular care is needed to protect those with low income against the risk of poverty in the wake of the large fall in real wages. Reserve funds should be refilled by enacting postponed privatisation plans. Monetary policy needs to continue to pay close attention to financial sector stability and therefore a quick return to the inflation targeting framework could be premature. Monetary policy should be further eased in view of the exchange rate appreciation. Measures to reign in corruption reduce the role of the state in the economy and make the rule of law more effective should be swiftly implemented.

Investment is falling in the wake of sanctions that imposed constraints on long-term financing, which are especially binding for SMEs. The government is planning to support investment projects to replace imports. In the absence of effective implementation of reforms improving the environment for doing business, boosting investment activity dependent on public support will likely have negative consequences for productivity and potential growth.

The economy has contracted and structural policies are focused on import substitution

GDP fell by about 2% at the beginning of 2015. Consumption spending was hit by a large decline in real wages and tighter financing conditions for consumer loans.

Russian Federation



Source: OECD Economic Outlook 97 database; Central Bank of Russia; and Datastream.

StatLink http://dx.doi.org/10.1787/888933221259

Russian Federation: **Demand, output and prices**

	2011	2012	2013	2014	2015	2016
	Current prices Russian Ruble billions	Percentage changes, volume (2008 prices)				
GDP at market prices	55 967.2	3.4	1.3	0.6	-3.1	0.8
Private consumption	27 426.6	7.7	4.9	1.2	-4.7	0.2
Government consumption	10 102.8	2.6	1.1	-0.1	0.0	0.5
Gross fixed capital formation	11 469.0	7.0	0.6	-2.1	-18.5	5.0
Final domestic demand	48 998.4	6.5	3.1	0.2	0.1	0.0
Total domestic demand	51 190.7	5.5	1.2	-1.0	-8.5	1.1
Exports of goods and services	16 940.9	1.1	4.6	-0.1	0.6	2.1
Imports of goods and services	12 164.4	8.7	3.8	-7.9	-14.1	4.2
Memorandum items						
GDP deflator	_	7.4	5.0	7.2	10.8	7.1
Consumer price index	_	5.1	6.8	7.8	16.3	7.0
Private consumption deflator	_	5.8	6.4	8.3	16.3	7.0
General government financial balance[1,2]	_	2.0	0.6	0.4	-3.7	-1.2
Current account balance[1]	_	3.5	1.7	3.3	3.7	3.5

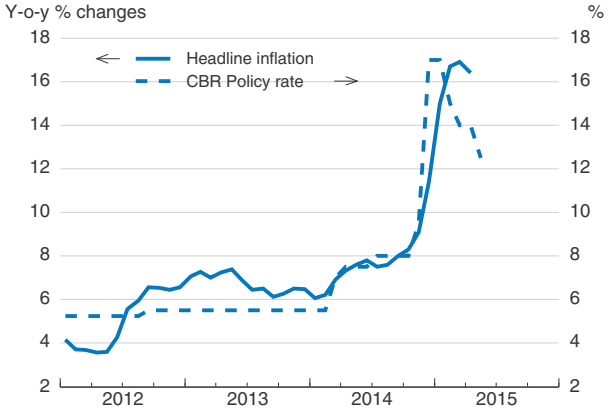
1. As a percentage of GDP at market value.
2. Consolidated budget.
Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933222396

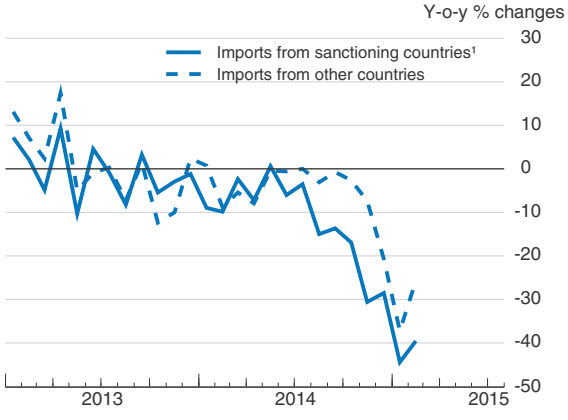
Investment spending, including in real estate, declined strongly because of general uncertainty, high financing costs and limited access to long-term international finance. Exports held up well while imports contracted sharply. Economic activity declined in particular in retail trade, financial services and construction, while mining, basic goods

Russian Federation

The central bank has started to reduce interest rates



Imports from sanctioning countries are falling more strongly



1. Imports from the European Union, United States, Canada, Japan, Australia, Norway and Ukraine.
Source: Rosstat; Central Bank of Russia; and Federal Customs Service.

StatLink http://dx.doi.org/10.1787/888933221266

industries as well as food industries and agriculture benefited from the sharp depreciation of the exchange rate. Car manufactures experienced a collapse of sales and have reduced production.

Inflation apparently peaked in April 2015 at around 17%. Food prices increased even more. Wages moved up by only 6.5% at the beginning of the year, resulting in a sharp fall in disposable real household income. On the other hand, pensions have been increased by 13%, limiting the erosion of the purchasing power of the – usually poorer - elderly.

The current account remains positive, in spite of lower oil prices. Capital outflows have been substantial since the outset of the Russia-Ukraine crisis, initially because of a loss in confidence, but more recently because of a more orderly reduction of international indebtedness.

The sharp fall in oil prices is an adverse shock for the Russian economy, mainly through sharply lower government revenues. The central bank has cushioned the economy by allowing the rouble to depreciate, thereby reducing the cut in government oil and gas revenues in rouble terms. However, given the uncertainty related to the Russia-Ukraine crisis, capital flight soared and the central bank had to hike interest rates in December 2014. Since then exchange rates and oil prices have recovered somewhat.

Sanctions are significantly reducing the access of Russian enterprises to international financial markets. In particular, private SMEs find it difficult to finance investment and expansion. The situation is different for big firms and state-controlled enterprises, which have access to government funding. The ban on dual-use goods adds further uncertainty, because in some cases these are needed for maintenance of already installed equipment. The Russian ban on imported agricultural and food items has contributed to large price increases, but has also stimulated import substitution. This is being aided by a shift in the focus of structural policy to remove infrastructure bottlenecks, boost import substitution and encourage technological upgrading.

The central bank is constrained by external developments, but automatic fiscal stabilisers can work

The Russian central bank has started to ease after increasing its key policy rate to a 10-year record high of 17% in late 2014. Since the beginning of 2015, the exchange rate has appreciated somewhat. If inflation falls, as expected, the central bank will be able to further reduce interest rates. The central bank should continue to be vigilant with respect to liquidity provisions for banks with foreign currency obligations and avoid propping up insolvent institutions. In this context a transparent “bail-in” regulation would be useful.

The Duma has passed a budget for 2015 with a revenue shortfall of nearly 4% of GDP. It is appropriate to let automatic stabilisers fully operate. Indeed, the planned reduction of the budget deficit to below 2% of GDP in 2016 may be premature. The pension indexation was carried out as planned in February 2015, but will still not be sufficient to prevent the real value of old age income replacement from falling. The government should therefore prepare a means-tested heating benefit before the next winter.

The current government has started to make progress on achieving its goal to reign in corruption, ease regulatory red tape and improve tax collection. However, more recently progress in these areas has slowed because of the overall deterioration of the economy.

Growth will reappear

Economic growth is projected to rebound in the second half of 2015, and GDP to increase by 0.8% in 2016. The recovery will be mainly driven by investments in the import substitution programmes and higher oil and gas exports.

Growth depends on the evolution of geopolitical tensions. If they eased significantly, investment and growth would increase, but if they were to deteriorate the Russian economy would face further pressures. A downside risk is that scarce resources will be wasted in the import substitution programmes. On the upside, a fast start of the activities of the newly established Asian Infrastructure Investment Bank could generate new business opportunities for Russia with eastern and south-eastern neighbours. Likewise, deeper integration within the Eurasian Economic Union could revive traditional business ties and mobilise dormant productivity-increasing opportunities for the division of labour. Higher oil prices would lead to appreciation, lower inflation and higher growth of private consumption spending, while lower oil and gas prices would mean the opposite.

SLOVAK REPUBLIC

Economic growth is projected to accelerate further in 2015. Labour market performance will continue to improve and increasingly confident households should spend more out of rising real incomes. Export markets are set to recover, raising business sentiment and investment.

The slowdown in the pace of fiscal consolidation in 2014 was appropriate, given the economic slack. Nevertheless, budgeted further consolidation efforts are welcome to build fiscal buffers. In that regard, implementing multi-annual binding spending ceilings will reinforce budget discipline, while improving the efficiency of tax administration will support revenue collection.

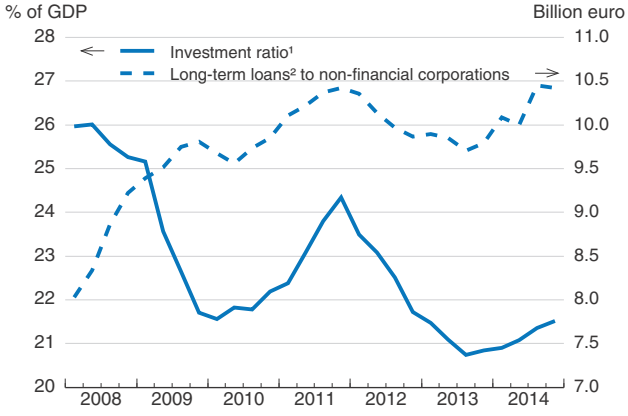
Investment is still well below the pre-crisis level. Foreign investment, which has been an important driver of capital accumulation (the FDI stock is 60% of GDP), has been subdued due to the sluggish growth of Slovakia's trading partners and competition from low-cost countries in the region. Policies to improve business climate, infrastructures, innovation and skills can give impetus to more broad-based FDI. Strengthening administrative capacities and expanding the use of simplified procedures will help to increase the use of EU structural funds.

Growth is picking up

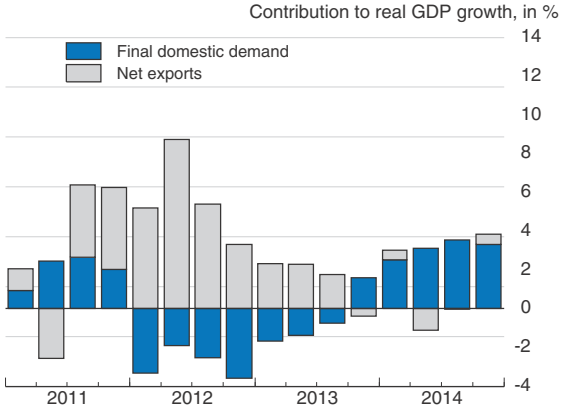
Economic growth is accelerating, driven both by domestic demand and exports. Exports are benefiting from improved competitiveness and increasing demand from main trading partners. Investment growth has surged after years of under-investment, contributing to the modernisation of production lines in the automotive industry, the upgrading of nuclear plants in the energy sector, the reconstruction of railways and the extension of highways.

Slovak Republic

Rising bank lending is supporting investment recovery



Growth rebalancing is underway



1. Real gross fixed capital formation. Four-quarter moving average.
2. More than 1 year.

Source: OECD Economic Outlook 97 database; National Bank of Slovakia; and Eurostat.

StatLink http://dx.doi.org/10.1787/888933221277

Slovak Republic: **Demand, output and prices**

	2011	2012	2013	2014	2015	2016
	Current prices € billion	Percentage changes, volume (2010 prices)				
GDP at market prices	70.2	1.6	1.4	2.4	3.0	3.4
Private consumption	40.3	-0.4	-0.7	2.2	2.6	2.6
Government consumption	12.9	-2.0	2.4	4.4	3.2	1.8
Gross fixed capital formation	16.9	-9.3	-2.7	5.7	4.8	4.0
Final domestic demand	70.1	-2.9	-0.6	3.4	3.2	2.8
Stockbuilding[1]	0.7	-1.3	0.5	-0.4	-0.2	0.0
Total domestic demand	70.8	-4.1	-0.1	2.9	3.0	2.8
Exports of goods and services	59.9	9.3	5.2	4.6	2.8	6.1
Imports of goods and services	60.5	2.6	3.8	5.0	2.8	5.6
Net exports[1]	- 0.6	5.8	1.4	-0.2	0.2	0.7
Memorandum items						
GDP deflator	_	1.3	0.5	-0.2	0.2	1.3
Harmonised index of consumer prices	_	3.7	1.5	-0.1	-0.2	1.4
Private consumption deflator	_	3.4	1.3	-0.1	0.1	1.4
Unemployment rate	_	14.0	14.2	13.2	12.4	11.6
General government financial balance[2]	_	-4.2	-2.6	-2.9	-2.7	-2.3
General government gross debt[2]	_	57.9	60.8	60.0	59.9	59.9
General government debt, Maastricht definition[2]	_	52.1	54.6	53.6	53.5	53.5
Current account balance[2]	_	0.9	1.5	0.1	0.0	0.9

1. Contributions to changes in real GDP, actual amount in the first column.
2. As a percentage of GDP at market value.
Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933222297

Private consumption continues to recover after five years of decline or stagnation, reflecting stronger household confidence, rising real incomes and a stronger labour market. Low food and energy prices, including cuts in regulated electricity prices, have continued to hold inflation down. The low inflation rate has not been fully taken into account in the wage bargaining process, resulting in robust real wage growth. The minimum wage increase of 8% in January 2015 is raising the purchasing power of poor households and increasing incentives to search for employment. The risk that it would also price low-skilled workers out of jobs has been countered by an exemption in health contribution insurance that would have been paid by employees and employers.

Fiscal and structural policies will be supportive of more balanced growth

Fiscal policy gained a bit of flexibility after the downward revision of the public debt below the 55% constitution ceiling that triggers spending cuts (following changes in international standards to ESA2010). While easing the stance of fiscal policy was appropriate given the slack in the economy, public debt remains close to this ceiling and this will require further consolidation efforts. The lower co-financing requirement for EU funds, greater efficiency due to public sector reforms, the fight against tax evasion and the broadening of the tax base will all provide room to build fiscal buffers. Implementing

multi-annual spending ceilings would help prevent spending slippages during the next upturn.

Regional inequality is among the highest of OECD countries, due to low job creation in the east and the central parts of the country and the low mobility of workers. As a result, a significant fraction of people are not fully sharing in the economic recovery. Recent reforms of vocational education to promote dual education, a better prioritisation of activation policies and a lower tax wedge will improve the employability of the low-skilled and youth, especially in lagging regions, thereby increasing the inclusiveness of economic growth. The completion of transport infrastructure projects will make the lagging regions more attractive to investment, but the lack of affordable housing remains an important barrier to regional development.

Growth is projected to strengthen

Economic growth is projected to expand further in 2015-16 and become more broad-based. Private consumption will be supported by job creation as the recovery becomes stronger and the fruits of recent labour market reforms materialise. Exports are set to accelerate due to a stronger recovery of Slovakia's trading partners and the recent euro depreciation.

Non-residential investment will remain strong in 2015 as banks' lending to business increases with quantitative easing, aggregate demand expands and the absorption of EU funds is to be completed by 2015. Further infrastructure investment, in particular on highways and railways connecting eastern and western regions, will reduce bottlenecks to broad-based growth. Reform of the R&D tax credit, implemented in 2015, will support technology transfers and raise the attractiveness of FDI.

Domestic demand may be stronger than projected if ongoing reforms, in particular of the labour market and vocational education, the plan to boost pan-European investment projects, and the effects of quantitative easing, deliver quicker results than assumed. On the downside, intensified tensions in neighbouring Ukraine, weaker growth than planned in the euro area and potential skills shortages could deter foreign investment.

SLOVENIA

Economic growth is projected to continue in 2015 due to strong exports and public investment in infrastructure, partly financed by EU funds. Fiscal consolidation, still high unemployment and corporate deleveraging will weigh on domestic demand. A decline in public investment will be a drag on growth in 2016, although private investment and consumption will gain some momentum. Inflation will remain low due to the large degree of slack.

A key priority is smooth and swift corporate restructuring and reducing non-performing loans. Fiscal slippage in structural terms should be avoided but automatic stabilisers should be allowed to operate fully. Continued structural reforms are needed, in particular to lower regulatory burdens and improve efficiency in public services. Strengthening active labour market policies would enhance growth and its inclusiveness. Privatisation and greater openness to FDI would bring new capital and improve corporate governance.

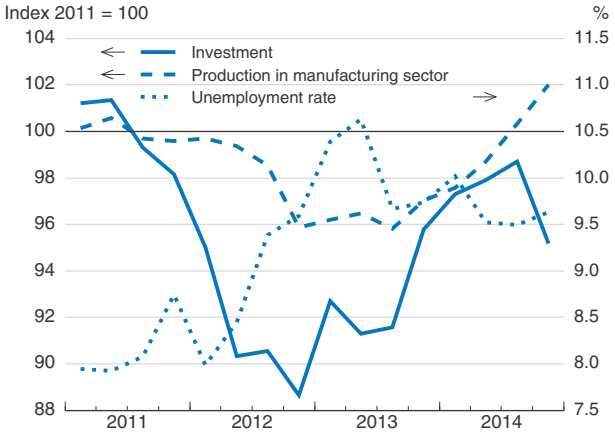
Investment dropped substantially following the 2009 crisis, dragged down by deleveraging in the corporate sector and restructuring of bank balance sheets. As the EU Multiannual Financial Framework comes to an end in 2015, reducing inefficient public spending will be needed to sustain public investment. While residential investment is expected to recover gradually as the economy improves, stronger business investment would require faster progress with corporate restructuring and, to ease credit conditions, reducing non-performing loans in banks.

The economy is growing again

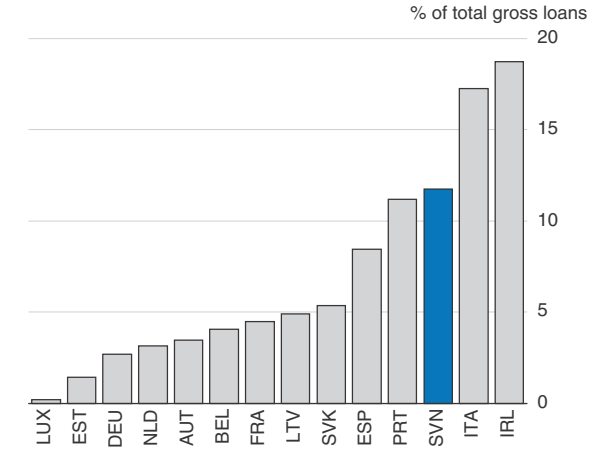
After two years of recession, growth returned in 2014, driven mainly by exports and investment. Investment was boosted by local infrastructure projects co-financed with EU funds that have to be used by end-2015, when the previous EU Multiannual Financial

Slovenia

Activity and the labour market have strengthened



The share of non-performing loans remains high[1]



1. 2014 Q4 or latest data available.

Source: OECD Main Economic Indicators Database; *OECD Economic Outlook 97 database*; Eurostat; and *IMF Financial Soundness Indicators Database*.

StatLink http://dx.doi.org/10.1787/888933221284

Slovenia: **Demand, output and prices**

	2011	2012	2013	2014	2015	2016
	Current prices € billion	Percentage changes, volume (2000 prices)				
GDP at market prices	36.9	-2.6	-1.0	2.6	2.1	1.9
Private consumption	20.6	-3.0	-3.9	0.3	0.4	1.3
Government consumption	7.6	-1.5	-1.1	-0.5	-0.3	-0.2
Gross fixed capital formation	7.4	-8.9	1.9	4.8	2.1	0.0
Final domestic demand	35.6	-3.9	-2.1	1.1	0.6	0.7
Stockbuilding[1]	0.6	-1.8	0.1	-0.2	0.2	-0.1
Total domestic demand	36.1	-5.7	-2.1	0.8	0.8	0.6
Exports of goods and services	26.0	0.3	2.6	6.3	5.2	5.5
Imports of goods and services	25.2	-3.9	1.4	4.1	3.1	4.4
Net exports[1]	0.7	2.9	1.0	1.9	1.9	1.4
Memorandum items						
GDP deflator	_	0.3	1.4	0.4	0.8	-0.5
Harmonised index of consumer prices	_	2.8	1.9	0.4	-0.4	0.7
Private consumption deflator	_	1.4	0.6	0.3	-0.9	-0.1
Unemployment rate	_	8.8	10.1	9.7	9.4	9.1
General government financial balance[2]	_	-4.0	-14.9	-4.9	-2.9	-2.5
General government gross debt[2]	_	60.4	79.2	97.6	99.7	101.8
General government debt, Maastricht definition[2]	_	53.7	70.3	80.9	83.0	85.1
Current account balance[2]	_	2.7	5.6	5.9	7.8	7.7

1. Contributions to changes in real GDP, actual amount in the first column.
2. As a percentage of GDP at market value.
Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933222307

Framework ends. Private consumption benefitted from improved consumer confidence and job creation in industrial and construction activity. Cost competitiveness and export market performance started to improve, especially in manufacturing, causing the current account surplus to increase.

However, the recovery is fragile. Corporate investment remains low and banks' capacity to lend is constrained by still high non-performing loans and risk aversion. Corporate restructuring and deleveraging are ongoing and banks are cleaning up their balance sheets. However, credit is still falling and interest rates paid by companies are higher than the average in the euro area. Unemployment has started to decline, but remains high. Due to the large slack in the economy, inflation has been low, and recent declines in the price of oil and other commodities have pushed it even lower.

Fiscal consolidation continues, but further structural reforms are needed

Despite stronger-than-expected growth in 2014, the fiscal deficit was larger than planned, partly due to one-offs on the spending side, contributing to the rise of the public debt beyond 80% of GDP. The government aims to lower the headline deficit in 2015 by several measures on the expenditure and revenue side. Nevertheless, achieving the agreed consolidation path will be a challenge without structural fiscal reforms that will improve efficiency in education, health and public administration. Reform in education would

contribute to more inclusive growth by increasing skills of students from disadvantaged background, thereby allowing them access to jobs in high value-added industries. Better targeting of active labour market policies to the long-term unemployed and the low-skilled would also make growth more inclusive. Reform in health and public administration could enhance well-being by ensuring better service for all.

Growth will remain weak

Exports are projected to be the main source of growth, as global trade recovers and Slovenian competitiveness improves further. Public investment will remain strong until the end-2015. Restructuring in the banking and corporate sectors, corporate deleveraging and weak credit will hold back private investment. Continued fiscal consolidation and a weak, though slowly improving, labour market limit consumption growth and private domestic demand will gain momentum only in 2016. Unemployment will decline slowly and inflation will remain low due to continued slack in the economy.

The pace of export growth will depend largely on the growth of Slovenia's trading partners, especially in Europe and the euro area. Euro depreciation also opens opportunities to expand trade to non-euro area markets. Lower commodity prices than projected would help exports, but persistent deflation could increase the real value of financial debt and deter investment and hiring. Progress on corporate restructuring, consolidation in the banking sector and privatisation would improve growth prospects, although corporate restructuring could raise unemployment in the short run. Fiscal slippage could worsen markets' perception of Slovenia.

SOUTH AFRICA

Economic growth is slowly recovering reflecting stronger world trade and past depreciation of the rand. However, ongoing electricity shortages are slowing the economy. Exports will rely on manufacturing goods, as commodities remain depressed by low international prices. Infrastructure investment will contribute to growth, both by providing demand and by alleviating bottlenecks. As incomes increase and confidence slowly improves, private domestic demand is projected to pick up.

Fiscal policy will remain mildly restrictive, as the government, appropriately, seeks to reduce the deficit and stabilise public debt. The present supportive stance of monetary policy is appropriate, as the economy's spare capacity should contain inflation pressures. High levels of inactivity and unemployment add to persistently high inequality and require broad-based structural reforms to boost employment creation and make growth more inclusive.

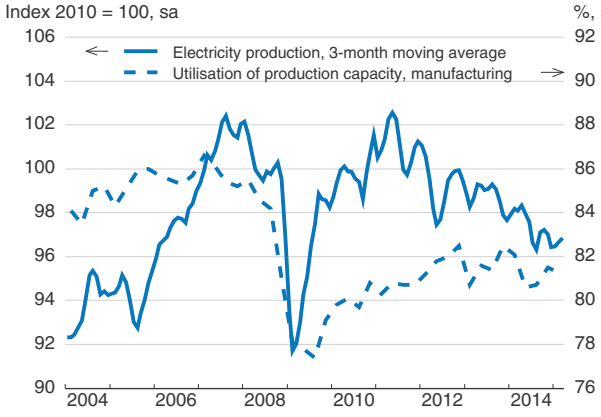
Business investment remains weak, reflecting slow economic growth, low capacity utilisation, regulatory uncertainties, and infrastructure bottlenecks, while residential construction is held back by weak demand and tighter lending conditions. Investment by state-owned enterprises is high, reflecting efforts to alleviate infrastructure bottlenecks.

The recovery is gathering pace

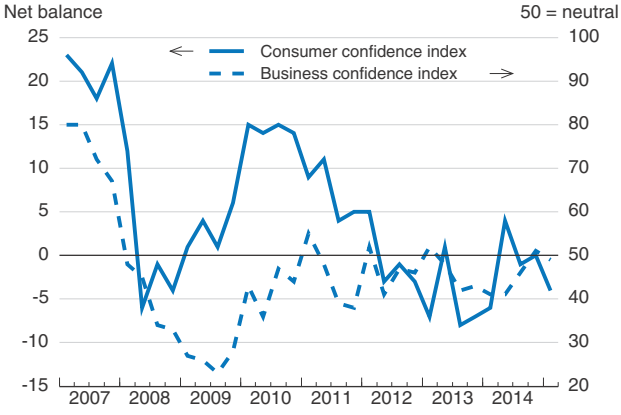
The economic expansion slowed in early 2015 owing to power outages and higher energy taxes. Commodity exports have been hampered by the end of the commodity boom, while the positive effect of past rand depreciation on the export of manufacturing goods is dissipating. Inflation fell to around 4% in the beginning of 2015 as the result of lower food and energy prices. Outcomes of recent wage negotiations suggest core inflation will remain close to 6%, the top of the Reserve Bank's inflation target band.

South Africa

Ample capacity and electricity constraints hold back business investments



Confidence remains low



Source: *SARB Database*; Statistics South Africa; and Bureau of Economic Research.

StatLink http://dx.doi.org/10.1787/888933221293

South Africa: **Demand, output and prices**

	2011	2012	2013	2014	2015	2016
	Current prices rand billions	Percentage changes, volume (2010 prices)				
GDP at market prices	3 025.0	2.2	2.2	1.5	1.9	2.2
Private consumption	1 796.8	3.4	2.9	1.4	1.7	2.1
Government consumption	603.9	3.4	3.3	1.9	1.5	0.8
Gross fixed capital formation	566.7	3.6	7.6	-0.4	2.6	4.1
Final domestic demand	2 967.4	3.4	3.9	1.1	1.8	2.3
Stockbuilding[1]	31.3	0.5	-2.4	-0.6	0.0	0.0
Total domestic demand	2 998.7	3.9	1.4	0.6	1.8	2.2
Exports of goods and services	920.9	0.1	4.6	2.6	4.8	5.2
Imports of goods and services	894.7	6.0	1.8	-0.5	4.3	5.2
Net exports[1]	26.2	-1.7	0.7	0.9	0.1	0.0
Memorandum items						
GDP deflator	_	5.5	6.0	5.8	5.1	5.6
Consumer price index	_	5.7	5.8	6.1	4.8	5.7
Private consumption deflator	_	6.3	5.5	5.8	4.6	5.7
General government financial balance[2]	_	-3.2	-3.3	-4.1	-4.2	-3.9
Current account balance[2]	_	-5.0	-5.8	-5.4	-5.5	-5.2

1. Contributions to changes in real GDP, actual amount in the first column.
2. As a percentage of GDP at market value.
Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933222402

Macroeconomic policy settings are prudent but structural reforms are needed for inclusive growth

The Reserve Bank's policy rate has remained at 5.75% – a historically low level – since early 2014. This has helped to stabilise the nominal effective exchange rate. Inflation and inflation expectations have been broadly stable for three years, and the recent dip in headline inflation is projected to reverse as the effects of the drop in oil prices pass out.

The government budget for the fiscal year 2015/16 contained additional consolidation measures, confirming the mildly restrictive stance needed to contain public debt. Against the background of weak economic growth, the public sector deficit will remain unchanged this year before falling slightly in 2016. This mildly restrictive policy stance is appropriate, and should secure a sustainable and prudent level of public debt. If growth turns out faster than expected, unexpected revenues should be used to reduce the public debt-to-GDP ratio in order to expand future fiscal space.

Structural reforms to facilitate entry to markets and enhance competition would help alleviate infrastructure bottlenecks in transport and electricity and stimulate job creation. High levels of unemployment could also be alleviated through labour market reforms and active labour market policies.

Growth is picking up but will continue to be constrained by electricity supply

The economy will slowly accelerate as external demand strengthens, although the pace of recovery will continue to be held back by ongoing power outages for some time,

even assuming new capacity proceeds as planned. Stronger private sector confidence should stimulate private consumption and investment. Still, projected growth will achieve only modest employment gains, and unemployment will remain high.

Additional delays in the roll-out of new electricity generation capacity would constrain production and exports further. Exchange rate turmoil in the wake of US monetary policy normalisation, or faster wage growth, which could be fuelled by further electricity price increases, could push inflation out of the target range for a sustained period, forcing the central bank to hike interest rates. On the upside, a faster-than-projected recovery in world trade, particularly for commodities, would boost exports. A significant restraint on growth would be eased if policy uncertainty surrounding investment regimes in the resources and agriculture sectors was resolved, boosting private investment.

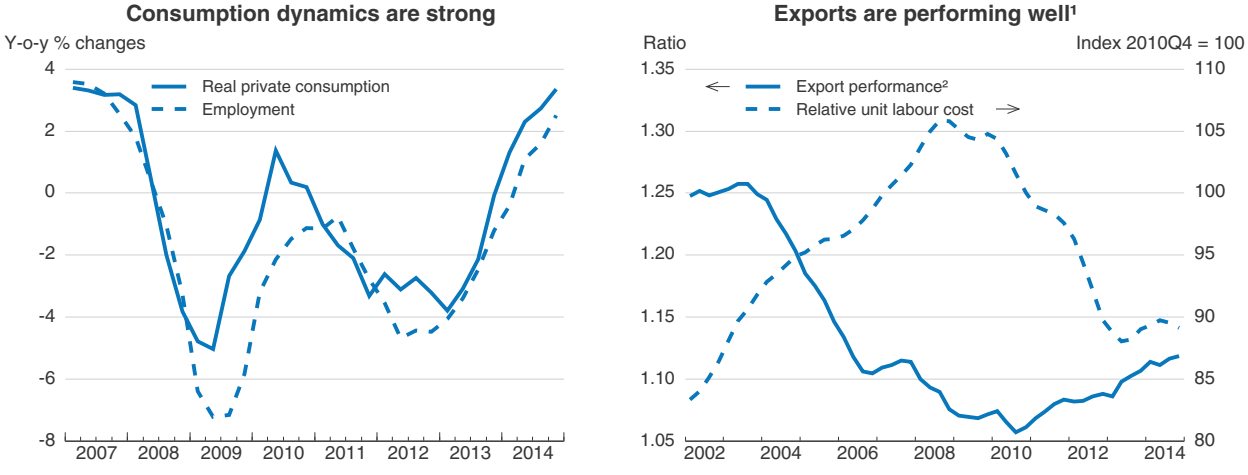
SPAIN

Robust growth is projected over the next two years, driven by very supportive financial conditions, the depreciation of the euro, lower oil prices and strengthening trading partner growth. The fiscal stance is assumed to be mildly contractionary. Private consumption growth will be supported by rising employment and incomes, household tax cuts, and lower fuel prices and interest rates. Export growth will be underpinned by cost competitiveness gains, including from the depreciation of the euro, and stronger growth in Europe. Persistent slack will keep inflation low.

The government should continue to ensure the reduction in the fiscal deficit in order to put public debt on a downward path. Structural reforms to make it easier to start and expand a business and improve innovation are key to moving towards a knowledge-based economy and ensuring strong inclusive growth and job creation. High unemployment, which has pushed up income inequality, is a key concern. Dealing with it will require greater efforts to improve both job search assistance and training options for the unemployed, many of whom are poorly skilled.

The collapse of the property bubble and the recession led to a fall in total investment from a historical peak of 31% of GDP in 2007 to a trough of 18.5% of GDP in 2013, around 5 percentage points below its long-run average. Machinery and transport equipment investment has been growing around 15% per annum, helping to boost medium-term prospects. The bubble left an excess of housing in coastal resorts and satellite towns. It also contributed to high corporate leverage but this is now declining. Overall infrastructure quality is high, but the bubble resulted in excessive investment in regional airports. Continued investment in cross-border electricity transmission would increase energy market efficiency in Spain and the EU. Harmonising the price of greenhouse gas emissions across sources using taxes and fees would promote efficient investment in emissions reduction technologies.

Spain



1. Four-quarter moving average.
2. Ratio between export volumes and export markets.

Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933221308

Spain: **Demand, output and prices**

	2011	2012	2013	2014	2015	2016
	Current prices € billion	Percentage changes, volume (2010 prices)				
GDP at market prices	1 075.1	-2.1	-1.2	1.4	2.9	2.8
Private consumption	622.6	-2.9	-2.3	2.4	3.8	2.6
Government consumption	219.7	-3.7	-2.9	0.1	-0.8	0.0
Gross fixed capital formation	230.3	-8.1	-3.8	3.4	5.4	6.3
Final domestic demand	1 072.5	-4.2	-2.7	2.1	3.2	2.9
Stockbuilding[1]	5.3	-0.1	0.0	0.2	-0.1	0.0
Total domestic demand	1 077.8	-4.2	-2.7	2.3	3.1	2.9
Exports of goods and services	309.6	1.2	4.3	4.2	5.4	6.1
Imports of goods and services	312.2	-6.3	-0.5	7.6	6.2	6.5
Net exports[1]	- 2.6	2.2	1.4	-0.8	-0.1	0.1
Memorandum items						
GDP deflator	_	0.2	0.7	-0.5	1.1	0.8
Harmonised index of consumer prices	_	2.4	1.5	-0.2	-0.6	0.7
Private consumption deflator	_	2.4	0.9	-0.1	0.5	0.7
Unemployment rate	_	24.8	26.1	24.4	22.3	20.3
Household saving ratio, net[2]	_	3.5	4.9	4.7	3.3	4.7
General government financial balance[3,4]	_	-10.3	-6.8	-5.8	-4.4	-3.0
General government gross debt[3]	_	91.0	102.0	115.8	117.1	117.2
General government debt, Maastricht definition[3]	_	84.4	92.1	97.7	98.9	99.1
Current account balance[3]	_	-0.3	1.4	0.8	1.3	1.3

1. Contributions to changes in real GDP, actual amount in the first column.
2. As a percentage of disposable income.
3. As a percentage of GDP at market value.
4. The deficits for Spain in 2012 and 2013 include outlays related to one-off banks restructuring operations amounting to 3.8% and 0.5% of GDP respectively.

Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933222315

The recovery has strengthened and broadened

Growth has steadily picked up to around a 3% annual pace and spread to domestic demand. Household consumption has risen in tandem with dynamic employment growth and modest real wage gains due to the improvement in the labour market combined with falling consumer prices. Residential property prices appear to have troughed. Construction investment has bottomed out and has started to grow modestly again. Cost-competiveness gains are helping to propel exports and Spain continues to gain market share. More robust domestic demand and solid export growth have pushed up import growth significantly but the current account balance is expected to remain in surplus. Solid employment growth is encouraging workers to return to the labour market and participation is above its 2007 level. However, the unemployment rate is still above 23%, and the youth unemployment rate is 52%. Making headway in reducing unemployment is a priority.

Conditions are propitious for growth

The array of forces supporting growth in Spain is the strongest since the crisis. Falling mortgage interest rates combined with the large fall of oil prices and tax cuts is further

boosting consumer purchasing power beyond the gains already coming from growing employment. The depreciation of the euro sparked by the ECB's quantitative easing programme has reinforced Spain's decline in relative unit labour costs and international cost competitiveness. A healthier banking sector following restructuring and recapitalisation, falling interest rates on corporate borrowing, rising corporate profitability and increased capacity utilisation are all expected to contribute to renewed business investment growth.

Fiscal consolidation has slowed markedly and the government's budget is only mildly contractionary over the next two years, which is favourable to allow the recovery to strengthen. Any positive growth surprise should be used to reduce further the debt level though. Public investment fell from 4.6% to 2% of GDP from 2007 to 2014. Public investment is expected to be less of a drag on overall GDP growth in 2015-16, but fiscal consolidation will constrain any significant public investment expansion.

Spain has been implementing a coherent set of structural reforms and is starting to reap the benefits of this effort, notably with a better performing labour market than in the past. The government should further improve the business environment by: fully implementing the market unity law to harmonise regulation across the regions; making the licence and permits system less onerous; broadening the corporate tax base and lowering the rate; and liberalising entry to professional services. To boost innovation and create a sustainable engine of growth, the government should encourage greater scale and specialisation of universities and research organisations and extend performance based resources allocation. Vocational training and the public employment services need to be strengthened to help the long-term unemployed back into the labour market, which is the main lever for reducing inequality and spreading the benefits of the recovery as widely as possible.

Solid growth is set to continue in the short-run

The economy is projected to out-perform the euro area average, growing at just under 3% in 2015 and 2016. Consumption growth is set to moderate somewhat as pent-up demand after the crisis is satiated and current temporary tailwinds from lower oil price fade. However, this will be replaced with a further strengthening in European growth, which will boost exports and investment.

Upside risks to growth include that trading partner growth in Europe may be stronger than expected, consumption may continue to grow strongly and construction investment may expand faster than expected from its low base. However, renewed financial turmoil in the euro area or a sudden increase in oil prices would temper growth.

SWEDEN

Private consumption and investment continue to grow briskly, while foreign trade will make a significant but modest contribution to growth. Unemployment is projected to recede only slowly, as integrating the substantial flow of immigrants takes time and labour force participation increases. Inflation is set to pick up gradually, as wages increase and the disinflationary effect of falling oil prices fades out.

Monetary policy is highly expansionary and should remain so until inflation is clearly moving towards target. Macro-prudential policies should be strengthened and complemented by measures to increase housing supply to reinforce financial stability. Fiscal policy is reverting towards a broadly neutral stance. Structural policies to improve immigrant integration, skills and innovation are needed to boost long-term growth.

Residential investment is growing rapidly from a low level, responding to strong housing demand. Business investment growth is robust. Intangibles, notably software and R&D, account for a large share of corporate investment. Public investment is increasing at a moderate pace, with a focus on enhancing rail and road infrastructure.

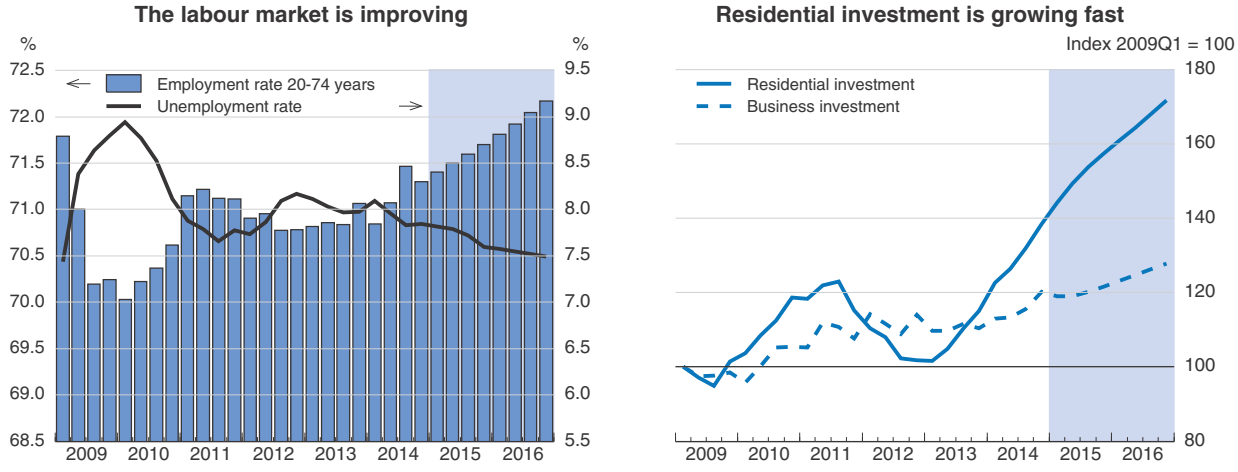
The recovery is broadening

Output growth reached 2.3% in 2014 and is gathering further momentum, driven by buoyant residential investment and private consumption. A weaker currency has boosted exports. Employment is increasing while unemployment has barely fallen due to increasing labour force participation and slow integration of the large inflows of humanitarian and family reunion immigrants. With the stabilisation of energy prices, inflation shows signs of picking up after having hovered around zero for some time.

Expansionary monetary policy, macro-prudential measures and structural reforms

The Riksbank lowered its repo rate in steps from 0.75% in mid-2014 to -0.25% by February 2015 and implemented a programme of quantitative easing. It has stated its

Sweden



Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933221311

Sweden: **Demand, output and prices**

	2011	2012	2013	2014	2015	2016
	Current prices SEK billion	Percentage changes, volume (2013 prices)				
GDP at market prices	3 651.6	0.0	1.3	2.3	2.8	3.0
Private consumption	1 691.4	0.9	2.0	2.4	2.5	2.7
Government consumption	920.3	1.5	0.8	2.0	1.8	1.7
Gross fixed capital formation	831.3	0.3	-0.3	6.6	5.4	5.2
Final domestic demand	3 443.0	1.0	1.1	3.3	3.0	3.0
Stockbuilding[1]	36.2	-1.1	0.1	0.2	-0.1	0.0
Total domestic demand	3 479.2	-0.2	1.2	3.5	3.0	3.0
Exports of goods and services	1 701.8	1.5	-0.1	3.5	4.6	4.7
Imports of goods and services	1 529.3	1.1	-0.5	6.5	5.2	4.9
Net exports[1]	172.5	0.3	0.2	-1.0	-0.1	0.1
Memorandum items						
GDP deflator	_	1.0	1.2	1.3	1.5	1.6
Consumer price index[2]	_	0.9	0.0	-0.2	0.2	1.4
Private consumption deflator	_	0.5	0.7	0.8	0.7	1.4
Unemployment rate[3]	_	8.0	8.0	7.9	7.7	7.6
Household saving ratio, net[4]	_	15.2	15.6	16.0	16.3	16.6
General government financial balance[5]	_	-0.9	-1.4	-1.9	-1.2	-0.5
General government gross debt[5]	_	44.6	44.8	52.1	52.6	51.2
General government debt, Maastricht definition[5]	_	36.5	38.7	43.8	44.3	43.0
Current account balance[5]	_	6.6	7.3	6.3	6.5	6.3

1. Contributions to changes in real GDP, actual amount in the first column.
2. The consumer price index includes mortgage interest costs.
3. Historical data and projections are based on the definition of unemployment which covers 15 to 74 year olds and classifies job-seeking full-time students as unemployed.
4. As a percentage of disposable income.
5. As a percentage of GDP at market value.

Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933222323

intention to do more if needed to prevent de-anchoring of inflation expectations and appreciation of the krona. The weakening of the currency has boosted export performance. Fiscal policy is slightly expansionary but is set to move to neutral as slack diminishes. The government is considering whether to move from a fiscal target of a 1% of GDP surplus over the cycle to a balanced budget target, which would be appropriate given the strong public sector financial position.

Household borrowing and house prices have continued to increase, heightening the need to tighten macro-prudential regulations and phasing out mortgage interest rate deductibility. Restrictions on housing supply would be eased by streamlining land-use planning and zoning regulations and incentivising municipalities to release land. Raising skills among youth and integrating immigrants, who are mostly low skilled, are crucial to reduce unemployment and secure inclusive growth.

Growth will pick up

Expansionary monetary policy and the fading of the effect of the fall in oil prices are expected to raise inflation. Nevertheless, the 2% inflation target is not projected to be reached until after 2016, despite an assumed further loosening of monetary policy. Residential investment should continue to grow, but at a slower pace as supply-side constraints become increasingly binding. Private consumption will continue to increase and growth will broaden as the weaker currency and higher activity among key trading partners boost exports. The government deficit will shrink gradually, from around 2% of GDP in 2014 to ½ per cent in 2016, as the economy gathers momentum.

As Sweden is a small open economy, unexpected growth outcomes of its main trading partners, notably in the European Union, and currency movements will have a major impact on output. As policy rates are bound to stay low for some time, a failure to rein in the rise in household debt through the implementation of macro-prudential policies and structural reforms could result in unbalanced growth, heightening financial and macroeconomic risks.

SWITZERLAND

The economy has weakened thus far in 2015, but growth is projected to rise gradually into 2016 as the recent large exchange rate appreciation is absorbed. Private consumption should hold firm on the back of rising real wages and very favourable financial conditions, but exports and business investment will suffer. Lower oil prices combined with the higher Swiss franc are bringing inflation back into negative territory.

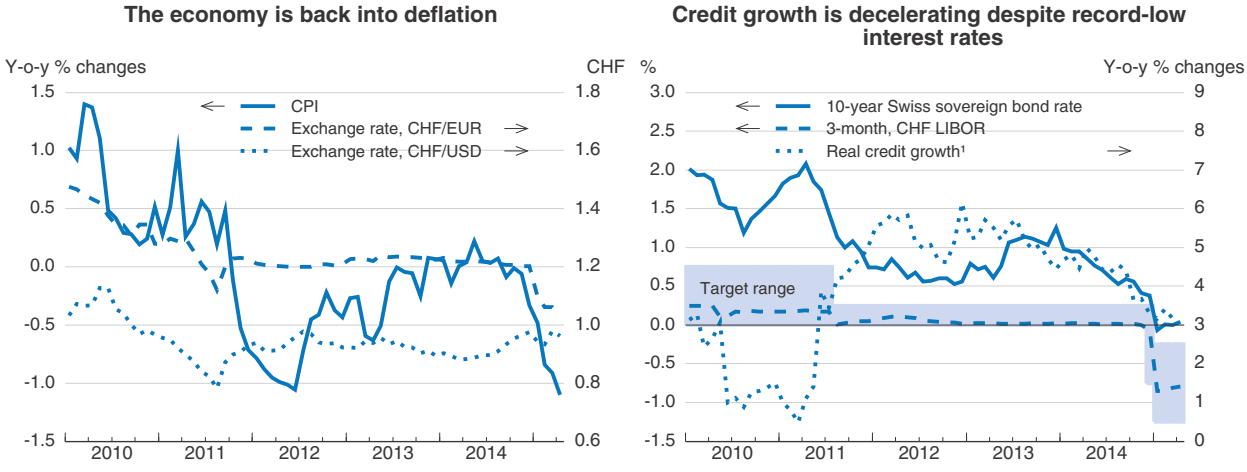
Policy interest rates will remain negative for the foreseeable future. Should growth slow further, healthy public finances leave ample room for fiscal support. Stepping up funding for childcare and education for migrant children would boost job opportunities for women and increase growth. Raising competition and efficiency in health care could free up consumer spending for other items.

Investment will be hit by lower business confidence, exchange rate volatility and the uncertainty surrounding the implementation of immigration quotas in 2017. In the medium term, as the country phases out its nuclear power plants, investment in other forms of energy will need to increase, which should boost domestic demand. Transport infrastructure is already well developed, but implementing peak-load pricing in motorway and train transportation could help reduce congestion and boost productivity.

The economy is absorbing a large exchange rate shock

On 15 January 2015, the Swiss National Bank discontinued the minimum exchange rate of 1.20 francs to the euro and further lowered interest rates by 0.5 percentage point, to –0.75%. The ensuing sharp appreciation of the Swiss franc against the euro of about 15% has put an end to trade-led economic momentum. Both exports and imports were down sharply in early 2015, and GDP fell 0.2% in the first quarter. As confidence has also been hit, household consumption growth is set to remain weak over the year. Retail sales fell early in the year, and total domestic lending growth is at its lowest point in three years. The

Switzerland



1. Deflated by CPI.

Source: *OECD Economic Outlook 97 database*; SNB; and SECO.

StatLink http://dx.doi.org/10.1787/888933221323

Switzerland: **Demand, output and prices**

	2011	2012	2013	2014	2015	2016
	Current prices CHF billion	Percentage changes, volume (2010 prices)				
GDP at market prices	618.3	1.1	1.9	2.0	0.8	1.7
Private consumption	333.4	2.8	2.2	1.0	1.6	1.5
Government consumption	66.4	2.9	1.4	1.1	2.5	2.2
Gross fixed capital formation	144.6	2.4	1.7	1.5	0.9	0.9
Final domestic demand	544.4	2.7	2.0	1.1	1.5	1.4
Stockbuilding[1]	21.5	-3.4	-2.4	0.5	-2.6	0.0
Total domestic demand	565.9	-1.2	-0.7	1.8	-1.4	1.5
Exports of goods and services	406.7	0.8	15.3	-7.1	1.9	2.0
Imports of goods and services	354.3	-2.8	13.5	-9.4	-1.2	1.8
Net exports[1]	52.4	2.1	2.6	0.5	1.9	0.4
Memorandum items						
GDP deflator	_	-0.1	-0.2	0.0	-0.6	0.4
Consumer price index	_	-0.7	-0.2	0.0	-0.8	-0.1
Private consumption deflator	_	-0.9	-0.4	-0.1	-0.7	0.2
Unemployment rate	_	4.1	4.3	4.4	4.5	4.6
General government financial balance[2]	_	0.3	0.1	0.2	0.2	0.3
General government gross debt[2]	_	45.8	45.6	45.3	45.1	44.7
Current account balance[2]	_	9.9	10.7	7.0	10.1	10.5

Note: In accordance with ESA 2010 national accounts definitions.
1. Contributions to changes in real GDP, actual amount in the first column.
2. As a percentage of GDP at market value.
Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933222338

exchange rate appreciation and falling global oil prices ushered in a return to deflation, and consumer prices fell year on year in the first quarter of 2015.

While monetary policy will remain accommodative, structural policy could help cushion the shock

The appreciation of the Swiss franc will hurt exports, especially as many businesses in tradable goods markets were already operating with thin margins. As profits are further squeezed, firms are likely to postpone investment and reduce employment. Investment may also be delayed as businesses await the details of the 2017 immigration quota implementation. As the country phases out its nuclear power plants, public investment in gas-fired power plants and renewable energy could rise, as non-nuclear capacity will have to increase, but this may not be significant during the projection period.

To offset the impact of the strong franc, monetary policy will remain very accommodative, and policy rates are assumed to stay negative for the foreseeable future. Despite historically low mortgage rates, the activation of several macro-prudential instruments in recent years has helped cool the housing market, and mortgage growth has slowed. Fiscal policy is assumed to remain broadly neutral but has ample scope for easing if necessary. Structural policies can cushion the exchange rate shock. Raising competition and efficiency in health care could free up consumer spending for other purchases. Implementing peak-load pricing in motorway and train transportation could reduce

congestion and boost productivity growth. Stepping up funding for childcare would remove barriers to women getting jobs. Increased education spending for children with an immigrant background would foster an inclusive society, reduce inequalities and enhance productivity in the longer-term.

Growth is projected to resume

Growth is projected to fall sharply in 2015 but then to rebound to 1.7% in 2016 as a stream of positive domestic and external forces offset the lingering effects of the exchange rate appreciation. Rising real wages, lower oil prices and ultra-low interest rates will support consumption. Accelerating growth in Europe, especially in Germany, which is Switzerland's main trading partner, should help the export sector absorb the higher exchange rate.

Developments regarding the euro area or geopolitical tensions could once again affect the exchange rate (up or down) and could change the outlook significantly. Switzerland also depends heavily on the evolution of its European trading partners. With interest rates settling in firmly in negative territory, sustained housing investment could spur growth but would also pose a risk to the economy, should a bubble develop.

TURKEY

Growth weakened in early 2015, after a short-lived upturn in late 2014. The uncertainties associated with the forthcoming legislative elections and ongoing geopolitical tensions in the region are holding back investment and consumption spending. GDP growth is projected to pick up gradually over 2015 and 2016, after the "wait and see" attitudes of businesses and households dissipate, but to remain below potential.

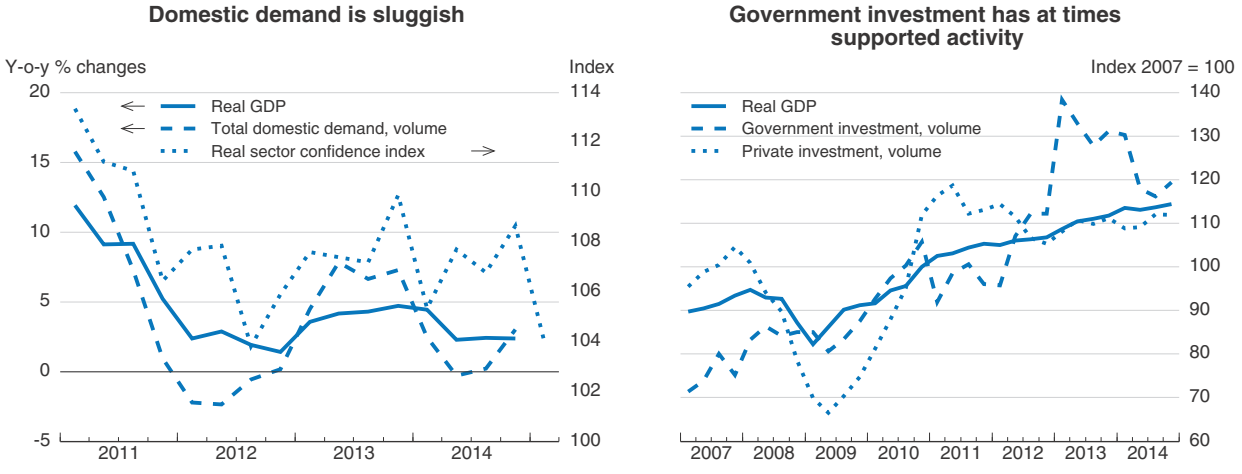
Against the backdrop of large foreign financing needs and volatile capital flows, inflation – which remains far above target – will need to be brought down. To further rebalance demand from domestic to external sources, freeing up the productivity potential of the business sector and achieving durable competitiveness gains is crucial. The implementation of key product and labour market reforms would spur growth.

Private investment peaked in 2011 after a swift recovery following the global crisis, but has since been sluggish. In contrast, government investment, mainly in infrastructure, continued to increase until the end of 2013 and provided support during a time of volatile economic activity. Exchange rate uncertainty, corporate leverage and foreign exchange exposures, and regional geopolitical tensions will influence the pace of recovery of investment.

The economy has slowed

Economic activity slowed in early 2015, after a short-lived upturn in late 2014. The uncertainties associated with the legislative elections in June, ongoing geopolitical tensions in the region and high foreign exchange rate volatility undermined domestic confidence and demand. The weak recovery in the European Union – Turkey's largest export market – and geopolitical crises in the major markets of Iraq and Russia have hurt exports. Inflation has remained well above the 5% target and the real effective exchange rate appreciated substantially through 2014, before a sharp correction in early 2015.

Turkey



Source: OECD Economic Outlook 97 database; Central Bank of the Republic of Turkey; Turkish Statistical Institute; and OECD calculations.

StatLink http://dx.doi.org/10.1787/888933221332

Turkey: **Demand, output and prices**

	2011	2012	2013	2014	2015	2016
	Current prices TRY billion	Percentage changes, volume (1998 prices)				
GDP at market prices	1 297.7	2.1	4.2	2.9	3.1	3.9
Private consumption	923.8	-0.5	5.1	1.3	3.0	3.6
Government consumption	180.7	6.1	6.5	4.6	2.7	4.2
Gross fixed capital formation	283.2	-2.7	4.4	-1.3	2.6	5.4
Final domestic demand	1 387.7	0.0	5.2	1.3	2.9	4.0
Stockbuilding[1]	22.5	-1.4	1.4	0.0	0.6	0.0
Total domestic demand	1 410.2	-1.3	6.5	1.3	3.6	4.0
Exports of goods and services	311.1	16.3	-0.2	6.8	2.6	5.6
Imports of goods and services	423.7	-0.4	9.0	-0.2	4.9	5.6
Net exports[1]	- 112.5	4.0	-2.9	1.8	-0.8	-0.2
Memorandum items						
GDP deflator	_	6.9	6.2	8.5	7.0	6.4
Consumer price index	_	8.9	7.5	8.9	7.5	6.7
Private consumption deflator	_	8.1	6.2	7.0	7.5	6.5
Unemployment rate	_	8.4	9.0	10.0	10.3	10.1
Current account balance[2]	_	-6.1	-7.9	-5.8	-5.2	-4.9

1. Contributions to changes in real GDP, actual amount in the first column.
2. As a percentage of GDP at market value.
Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933222348

Exporters continue to diversify from low-growth to high-growth markets but their overall performance weakened in early 2015, with negative effects on investment. Government infrastructure investment, which had been providing support, declined in early 2014. Government-supported projects outside the general government sector, including via public-private partnerships, remain difficult to monitor.

Despite a narrowing current account deficit, external debt coming due in 2015 of about 20% of GDP entails sizeable foreign financing needs. So far, capital inflows have been sufficient to roll over the external debt and cover the current account deficit, but high dependence on foreign funding is a significant vulnerability.

Domestic and international conditions are supportive, but confidence is low

The major decline in the price of oil has reduced the current account deficit, lowered inflation and supported activity. Low real interest rates, recovery in the European Union, and the suspension of sanctions against Iran will provide additional support. Despite substantial job creation, the unemployment rate rose to over 10% due to the slowdown in activity. However, this job creation, in particular in the less advanced regions and for the low-skilled, has made growth more inclusive in recent years. In this regard, a recent decision to grant additional social contribution exemptions and subsidise wages for young workers from April 2015 may spur the hiring of youth.

Business and household confidence remain very low in historical comparison. Structural reforms in the highly rigid formal product and labour markets have slowed down. Important governance issues associated with the forthcoming elections and

controversies concerning the institutional framework of economic and monetary policies may contribute to "wait-and-see" attitudes among businesses and households. Higher exchange rate volatility is correlated with the decline in confidence among foreign currency leveraged businesses, but also local currency indebted households. Nevertheless, loan defaults have remained limited so far. The fiscal deficit and debt are being kept low as the central anchor of Turkey's macroeconomic credibility, and, according to official plans, no fiscal stimulus is being imparted. Monetary policy is also relatively tight to achieve disinflation and reduce depreciation pressures on the currency.

A gradual pick-up in growth is projected

GDP growth is projected to remain below potential, despite an acceleration to slightly above 3% in 2015 and close to 4% in 2016, once the "wait and see" attitudes of businesses and households dissipate. Growth could be faster if the structural reforms outlined in the National Development Plan 2014-18 were implemented promptly and effectively. Indeed, reforms in the key product and labour market areas would have a strong positive impact on confidence, investment and growth. Downward risks arise from post-election uncertainties and regional geopolitical conditions, notably in Iraq and Syria. A deterioration in domestic and international confidence might heighten financial tensions and hold back investment and growth.

UNITED KINGDOM

Economic growth was strong in 2014 and is projected to continue at a solid pace in 2015 and 2016, boosted by domestic demand. The unemployment rate is projected to fall further towards 5%. As spare capacity wanes, inflation is expected to pick up towards the 2% inflation target. The current account deficit has widened to above 5% of GDP, notably as investment income has disappointed, but is projected to narrow gradually as the euro area continues to recover.

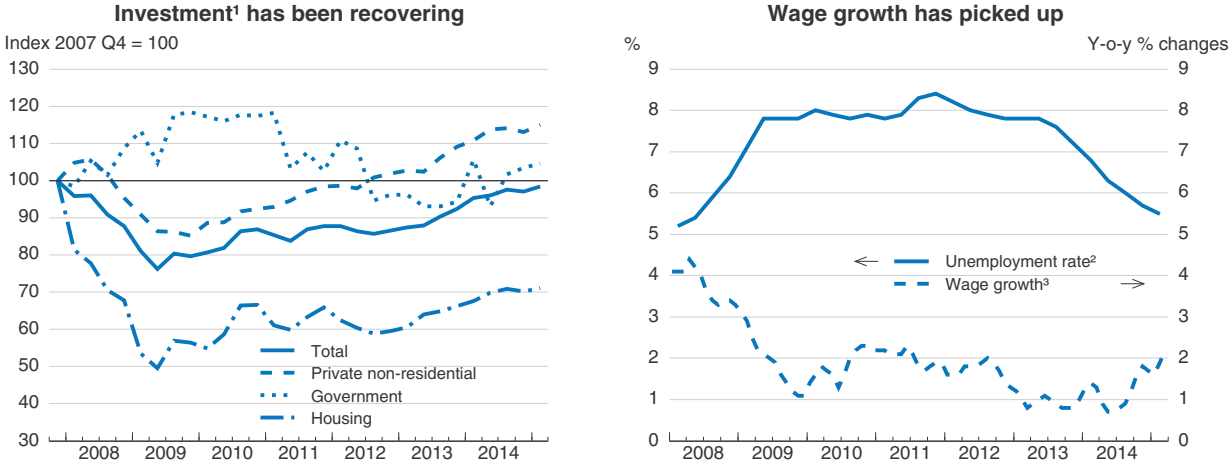
According to the March 2015 budget, bolder fiscal consolidation is planned by the authorities in 2016 and 2017, with the adjustment mainly on the spending side. It is important that adjustment measures that are yet to be defined be fair. The normalisation of interest rates is projected to start in early 2016 as spare capacity narrows and inflation pressures rise. Bank stress tests planned by the Bank of England for this year are welcome, but extending future exercises to shadow banks would provide more comprehensive information on financial stability risks.

Stronger investment is needed to revive labour productivity, wages and competitiveness, and to balance the housing market. This requires greater access to finance for businesses, relaxed land planning regulations, and improved infrastructure. The perceived quality of infrastructure is lower than in other G7 countries, and the investment ratio is low in international comparison. Infrastructure could be enhanced by strengthening long-term government strategy and planning in order to attract private investors, and by leveraging limited public resources with private investment.

Growth has been strong, albeit volatile, but productivity has remained subdued

Notwithstanding weakness in early 2015, the economic expansion has continued at a healthy pace of around 2.5% a year, mainly underpinned by strong increases in private

United Kingdom



1. Real gross fixed capital formation.
2. Population aged 16 and over.
3. Regular (excludes bonuses and arrears of pay) weekly earnings. Three month moving average applied.

Source: OECD Economic Outlook 97 database; and Office for National Statistics (ONS).

StatLink http://dx.doi.org/10.1787/888933221340

United Kingdom: **Employment, income and inflation**

Percentage changes

	2012	2013	2014	2015	2016
Employment	1.1	1.2	2.3	1.7	1.1
Unemployment rate[1]	8.0	7.6	6.2	5.4	5.1
Compensation per employee[2]	2.0	1.9	1.7	2.7	3.3
Unit labour cost	1.9	1.4	0.4	2.3	2.0
Household disposable income	3.7	1.7	1.6	5.8	4.0
GDP deflator	1.7	1.8	1.7	0.4	1.2
Harmonised index of consumer prices[3]	2.8	2.6	1.5	0.0	1.7
Core harmonised index of consumer prices[4]	2.2	2.0	1.6	1.2	1.9
Private consumption deflator	2.1	1.9	1.6	0.3	1.3

1. As a percentage of labour force.
2. In the total economy.
3. The HICP is known as the Consumer Price Index in the United Kingdom.
4. Harmonised index of consumer prices excluding food, energy, alcohol and tobacco.

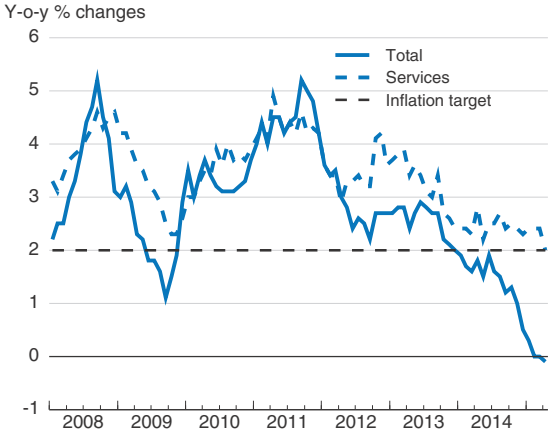
Source: OECD Economic Outlook 97 database.

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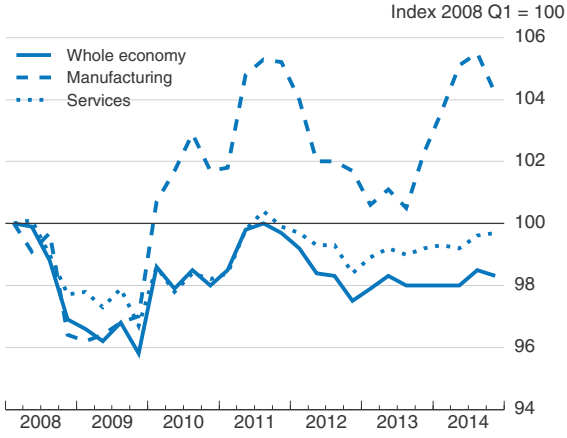
consumption. Robust employment growth, a pick-up in nominal and real wages, rising consumer borrowing and further increases in house prices have supported consumer confidence, leading to vibrant retail sales. However, labour productivity has been flat for some years and business investment has been weak amid flagging business confidence, lower oil prices (which are holding back capital spending of the oil and gas industry), and weak bank lending to businesses. Government investment has been volatile and is below its 2010 peak. Housing investment has been recovering, but not enough to prevent further increases in residential property prices. Annual house price growth has been showing some signs of slowing, while being volatile.

United Kingdom

Consumer price inflation has receded



Labour productivity[1] remains muted



1. Output per hour.

Source: Office for National Statistics (ONS).

StatLink http://dx.doi.org/10.1787/888933221355

United Kingdom: **Financial indicators**

	2012	2013	2014	2015	2016
Household saving ratio, gross[1]	8.0	6.4	6.0	7.5	7.5
General government financial balance[2]	-8.3	-5.5	-5.3	-4.0	-2.5
General government gross debt[2]	105.1	100.8	111.3	113.3	113.1
General government debt, Maastricht definition[2]	85.8	87.3	89.3	91.3	91.1
Current account balance[2]	-3.7	-4.5	-5.5	-5.1	-4.4
Short-term interest rate[3]	0.8	0.5	0.5	0.5	1.2
Long-term interest rate[4]	1.9	2.4	2.6	2.0	2.8

1. As a percentage of disposable income (gross saving).
2. As a percentage of GDP at market value.
3. 3-month interbank rate.
4. 10-year government bonds.

Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933221972

The current account deficit has increased to a record level of more than 5% of GDP. Export markets have continued to improve, but exports have contributed little to the recovery, notably as the exchange rate and unit labour costs have strengthened and the proportion of tradable sectors in total output has continued to fall. In parallel, the income balance has deteriorated further, notably as the rate of return on foreign assets has fallen.

United Kingdom: **Demand and output**

	2013	2014	2015	2016	Fourth quarter 2014	Fourth quarter 2015	Fourth quarter 2016
	Current prices £ billion	Percentage changes from previous year, volume (2011 prices)					
GDP at market prices	1 713.1	2.8	2.4	2.3	3.0	2.4	2.1
Private consumption	1 111.5	2.5	2.5	2.3	3.0	2.3	2.1
Government consumption	345.2	1.7	1.3	-0.7	2.1	1.0	-1.5
Gross fixed investment	282.1	7.8	4.7	6.2	5.1	6.4	6.2
Public[1]	39.7	7.3	4.1	2.8	9.7	2.4	3.5
Residential	70.8	8.9	5.2	7.5	6.0	7.3	7.5
Non-residential	171.6	7.5	4.6	6.4	3.7	7.0	6.3
Final domestic demand	1 738.7	3.2	2.6	2.4	3.2	2.8	2.1
Stockbuilding[2]	8.1	0.2	0.1	0.0			
Total domestic demand	1 746.9	3.4	2.8	2.4	2.4	3.2	2.1
Exports of goods and services	515.9	0.6	3.8	3.0	5.6	1.6	3.3
Imports of goods and services	549.6	2.2	4.8	3.1	3.0	4.2	3.3
Net exports[2]	- 33.7	-0.5	-0.4	-0.1			

Note: Detailed quarterly projections are reported for the major seven countries, the euro area and the total OECD in the Statistical Annex.

1. Including nationalised industries and public corporations.
2. Contributions to changes in real GDP, actual amount in the first column.

Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933221983

United Kingdom: **External indicators**

	2012	2013	2014	2015	2016
			$ billion		
Goods and services exports	793.5	806.5	836.2	801	840
Goods and services imports	848.1	859.4	892.0	858	899
Foreign balance	- 54.6	- 52.9	- 55.8	- 58	- 59
Invisibles, net	- 43.5	- 67.3	- 105.7	- 86	- 73
Current account balance	- 98.2	- 120.2	- 161.5	- 144	- 133
			Percentage changes		
Goods and services export volumes	0.7	1.5	0.6	3.8	3.0
Goods and services import volumes	3.1	1.4	2.2	4.8	3.1
Export performance[1]	- 1.8	- 1.0	- 3.3	- 0.6	- 2.2
Terms of trade	0.4	0.3	1.4	0.5	0.2

1. Ratio between export volume and export market of total goods and services.
Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933221996

The unemployment rate has continued to fall rapidly, the employment rate is at a historical high and vacancies are high. Regular wage growth has risen to 2% a year, but the strong labour market has not so far led to major wage pressures as recent labour market and pension reforms may have lowered the equilibrium unemployment rate and consumer prices are broadly unchanged from a year ago.

Macroeconomic policies are normalising and the supply side is strengthening

The government has amended its medium-term fiscal plan to bring the budget close to balance and to secure a further decline in the public-debt-to-GDP ratio. Stripping out cyclical effects, the deficit is to fall by accumulative 3% of GDP in 2016 and 2017. Real public spending is to fall significantly in fiscal years 2016 and 2017, to stabilise in 2018 and to rebound in 2019. Evening out the profile of fiscal consolidation would lower its impact on growth. Although the composition of measures is yet to be defined, it is important that they mitigate distributional effects.

Monetary policy will remain supportive throughout the projection, but as economic slack is reduced the Bank of England is assumed to gradually raise its rates, with the first hike no sooner than early 2016. Higher interest rates should help ensure the selection of more profitable investment projects and the restructuring of deficient businesses, hence supporting productivity. New stress tests of the banking sector planned by the Bank of England in 2015 are welcome and future exercises should be broadened to the shadow banking sector to expand the monitoring of financial stability risks.

Labour productivity and living standards would benefit from further gross fixed investment, which is low as a share of GDP by international standards. Business investment could be supported by enhancing competition among lenders through wider collection and sharing of credit information through credit reference agencies or directly through the regulator. To overcome market failures and attract private finance into infrastructure, the authorities should continue to build on the progress made with the National Infrastructure Plan to foster long-term government strategy and planning,

develop further the use of public guarantees, expand public-private partnerships, and reprioritise public spending towards infrastructure. Alleviating land planning regulations is essential to improve affordability and the allocation of resources in the economy, and to accommodate a rising population.

Growth will remain strong

GDP growth is expected to slow somewhat in 2016, with private consumption and investment being the main engines of growth. The current account balance is projected to improve owing to stronger profitability of overseas investments, notably benefiting from the recovery in the euro area. The labour market is projected to remain solid, with further declines in the unemployment rate and a pick-up in wage growth associated with a recovery in productivity. Consumer prices should remain flat in 2015 and pick up in 2016 as temporary effects of weaker commodity prices unwind and slack in labour and product market narrows further.

Productivity has continued to surprise on the downside over recent years and there is a risk that this underperformance is driven by structural rather than cyclical factors. Continued weak productivity would lead to lower-than-expected GDP and wage growth, and a higher-than-expected budget deficit. Moreover, euro area risks could hold back business confidence and investment. On the other hand, defining medium-term policy plans by the government and continuing structural reforms would boost productive capacity and productivity. Alternatively, growth could still be sustained through higher household borrowing and consumption, supported by stronger wages and lower commodity prices, even if productivity does not recover.

UNITED STATES

Output growth paused in early 2015, weighed down by the stronger dollar and adverse weather. Nonetheless, the labour market has continued to improve, as evidenced by job gains in the private sector and a falling unemployment rate. Supportive monetary conditions and lower energy prices should underpin a sustained pick-up in aggregate demand as the fiscal policy drag dissipates and ongoing increases in household wealth lift consumer spending and residential construction.

The Federal Reserve has kept policy rates close to zero, consistent with signs of lingering labour market slack, subdued wage gains, low underlying inflation and well-anchored inflation expectations. With the underlying strength of output growth uncertain and inflation projected to remain well below its target, policy rates are likely to remain near the zero lower bound until at least September 2015 before edging upward at a cautious pace. The federal budget deficit continues to narrow, reflecting consolidation measures and the advancing recovery. Policy actions to directly address long-term fiscal challenges remain desirable.

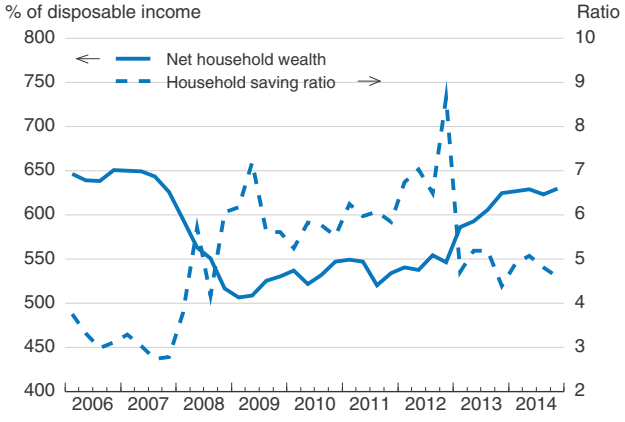
The recovery of investment spending has been sluggish so far, reflecting the weakness of the demand outlook, the overhang of construction from the housing boom, and a sustained public spending squeeze. Low public and private capital investments have reduced productivity and weakened production capacity. With real long-term interest rates historically low, the federal and state and local governments have scope to accelerate investment spending, notably through the highway trust fund.

The recovery has hit a soft patch

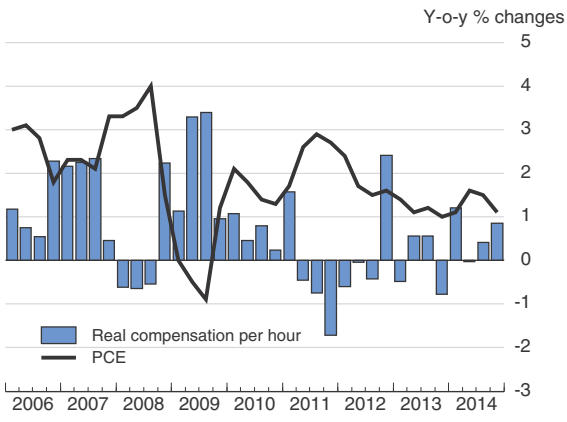
Although the US recovery appears to be further advanced than that in most OECD countries, GDP growth slowed in the fourth quarter of 2014 and then fell somewhat in the first quarter of 2015. Activity has been restrained, in part, by the recent appreciation of the US dollar and by transitory disruptions from unusually wintry weather early in the year. Recent oil-price declines have weakened investment expenditure in the drilling and

United States

Households wealth is rising



Wage and price inflation remain modest



Source: OECD Economic Outlook 97 database; and the US Bureau of Economic Analysis.

StatLink http://dx.doi.org/10.1787/888933221361

United States: **Employment, income and inflation**

Percentage changes

	2012	2013	2014	2015	2016
Employment[1]	1.6	1.4	1.8	2.0	1.1
Unemployment rate[2]	8.1	7.4	6.2	5.5	5.2
Compensation per employee[3]	2.4	1.1	2.2	2.5	3.0
Labour productivity	0.7	0.8	0.5	0.0	1.7
Unit labour cost	1.7	0.5	1.8	2.6	1.3
GDP deflator	1.8	1.5	1.5	1.1	1.8
Consumer price index	2.1	1.5	1.6	0.0	1.8
Core PCE deflator[4]	1.8	1.3	1.4	1.2	1.6
PCE deflator[5]	1.8	1.2	1.3	0.3	1.6
Real household disposable income	3.0	-0.2	2.5	3.6	3.0

1. Based on the Bureau of Labor Statistics (BLS) Establishment Survey.
2. As a percentage of labour force, based on the BLS Household Survey.
3. In the total economy.
4. Deflator for private consumption excluding food and energy.
5. Private consumption deflator. PCE stands for personal consumption expenditures.

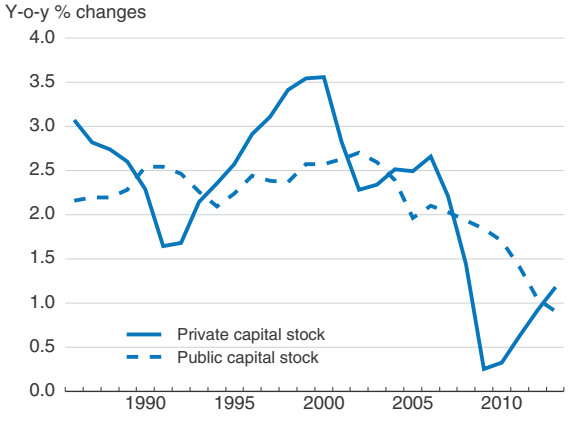
Source: OECD Economic Outlook 97 database.

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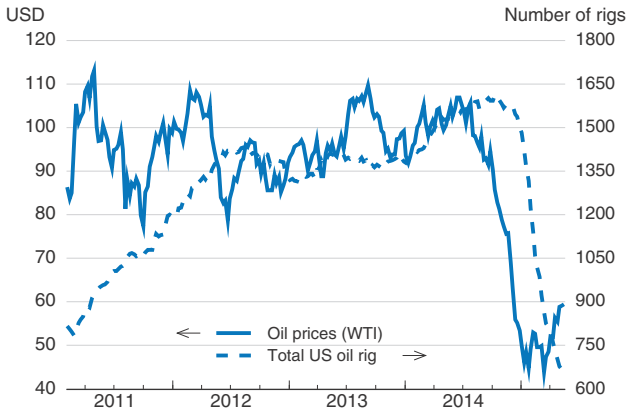
mining sector following an earlier sustained run-up. The recovery of housing investment remains hesitant, in part reflecting rates of household formation that remain below longer-term demographic trends. Business investment has also weakened more broadly, reflecting the drag from the stronger dollar on the manufacturing outlook and the overall deceleration of activity. However, apart from weather-related disruptions, consumer spending still appears to be registering decent gains.

United States

Capital stocks have decelerated since the crisis



Drilling activity has slumped with oil prices



Source: Bureau of Economic Analysis; and Baker Hugues (North America Rotary Rig Count).

StatLink http://dx.doi.org/10.1787/888933221372

United States: **Financial indicators**

	2012	2013	2014	2015	2016
Household saving ratio, net[1]	7.2	4.9	4.8	5.1	4.5
General government financial balance[2]	-9.0	-5.7	-5.0	-4.0	-3.6
General government gross debt[2]	110.5	109.2	110.1	111.4	111.1
Current account balance[2]	-2.9	-2.4	-2.4	-2.6	-3.0
Short-term interest rate[3]	0.4	0.3	0.3	0.5	1.6
Long-term interest rate[4]	1.8	2.4	2.5	2.3	3.2

1. As a percentage of disposable income.
2. As a percentage of GDP at market value.
3. 3-month rate on euro-dollar deposits.
4. 10-year government bonds.

Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933221807

Although the labour market has continued its steady recovery, there are still signs of lingering slack, especially amongst teenagers, ethnic minorities, and less-skilled workers. Recent monthly estimates provide tentative evidence that tightening labour market conditions are finally beginning to put some upward pressure on nominal hourly compensation, but wage acceleration to date has been modest and not broadly based.

United States: **Demand and output**

	2013	2014	2015	2016	Fourth quarter 2014	Fourth quarter 2015	Fourth quarter 2016
	Current prices $ billion	Percentage changes from previous year, volume (2009 prices)					
GDP at market prices	16 768.1	2.4	2.0	2.8	2.4	1.7	2.8
Private consumption	11 484.4	2.5	3.0	3.0	2.9	2.9	2.8
Government consumption	2 547.6	0.4	0.5	0.5	1.1	0.6	0.5
Gross fixed investment	3 170.3	3.9	3.0	5.4	4.4	2.5	5.9
Public	596.3	-2.5	-0.5	1.3	-0.5	-1.5	1.4
Residential	519.9	1.6	5.5	11.0	2.5	7.0	12.9
Non-residential	2 054.0	6.3	3.3	5.1	6.2	2.5	5.3
Final domestic demand	17 202.2	2.5	2.7	3.1	2.9	2.5	3.1
Stockbuilding[1]	74.1	0.1	0.1	0.0			
Total domestic demand	17 276.3	2.5	2.7	3.1	2.9	2.5	3.1
Exports of goods and services	2 262.2	3.2	1.7	4.9	2.4	1.5	5.0
Imports of goods and services	2 770.4	4.0	6.4	6.7	5.6	6.6	6.5
Net exports[1]	- 508.2	-0.2	-0.8	-0.4			

Note: Detailed quarterly projections are reported for the major seven countries, the euro area and the total OECD in the Statistical Annex.

1. Contributions to changes in real GDP, actual amount in the first column.

Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933221811

United States: **External indicators**

	2012	2013	2014	2015	2016
			$ billion		
Goods and services exports	2 194.2	2 262.2	2 337.0	2 293	2 415
Goods and services imports	2 762.5	2 770.4	2 875.2	2 854	3 043
Foreign balance	- 568.3	- 508.2	- 538.2	- 562	- 628
Invisibles, net	107.6	107.9	127.6	87	72
Current account balance	- 460.8	- 400.3	- 410.6	- 475	- 557
			Percentage changes		
Goods and services export volumes	3.3	3.0	3.2	1.7	4.9
Goods and services import volumes	2.3	1.1	4.0	6.4	6.7
Export performance[1]	- 0.7	- 0.4	0.1	- 1.9	- 0.2
Terms of trade	0.4	0.9	0.3	3.4	0.5

1. Ratio between export volume and export market of total goods and services.
Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933221827

The policy environment remains supportive

Monetary policy is assumed to remain accommodative throughout the projection period. This is appropriate given that core PCE price inflation continues to run below the 2% annual target even after accounting for temporary downward effects from energy prices and exchange-rate pass-through. However, as economic slack continues to diminish, monetary policy is expected to gradually tighten. The first rate increase is projected to occur no earlier than September 2015 and subsequent upward increments should be conditional on signs of further progress in narrowing economic slack.

Fiscal policy is expected to have a neutral impact on growth in the next few years, with cyclical developments accounting for the modest improvements in the overall budget balance in 2015 and 2016. This neutral stance should be sufficient to stabilise general government gross debt at around 110% of GDP. Even so, Congressional Budget Office projections suggest that spending pressures will re-emerge in 2018, largely driven by healthcare spending and, to a lesser extent, social security. Measures to directly address these longer-term challenges are necessary, but they should be implemented in a way that does not undermine the recovery. The debt ceiling should be raised soon to minimise uncertainties that have recently clouded the outlook.

Domestic infrastructure should be a key policy priority, as decaying government capital undermines productivity growth. Spending has been held back by insufficient fiscal resources and the lack of co-ordination across governmental jurisdictions. As budgets normalise, states should provide greater infrastructure funding, which should help boost overall productivity. The federal government should continue to support state and local government investment, for example through programmes managed by the Department of Transport and Department of Housing and Urban Development. The Highway Trust Fund, which remains underfunded as the nominal (per-gallon) gasoline tax has not been adjusted since 1993, requires a sustainable funding solution.

Growth is projected to rise

Activity should regain steam, with aggregate demand propelled by continued employment gains, wealth effects from rising asset prices, and the boost to purchasing power from lower oil prices. The tightening labour market should help distribute forthcoming income gains more broadly, thereby providing an impetus to household spending that should help offset the effect from an inevitable slowing in overall employment. Broadening income gains should also help lift residential construction toward levels consistent with longer-term demographic trends. Although there is little indication of pent up demand for business capital, non-residential investment should accelerate to keep pace with the projected brightening of the overall demand outlook.

The projection is surrounded by risks. On the upside, wages could accelerate more rapidly than anticipated, which may stoke inflationary pressures. Similarly, pent up demand for business investment could be more substantial than thought, and could be unleashed as businesses regain confidence. On the downside, heightened financial market volatility could occur due to uncertainties surrounding the lift off of policy rates or the normalisation of the monetary base, thereby threatening the outlook. Residential investment could yet again prove disappointing, requiring a more stimulative trajectory of monetary policy.

OECD Economic Outlook, Volume 2015 Issue 1
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Chapter 3

LIFTING INVESTMENT FOR HIGHER SUSTAINABLE GROWTH

Summary

- Total OECD real investment, and in particular housing investment, dropped precipitously at the peak of the crisis and its recovery has been sluggish. Weak investment has depressed productivity growth and will, if it persists, entrench low equilibrium growth and poor job prospects in the short and longer term.
- Recent investment developments should be considered in the context of important structural changes:
  - Part of domestic business investment in advanced economies may have been relocated to other countries. However, whether capital spending abroad replaces or complements domestic capital outlays remains uncertain.
  - The structure of advanced economies has shifted from highly investment-intensive industrial sectors to less investment-intensive services.
  - This was accompanied by a rising share of ICT and intangible/knowledge-based investment, which depreciates faster, reflecting technological progress and changing global specialisation in production.
- Weak aggregate demand, both domestic and foreign, through the accelerator mechanism, explains most of the weak non-housing investment since the onset of the crisis. Therefore, more balanced global demand could propel investment to a higher level equilibrium, particularly if accompanied by reduced uncertainties and market reforms.
- Surprisingly, falling real tax-adjusted interest rates and high equity prices (supported by monetary policy) have had relatively little pass-through to real investment, especially in the case of countries where credit supply has been constrained by an incomplete repair of bank balance sheets.
- Uncertainty dissuades investment. Although by some measures, economic uncertainty has fallen over the past three years, long-standing uncertainties persist, including how population ageing and climate change will be dealt with.
- Recent regulatory reforms in product markets in some countries and generally improved corporate balance sheets should boost the prospects for investment, although there is more to do.
- Public and infrastructure investment has been cut in a number of countries to meet fiscal consolidation objectives. A revival of public investment, with particular attention to reducing the dispersion of regulatory barriers in network industries would increase the quantity and quality of infrastructure investment to support both demand and supply.
- Increases in capital spending are needed to push economies onto a higher growth path and this calls for decisive policy actions. Macroeconomic policy to address deficient demand and a reduction in policy-related uncertainty need to be accompanied by structural policies that increase longer-term economic growth. Translating investment into effective and sustained growth requires attention to low-wage workers, as well as addressing the consequences of rising inequality for education, a key factor undermining potential growth in the longer term.

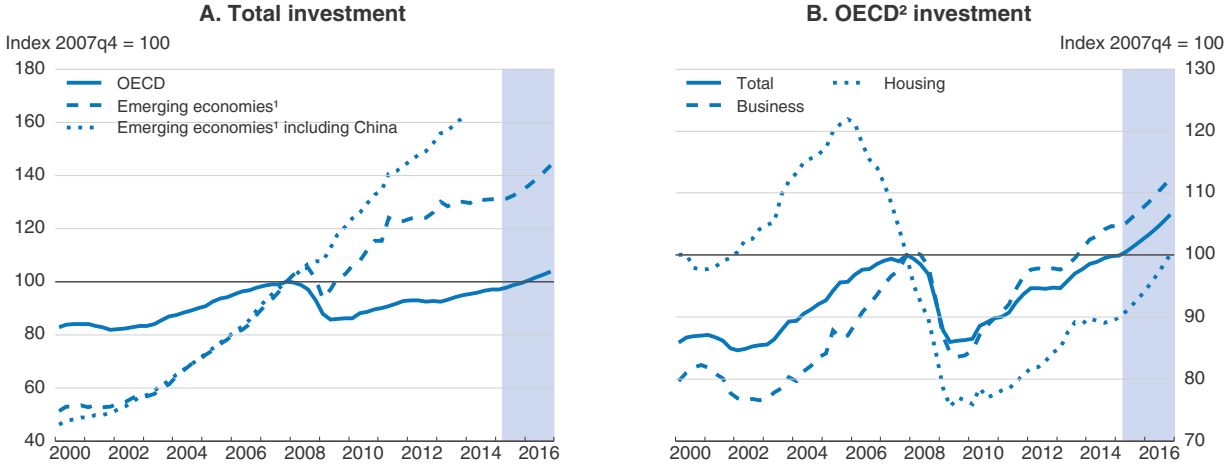
Introduction

Soft investment in advanced economies in recent years has gone hand in hand with the weak recovery and has reduced potential output growth. To escape this low equilibrium setting and push economies onto a higher growth path, it will be necessary to raise capital spending. This paper examines the potential reasons for current weak investment, against the background of secular trends, such as the shift of the location of investment to emerging market economies (EMEs), the growing importance of intangible investment and the declining share of investment-intensive sectors in the economy. The determinants of business investment are also examined: weak aggregate demand, cost of capital, economic and policy uncertainty, and regulatory constraints. The drivers of government and infrastructure investment are also considered. The paper concludes with an examination of the policy implications of the analysis to achieve a high-growth and high-investment equilibrium, with higher quality employment and enhanced innovation diffusion – that is, higher potential output.

The evolution of fixed capital investment

Total real gross investment in the OECD as a whole dropped precipitously at the peak of the crisis and only returned to the pre-crisis level by 2014 (Figure 3.1). The decline in housing investment was considerably larger than in business investment, but with important cross-country differences. Among advanced countries, the investment compression was particularly striking in the euro area (Figure 3.2). In contrast, in large EMEs excluding China, the decline in investment in 2009 was much smaller and shorter lived. However, investment growth in these countries has lost steam in the past four years, though with notable divergence across the different economies. Investment in the large

Figure 3.1. **Evolution of global investment**

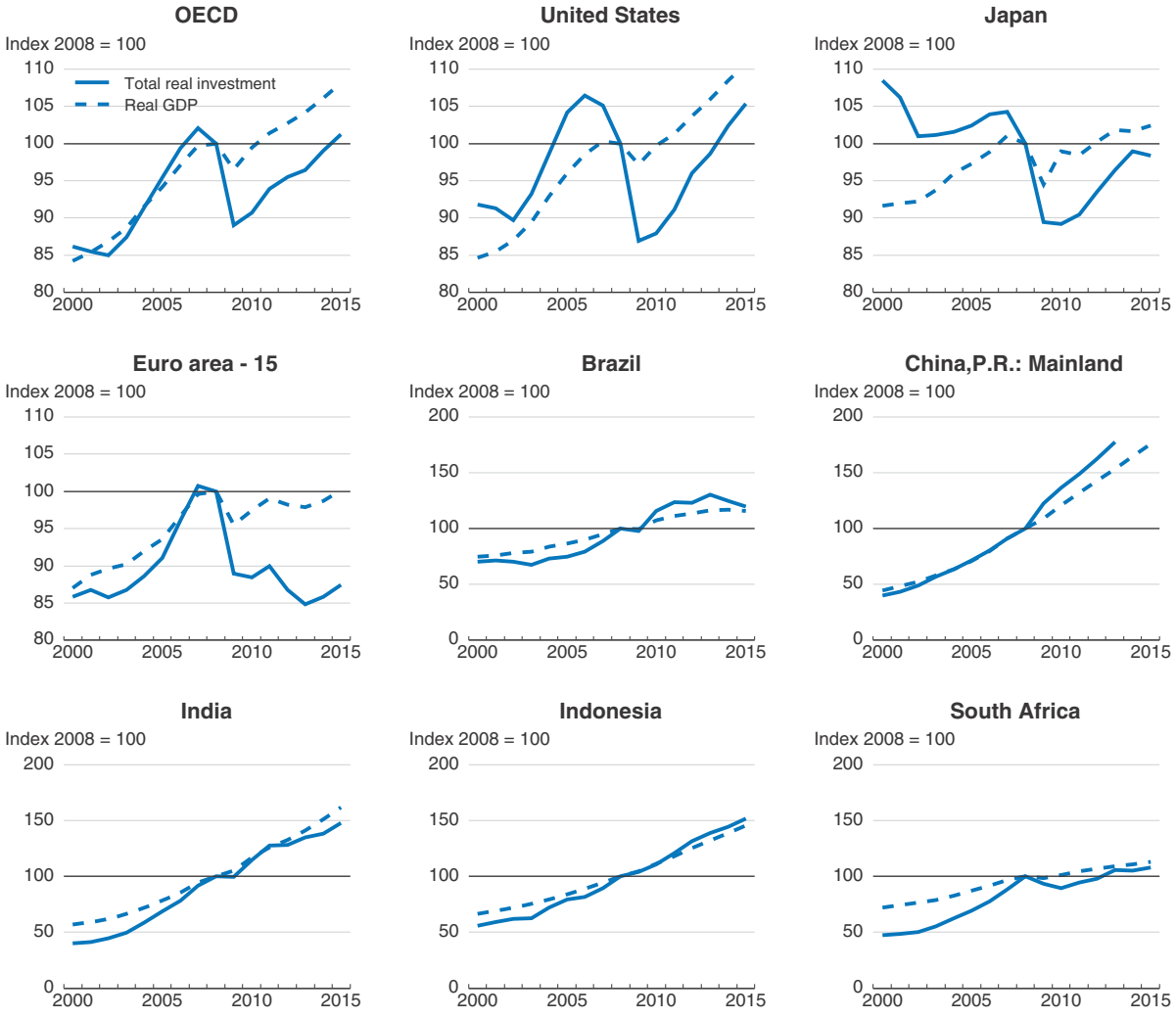


1. Covers Brazil, India, Indonesia, Mexico, Russia, South Africa and Turkey.
2. Covers only 17 OECD countries for which series on housing and business investment are available.

Source: OECD Economic Outlook 97 database; and *UN National Accounts Main Aggregates Database*.

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Figure 3.2. **Real gross investment**



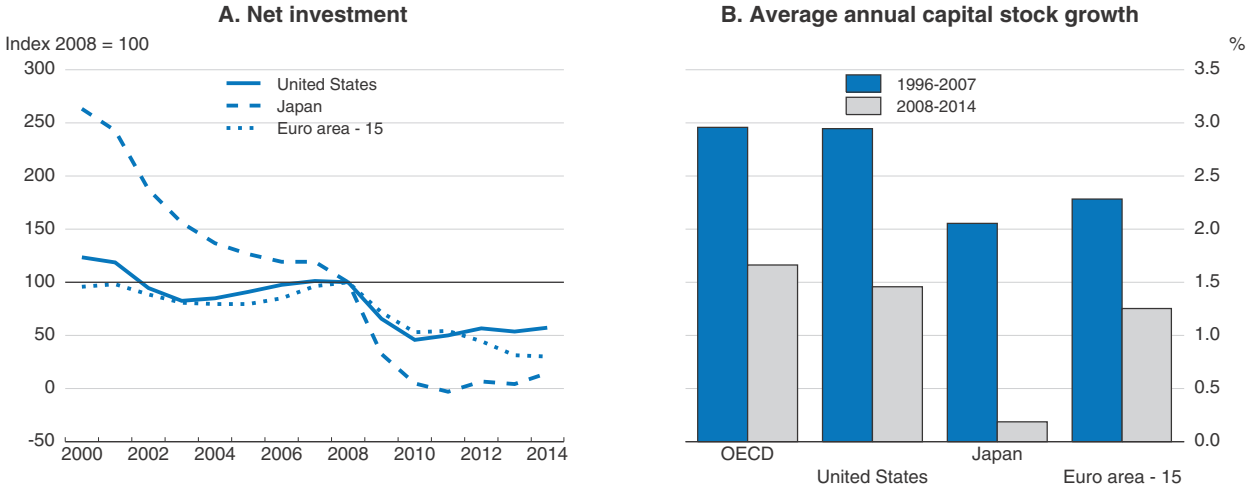
Source: OECD Economic Outlook 97 database; and *UN National Accounts Main Aggregates Database*.

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EMEs as a whole has grown at an uninterrupted and fast pace over the past decade due to robust investment in China, India and Indonesia, among others. As a result, the ratios of investment to GDP have been on the rise in many EMEs, in contrast many advanced economies, in particular the euro area. Looking forward, the pace of growth in gross investment is projected to exceed that of GDP, thus raising the capital-output ratio for these economies, which is appropriate for some but not for all at current stage of development.

As average depreciation rates have risen over time, reflecting the growing share of fast-depreciating information and communications technology (ICT) equipment and intangibles in total capital, gross investment would need to be higher than historical benchmarks in order to avoid a fall in net investment and the capital stock. Estimates of real net investment for business and government combined, derived from new OECD estimates of the real productive capital stock, suggest that they are much lower than prior to the crisis (Figure 3.3). Overall, the net productive capital stock has been growing at a

Figure 3.3. **Net investment and capital stock growth have been weak following the crisis**



Source: *OECD Economic Outlook 97 database*; and OECD calculations.

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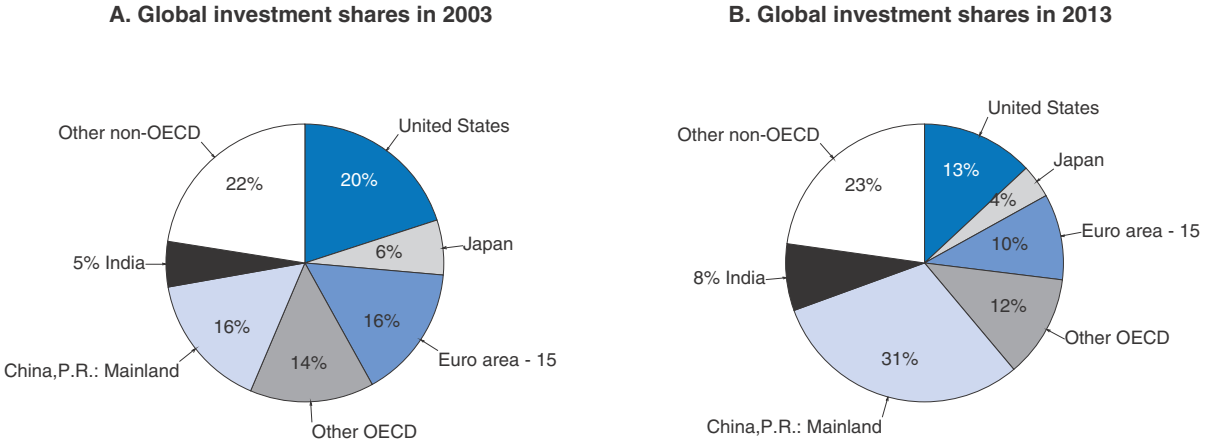
much slower rate than before the crisis and has not been keeping up with modest output increases in the recovery in the United States, Japan and the euro area. This is an important contributory factor behind the post-crisis weakness in potential output growth (Box 1.3 in Chapter 1).

The changing global distribution of investment

The share of global investment located in EMEs has risen dramatically over the past decade (Figure 3.4). This reflects a range of factors, including the relatively strong growth in

Figure 3.4. **Global fixed capital investment has shifted to emerging market economies**

In per cent of world gross fixed capital investment



Note: Calculations based on PPPs.
Source: World Bank; and OECD calculations.

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these economies, their investment-led development paths and the changing international specialisation of production. The change in the share accounted for by China is particularly striking. Considering all types of investment and investors, China now accounts for around 16½ per cent of global output (in PPP terms), but over 30% of global capital spending, with around one-sixth of Chinese investment being in housing. At the same time, China has become the leading location for international foreign direct investment (FDI) flows (see below).

Considering the movement of global investment across borders, there are a number of different indicators and measurements. The most commonly used are FDI flows and stocks, which are available for all economies and on a bilateral basis. These data measure financial flows across national borders that represent an ownership and control commitment. While importantly driven by mergers and acquisitions, these data also account for actual fixed capital investments undertaken by multinational enterprises (MNEs).[1] Additional information is provided by new "greenfield" FDI projects (a subset of total FDI) and, for those countries that have data, direct information on fixed investments by MNEs.[2] Changes in the geography of ownership and control could have implications for the level of investment in the advanced economies, in particular by raising the extent to which investment decisions in one economy are dependent not only on developments in that economy, but also on global demand and the relative costs of investing in other economies (Young, 1999; Belderbos et al., 2012). At the same time, this could raise the overall rates of return on investment by MNEs in advanced economies.

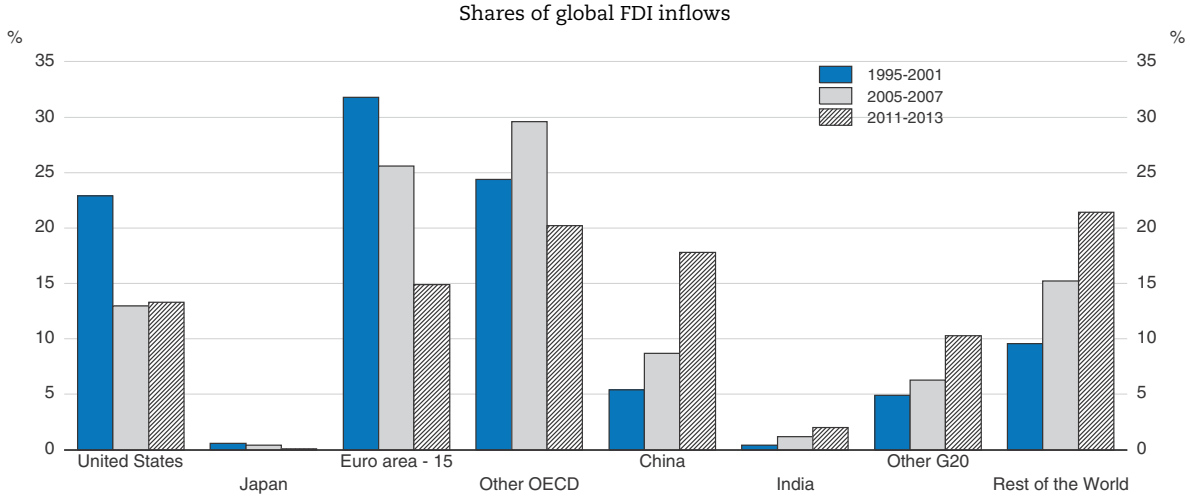
The global distribution of inward FDI flows – considering both mergers and acquisitions and greenfield – has shifted somewhat over time, with the OECD economies receiving less than one-half of total flows in 2011-13, down from around four-fifths of total flows in the latter half of the 1990s (Figure 3.5). Since the crisis, this decline in share has been particularly marked in the euro area. At the same time, the share of inflows to China and a number of EMEs has risen sharply. This is largely driven by EMEs' positive growth differentials, cost differentials and narrowing regulatory gaps *vis-à-vis* advanced countries (Arbatli, 2011).

- The majority of new greenfield FDI projects are also located outside OECD economies, but the distribution has been relatively stable over time (Figure 3.6). China remains an important location, but only receives around 10% of new greenfield FDI projects. In the OECD economies, the share of new projects located in the United States (and also the United Kingdom) has risen since the crisis, whereas the share in the euro area economies has again declined, possibly reflecting differences in the pace of recovery between these economies.

1. Specifically, FDI flows in balance-of-payment accounts equal the sum of equity flows from home to abroad, including mergers and acquisitions and greenfield investments, inter-company debt flows from parents to subsidiaries, retained earnings reinvested in those subsidiaries, and extensions of capital to existing affiliates and investments for financial restructurings (e.g. for debt repayment or loss reduction; see OECD (2008) for more information). These methods of measuring foreign investment make FDI flows a better measure of the financing of overseas operations through the use of internal capital markets rather than the actual capital expenditures of foreign subsidiaries.
2. In addition to mergers and acquisitions and greenfield investments, FDI flows also consist of extensions of capital to existing affiliates and investments for financial restructurings (e.g. for debt repayment or loss reduction). See OECD (2088) for more information.

Figure 3.5. **FDI flows are increasingly to non-OECD countries**

Shares of global FDI inflows



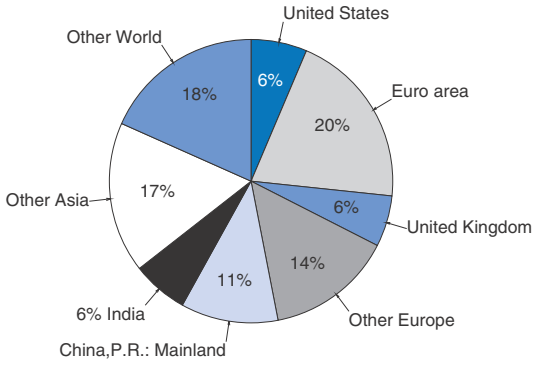
Source: *OECD FDI Databases*; and OECD calculations.

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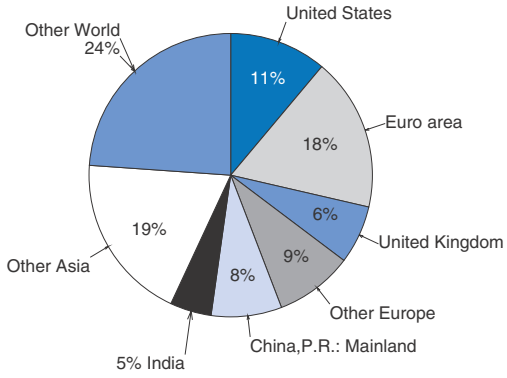
Figure 3.6. **The location of greenfield FDI projects**

Shares of global greenfield FDI

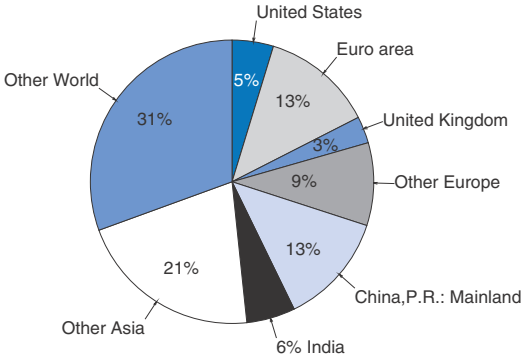
A. Volumes, 2005-2007 average



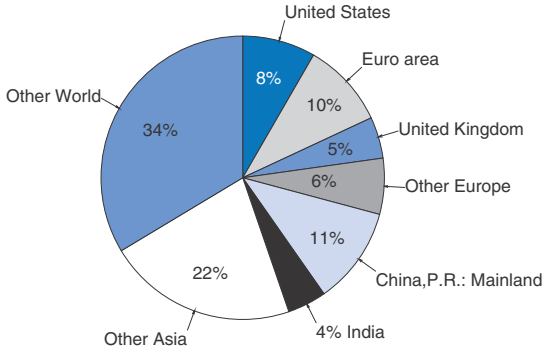
B. Volumes, 2011-2013 average



C. Values, 2005-2007 average



D. Values, 2011-2013 average



Source: UNCTAD; and OECD calculations.

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- China has also become an important source of FDI flows. According to UNCTAD data, after accounting for less than 1% of global FDI outflows for most of the past two decades, China's share of global outward FDI flows has risen rapidly since 2008, and accounted for over 7% of global outflows in 2013. Nevertheless, China accounts for less than 1% of the FDI stock in most OECD countries (its share is slightly higher in Australia, Canada, Korea, Norway and Sweden but still below 3%).
- Economy-wide information on the capital investments of MNEs is largely confined to fixed tangible capital investments by foreign-owned firms in host countries. Considerably less information is available on investments abroad by the affiliates of domestic companies (Box 3.1). In the majority of OECD economies for which data are available, investments by foreign-owned firms in tangible assets represent somewhere between 1 and 2½ per cent of domestic GDP, though in a handful of smaller open economies in Europe this rises to somewhere between 4% and 6% of GDP (Figure 3.7).[3] Japan stands out as having a comparatively low level of investment undertaken by foreign-owned firms. It seems unlikely that the investment decisions of foreign-owned

Box 3.1. **Capital investment by the foreign affiliates of domestic corporations**

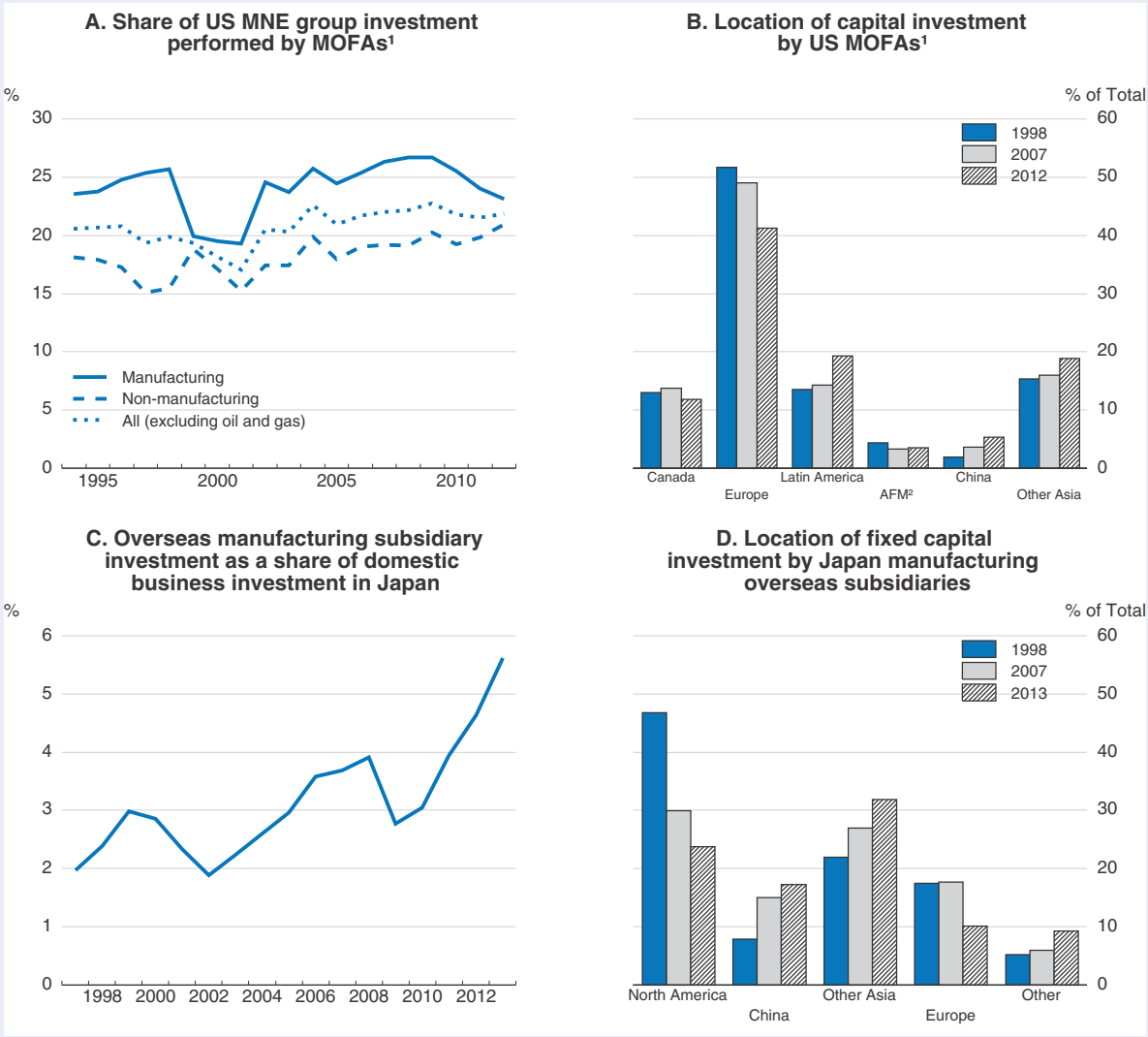
Information on the capital investment of the foreign affiliates of domestic corporations is limited, with most of the data on outward investments by domestic companies relating to output and employment. Comparatively rich data sets are, however, available for the United States and Japan (Box Figure).[1]

- In the United States, the investment intensity (measured relative to value added) of both US parent companies and their majority-owned foreign affiliates (MOFAs) has declined over time, to around 18% and 15½ per cent of value added respectively in 2012. The share of total group investments in tangible capital performed by MOFAs has edged up slightly over time, especially in the non-manufacturing sector. Investments by MOFAs have also risen relative to total US business investment (tangibles plus intangibles). In 2012, MOFAs' investments were equivalent to just over 11% of total domestic business investment in the United States, up from 8¼ per cent on average over 2001-07. This may reflect an increasing tendency to locate new investments outside the United States, but it could also just reflect the stronger financial resources available to many multinational companies.
- The main location for US MOFAs' capital investment remains Europe, but the share undertaken there has declined sharply over time and the shares in Asia and Latin America have risen. Although rising rapidly in the years prior to the global financial crisis, the share of non-OECD EMEs in total capital spending by US MOFAs edged up only marginally between 2007 and 2012 (the latest year for which data are available) to just above one-third. This was equivalent to around ½ per cent of US GDP, 0.2 percentage point higher than in 2004.
- In Japan the tangible capital investments of overseas manufacturing subsidiaries of Japanese companies has risen as a share of total domestic business investment (so called "hollowing out"), especially since the global financial crisis. Capital investments have been increasingly located in Asia (the principal recipient) at the expense of Europe and North America. Overall, measured relative to GDP in Japan, foreign affiliates' investment in EMEs increased by 0.2 percentage point between 2007 and 2013, to 0.5% of GDP.

3. The share of foreign-owned firms' tangible investments in total domestic tangible investments in 2012 ranged widely across countries, from around 4-6% in France and Italy, to 9-10% in the United States and Germany, close to 20% in the United Kingdom, 30-35% in Hungary and the Slovak Republic and over 50% in Ireland.

Box 3.1. **Capital investment by the foreign affiliates of domestic corporations** *(cont.)*

Investment by the foreign affiliates of US and Japanese companies



1. MOFAs stands for majority-owned foreign affiliates.
2. Africa and Middle East.

Source: OECD Economic Outlook 97 database; National Statistical Offices; and OECD calculations.

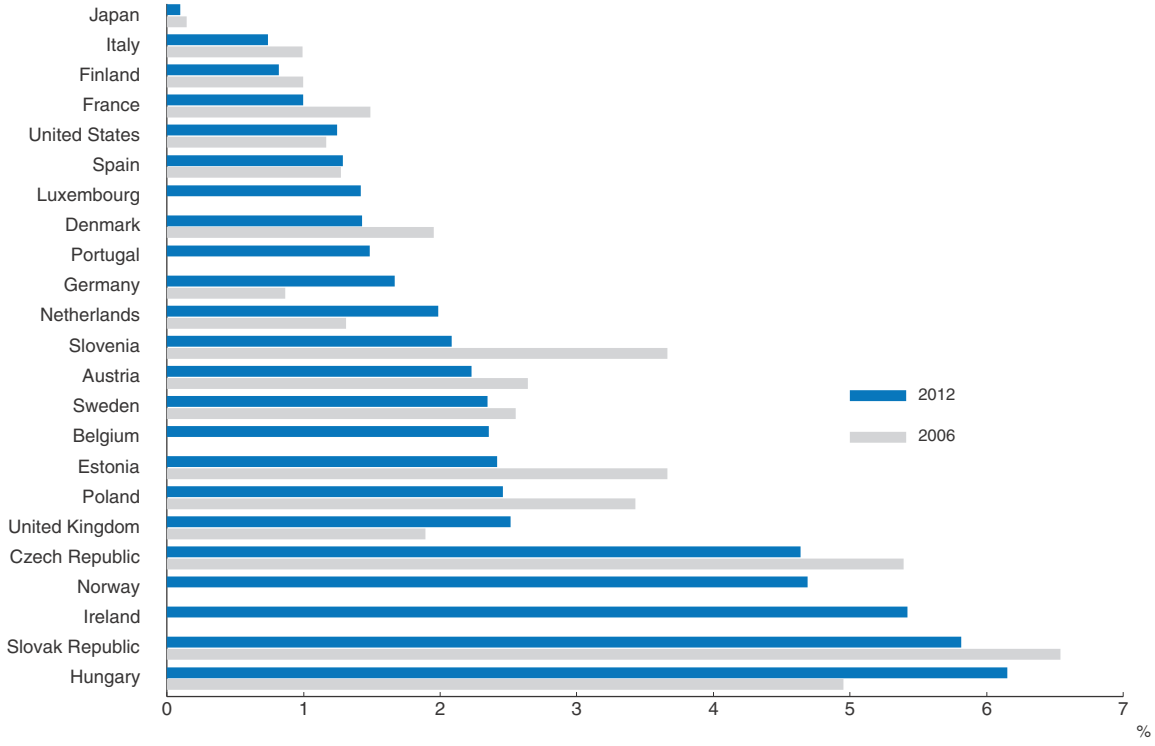
StatLink http://dx.doi.org/10.1787/888933221656

1. In Europe, estimates are available for the domestic investment by the foreign affiliates of other countries, but little is available for the investments made by outward affiliates.

firms can account for the softness of investment in all OECD economies since the crisis, as their investment has risen in around half of the countries considered (as a share of GDP), including the aggregate of those euro area economies for which data are available for both 2006 and 2012.

Figure 3.7. **Domestic tangible capital investment by foreign-owned firms**

In per cent of GDP



Note: Data refer to 2007 for Austria, the Netherlands and Poland; and to 2011 for Japan.
Source: *OECD Activity of Multinational Enterprises (AMNE) Database*; Bureau of Economic Analysis; Eurostat; and OECD calculations.

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The international mobility of fixed capital broadens the range of factors that affect fixed investment in each location. Outward FDI, or fixed capital investments by the foreign affiliates of domestic companies, could have implications for the total level of fixed investment in the home country. A priori there is no clear theoretical impact, with the linkages depending on a broad range of factors including the motivations for investing abroad, the impact of investing abroad on foreign market size and whether firms have financial constraints. The existing empirical literature is ambiguous about whether FDI flows replace or complement domestic investment (Globerman, 2012).

- Horizontal MNEs are multi-plant firms that produce related outputs in both home and host countries, thus economising on any costs of exporting. Such firms are more likely to occur when the host countries are of similar size (to avoid the costs of having costly capacity in small markets), have similar factor endowments, and there are positive costs to market entry via trade. Such investments are more likely to substitute directly for domestic activity if exporting previously took place. The findings of aggregate cross-country studies, using saving-investment relationships, that have typically found evidence of substitution, with outbound FDI tending to reduce domestic investment one for one (Feldstein, 1995; Desai et al., 2005) could reflect the importance of investment by

horizontal MNEs.[4, 5] Firm-level evidence of substitution, particularly for investments in lower cost economies, is found for Japan (Belderbos et al., 2013) and for those US companies who have made layoffs as a result of shifting production abroad (Monarch et al., 2014).[6]

- Vertical MNEs fragment stages of the production process and tasks across different countries in global value chains, with the location of stages depending on relative costs and other factors such as taxes and regulations. Such investments have an ambiguous effect on domestic investment. A negative impact could arise if firms are shifting the location of activities that have been performed domestically. However, once the production process has been split up, foreign and domestic activities are likely to complement one another, both via the production of intermediate inputs and by permitting greater exploitation of the knowledge-based firm-specific assets that multinational firms possess. Evidence of such complementarity is found for the United States, with Desai et al. (2009) estimating that a rise of 10% in foreign investment is associated with an additional 2.6% domestic investment.

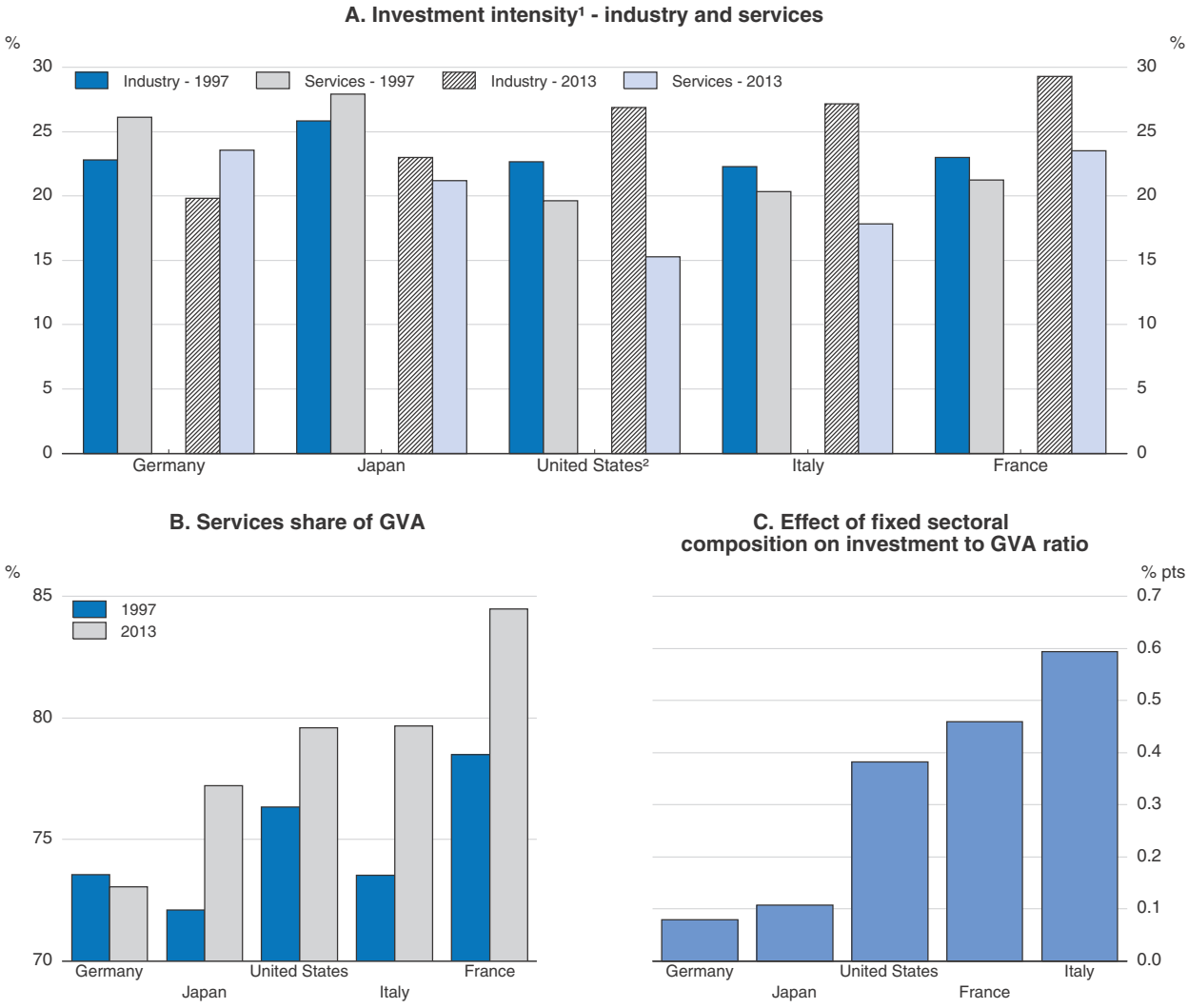
Apart from the potential impact of offshoring, capital spending in advanced economies, particularly in heavy industry, may have been weakened indirectly by developments in EMEs. Capacity expansion in EMEs has created excessive capacities in some sectors at a global level, leading to price declines in these sectors, lower profits and reductions in the profitability of additional investment (OECD, 2015c, 2015d). Excessive capacity expansion in some EMEs may have been driven by government interventions, such as administrated credit allocation or management incentive structures in state-owned enterprises, favouring capacity expansion as a goal in its own right. Low rates of return on equity of listed companies in EMEs, both relative to the cost of capital and to rates of return of the counterparts in advanced economies, could be indicative of such over-investment (Blundell-Wignall and Roulet, 2015; OECD, 2015d).

The shift to less investment-intensive services

The shift towards lower investment intensities in advanced economies could in part be explained by a shift in the sectoral composition of the economy. Less investment-intensive sectors have become bigger as a share of gross value added (GVA) at the expense of sectors that are more investment intensive. In broad terms, this is reflected by a shrinking industrial sector share, measured as the sum of manufacturing, mining and utilities, with an increasing services sector share (Figure 3.8). In the countries depicted in Figure 3.6, the investment intensity of the services sector, as measured as the share of investment in GVA, was up to 11 percentage points smaller than the investment intensity of the industrial sector in 2013. However, while the sectoral shifts have reduced the

4. Even if outward and domestic investment are substitutes, the relatively modest investment levels of foreign affiliates of US and Japanese companies in EMEs relative to home-country business investment or GDP levels (Box 3.1) might imply that they have had only a modest negative effect on domestic investment. Such a reallocation of investment would still generate benefits for both source and destination countries –higher profits for companies in the source economies, which could in turn feed back into corporate investment, and higher inward investment with technology transfers in the EME destination countries.
5. At a country-by-country level, the evidence is mixed, with outward FDI found to have a positive long-run relationship with domestic investment in the United States and Italy, but a negative relationship in Germany (Herzer and Schrooten, 2008; Herzer, 2008). The relationship may also differ across industries (Braunerhjelm et al., 2005).
6. The sample considered covers only those firms making layoffs either via within-firm investment abroad, or via contracting with outside parties.

Figure 3.8. **Changing sectoral composition has affected aggregate investment intensity**



1. Investment intensity is measured as the ratio of nominal investment to nominal gross value added (GVA).
2. Data for the United States based on the private sector only.

Source: Bureau of Economic Analysis; European Commission; Cabinet Office of Japan; and OECD calculations.

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investment intensity in all the economies studied, a comparison of actual intensities in 2013 and estimated intensities based on an unchanged sectoral composition from 1997 shows that the effects have been modest, but still amounting to around ½ percentage point in Italy and France.[7]

The shift towards knowledge-based capital

Investment in OECD countries has gradually moved away from traditional areas of physical investment to ICT and intangible/knowledge-based investments. This reflects a

7. The comparison of nominal shares may be complicated by the faster decline in relative ICT prices, although measurement of this effect is difficult given limited information on the relative use of ICT investment by the different sectors over time.

number of trends including technological progress, the rise of the digital economy, the shift from industry to services and the changing global specialisation in production as discussed above. This shift raises the importance of understanding the main factors behind the present subdued level of investment, since in addition to their direct impact on demand, intangible knowledge-based investments are central for the generation of new ideas and technologies and the successful diffusion of existing ones (OECD, 2015a).

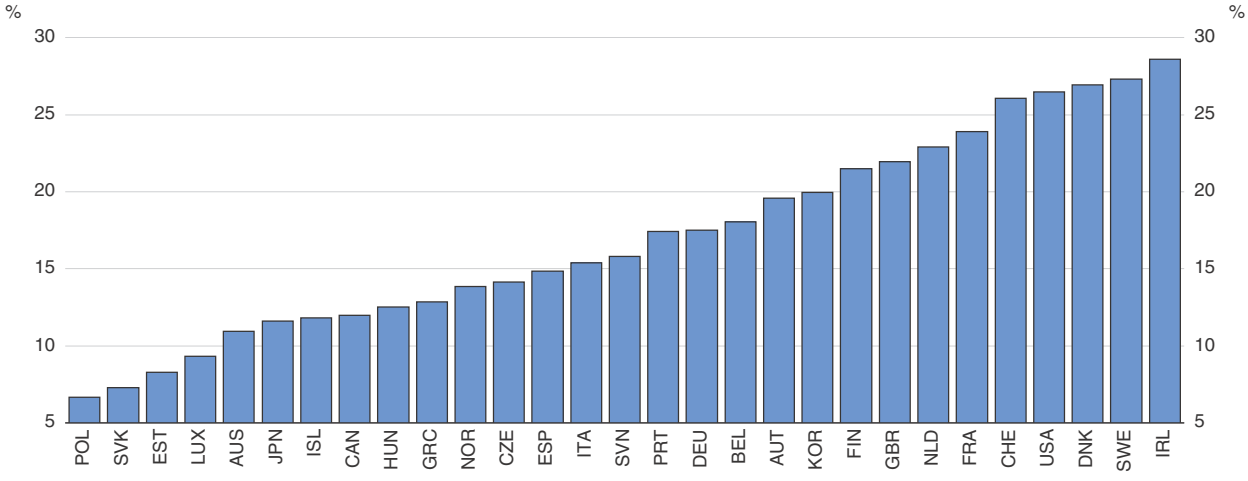
New national accounts systems (SNA 2008 and ESA 2010)[8] include many intangible investments – such as R&D, software and entertainment, literary and artistic originals and mineral exploration – in fixed capital investment, and this has translated into an increase in the share of investment in GDP. Measured intangibles, together with a broader range of investment-like activities that companies use to create value, are termed knowledge-based capital (KBC). Components of KBC that are not recorded in national accounts, include investment in design, new financial products, advertising, market research, training and organisational capital. Based on estimates of total KBC investment in 2010 (Corrado et al., 2012), intangible investment in the national accounts now covers 56% of total KBC on average across countries, ranging between 34% in Luxembourg to 80% in Greece.

The inclusion of intangible investments in the national accounts has led to marked changes in registered investment levels in some economies. The share of intangible capital in total investment varies considerably across OECD countries, but accounts for over one-fifth of total investment in several countries, including Ireland, Sweden, Denmark, the United States, Switzerland and France (Figure 3.9).

Intangible investment affected the overall resilience of investment since the onset of the crisis. The ratio of intangible investment, as measured in the new system of national accounts, to non-residential investment increased throughout the crisis in most countries,

Figure 3.9. **Intangibles account for a significant share of investment in most OECD countries**

In per cent of nominal non-residential investment



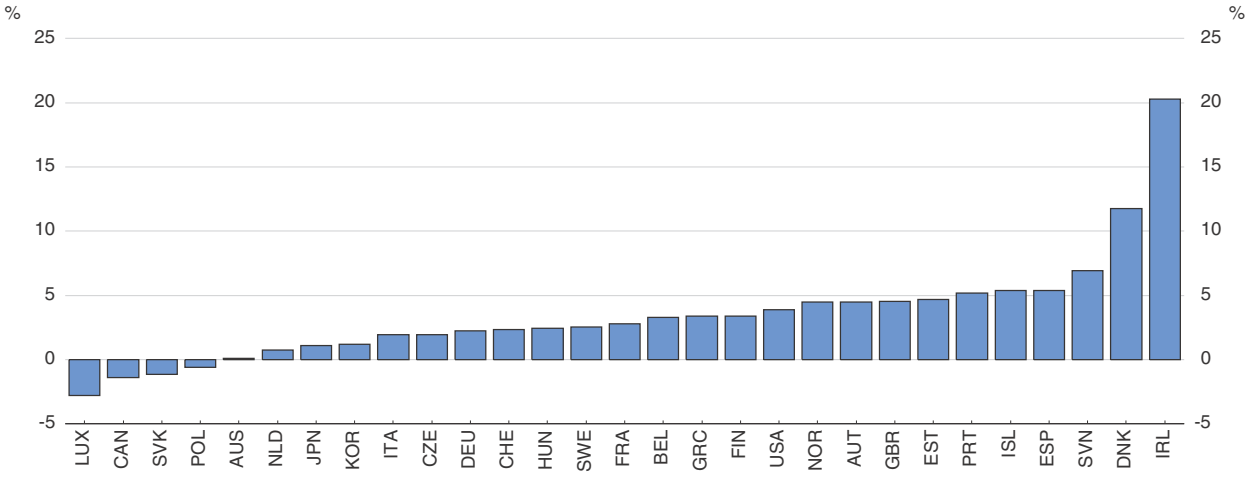
Note: Latest available annual data.
Source: *OECD Economic Outlook 97 database*; national statistical offices; and OECD calculations.

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8. A few countries, including Japan, have not adopted the new national accounts system.

Figure 3.10. **Intangible investment remained strong throughout the crisis**

In per cent of nominal non-residential investment, change from 2007 to 2011



Source: OECD Economic Outlook 97 database; national statistical offices; and OECD calculations.

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implying that the overall weakness in total investment is generally attributable to weaknesses in tangible investments, such as structures and business equipment (Figure 3.10).[9]

The relative resilience of intangible investment could indicate that intangible investment is less cyclically sensitive than physical investment or benefited more from government actions at an early stage of the crisis. It may also reflect longer-term shifts toward a higher share of intangibles in many goods and services. Ultimately there is likely to be strong complementarity between intangible and tangible capital. For example, successful R&D investment may result in tangible investment with a lag, and business software complements capital spending on ICT capital goods. At a disaggregated level, important complementarities are found to exist between different types of investment. One example is the significant complementarity of organisational capital (not included in national accounts) and ICT capital investment (Andrews and Criscuolo, 2013).

The contribution of different sectors to the weakness of investment in advanced countries

Nominal gross investment as a share of nominal GDP is a measure of the proportion of output value that is being allocated towards capital spending. Volume measures, already discussed, measure the share of an economy's real resources that are allocated. Because the relative prices of different kinds of investment move over time (for example the declining price for ICT capital and rising prices for other types of capital) aggregate volume measures of the level of investment cannot be disaggregated for sector-level comparison.[10]

9. Where they exist, data for intangibles not included in national accounts go only up to 2010. For many of the countries, the ratio of such intangible investment to GDP in 2010 was higher than prior to the crisis.
10. Chained volume measures of individual components are not additive and changes in shares of different components in total investment or GDP can be very misleading when relative prices are shifting (Whelan, 2000).

In contrast, the nominal investment share can be disaggregated by sector, allowing the identification of the contribution of particular sectors to current shortfalls relative to pre-crisis averages.

The nominal share of gross investment in GDP has fallen relative to its historical pre-crisis average in most OECD countries. In 2014, spending on capital investment in the OECD area was still around 2% of GDP lower than its long-term pre-crisis average (Table 3.1). Different sectors of the economy have had unequal contributions to the overall shortfall of gross investment in 2014 compared with its long-term historical average in the OECD area (Table 3.1):

- Household residential investment spending (hereafter referred to as housing investment) relative to GDP accounts for the largest part of the overall shortfall despite its small share in aggregate investment.
- Government investment as a share of GDP, which rose in the initial stages of the downturn as a result of fiscal stimulus and then subsequently fell with fiscal consolidation, contributed just over a tenth of the overall shortfall in 2014.
- After gradually recovering from a sharp decline early in the crisis, business investment – the largest component of total investment – accounted for just under a third of the overall shortfall in 2014.
- As discussed above, the decline in business and government investment was concentrated on tangible investment. Indeed, intangible investment relative to GDP is now lower than its pre-crisis average in only six out of the 29 OECD countries for which data are available. The shortfall in each was small (0.6% of GDP or under).

The OECD-wide gross investment shortfall *vis-à-vis* its longer-term historical average, and the relative contribution of different sectors, mask significant differences across the main OECD economies (Figures 3.11 and 3.A1; CPB, 2015). In the United States and Japan the total investment shortfall compared with the pre-crisis period is larger than the OECD average, reflecting weak housing investment in the former and weak government investment in the latter. For the euro area the aggregate investment shortfall is slightly smaller than the OECD average. Other economies had more extreme departures from the average:

- A negative total investment shortfall relative to historical averages of 7% of GDP or more is seen in a few countries hit particularly hard by the crisis. In some (Greece, Ireland and Spain), the overall gaps were predominantly accounted for by housing, with only minor

Table 3.1. **Gross investment levels remain weak across OECD countries**

Per cent of GDP

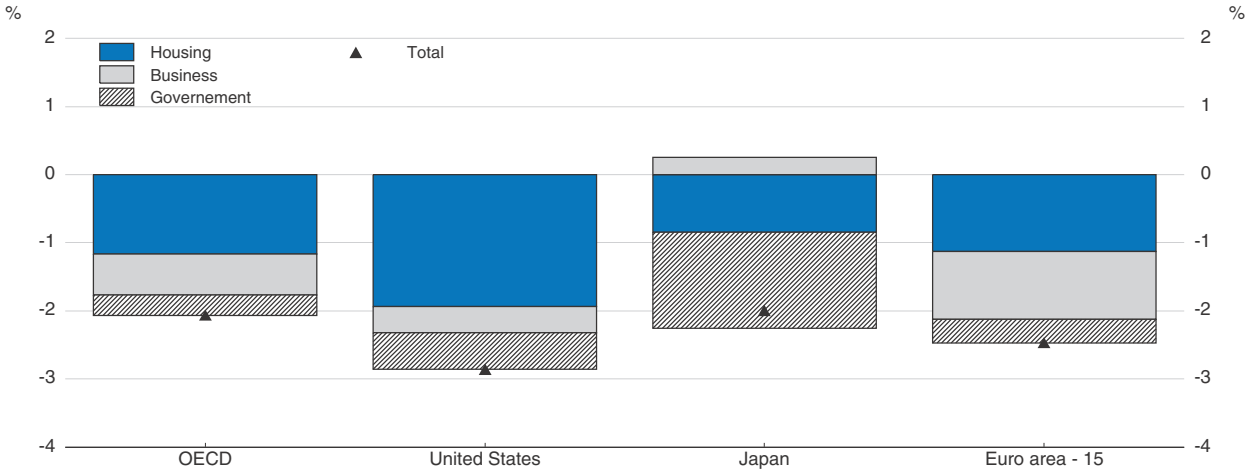
	2014	Pre-crisis average (1996-2007)	Difference
Total	20.3	22.4	-2.1
Business	12.8	13.4	-0.6
Housing	4.2	5.3	-1.2
Government	3.4	3.7	-0.3

Note: Aggregate based on PPP weights. Only includes countries where component level data are available.
Source: OECD Economic Outlook 97 database.

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Figure 3.11. **The composition of gross investment shortfalls differs across countries**

In per cent of GDP, 2014 minus 1996-2007 average



Source: OECD Economic Outlook 97 database; European Commission; and OECD calculations.

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contributions, if any, from business and government investment shortfalls. In others (including Iceland and the Slovak Republic), weak business investment was the main contributory factor.

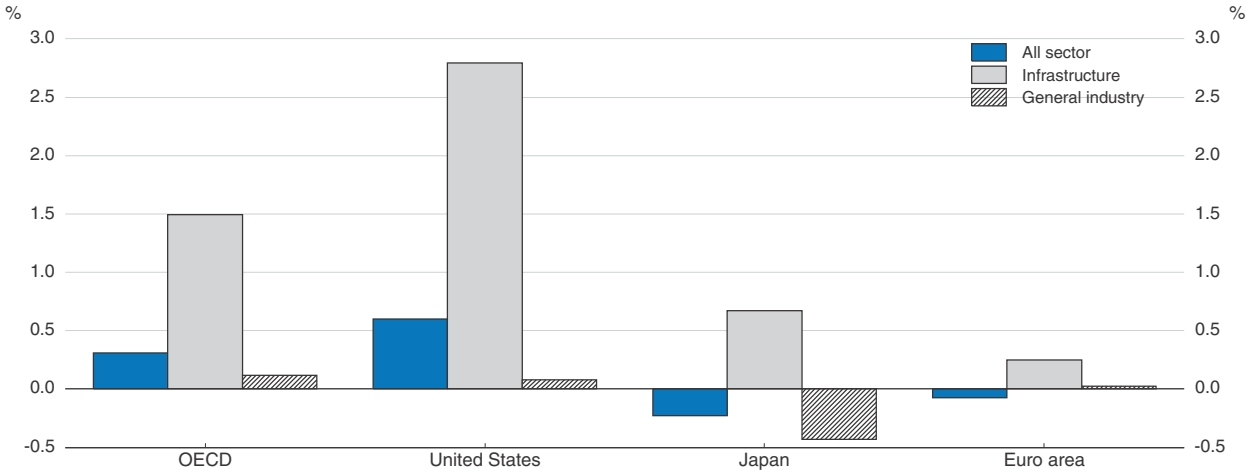
- A few countries, including a number of commodity exporters such as Australia, Canada and Norway, had higher gross investment ratios in 2014 than on average before the crisis. In these countries the different components of investment were generally positive or unchanged. More surprisingly, nominal gross investment exceeded historic averages in France and Belgium, despite the underlying softness of domestic demand in these economies and the weakness of investment in 2014.

Lower investment in particular sectors compared with pre-crisis historical norms does not indicate that investment needs to attain such norms in the future. Pre-crisis investment levels may have been boosted by special circumstances. This applies in particular to housing where easy access to mortgage credit at low interest rates inflated residential construction well beyond sustainable levels in a number of countries. This set the stage for a subsequent housing collapse with serious implications for the rest of the economy, particularly employment, given the high labour intensity of residential construction. In the future, without such a housing bubble and with a slowdown in population growth or population declines in many OECD countries, housing investment is likely to be lower than prior to 2008. Population ageing is found empirically to have a significant negative impact on housing investment in the OECD countries (*Lindh* and Malmberg, 2008).[11] Lower housing investment may have negative implications for durable goods consumption as well as employment. Housing investment was covered extensively in earlier OECD research (Andrews et al., 2011).

11. Reduced housing investment due to population ageing induced lower demand for housing may be mitigated somewhat by works to adapt housing for needs of elderly as well as investment in renovation.

Figure 3.12. **Global capital spending departure from average for OECD listed companies**

Nominal gross capital spending, in per cent of net global sales, 2013 minus 2002-2007 average



Source: Datastream; and Blundell-Wignall and Roulet (2015).

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For business and government investment, the continuation of weak capital spending will depress both current and future demand and potential growth, limiting employment prospects, undermining consumption, and reducing the capacity of economies to provide for their citizens, support diffusion of innovation, and repay fiscal obligations. The remainder of this chapter will focus on the determinants of business and government capital spending and the policies required to increase such spending.

A more nuanced view of capital spending is obtained from company data on global gross investment (expressed relative to global sales rather than value added) of OECD listed (and thus relatively large) companies. For this set of large companies, their global capital spending relative to global net sales was actually higher in 2013 than the 2002-07 average in the OECD area (Figure 3.12; Table 3.A1 shows the record for most OECD countries; OECD, 2015d). The difference from national account data (discussed above) is consistent with a number of stories. First, a large part of the shortfall in OECD countries could be attributed to relatively smaller companies that may have been more strongly affected by the downturn than their larger counterparts. Indeed, investment rates (i.e. investment relative to the capital stock) are higher for smaller companies compared to larger ones, at least in the United States (Gala and Julio, 2012). Second, the discrepancy between company data and national accounts could reflect a shortfall in investment by listed companies in OECD economies at the expense of stronger investment in non-OECD economies. The following assessment of rates of return on equity, in particular, would support this assessment, see below.

Infrastructure investment

Infrastructure investment is one area of particular attention. The societal cost of shortfalls in infrastructure could be large. Infrastructure has traditionally comprised transportation, utilities and telecommunications, but now also includes in principle knowledge and digital infrastructure, notably broadband networks.[12] Recent levels of

12. The concept of digital infrastructure has been broadening over recent years, with access to spectrum and IP addresses increasing in importance. See OECD (2014b) for several digital infrastructure indicators.

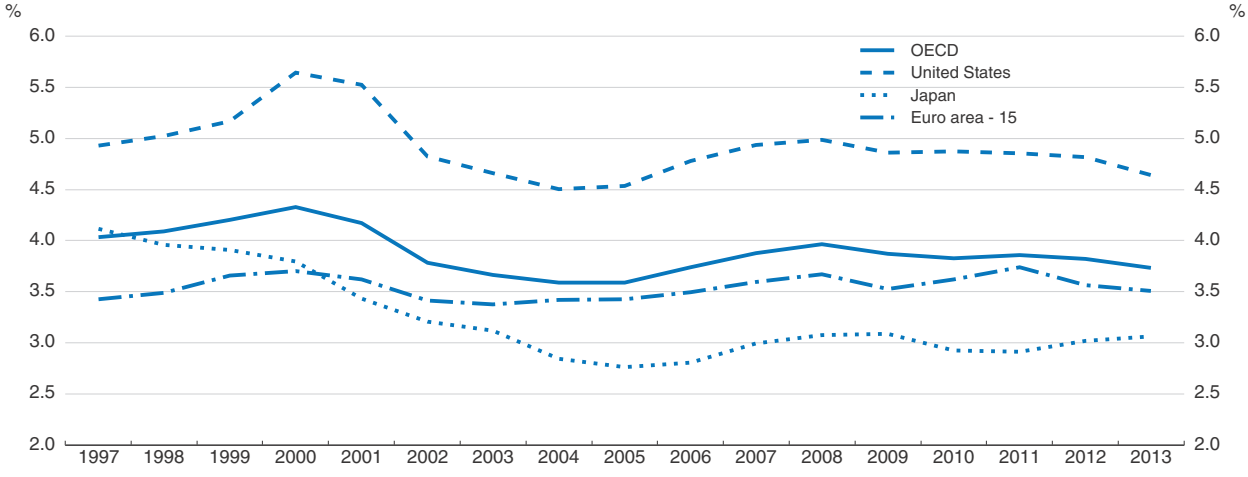
traditional infrastructure investment are not, in aggregate, particularly low compared with pre-crisis capital spending (Figure 3.13) and the global infrastructure investment by listed companies headquartered in the OECD area is estimated to exceed pre-crisis levels (Figure 3.12). However, past infrastructure spending in many OECD countries, including the United States, has not been sufficient to make up for capital depreciation, with the result that a backlog of replacement and maintenance investment has been building up (Dobbs et al., 2013; American Society of Civil Engineers, 2013).

Additional capital spending is also required to help achieve long-term policy objectives, such as those related to climate change and environmental quality. Although future investment needs are difficult to assess (because they depend on how demand shifts in response to prices that account for externalities), these challenges are particularly likely to be present in the energy, water and transportation sectors.

- In the energy sector, the IEA estimates that in order to maintain existing infrastructure and replace plants and structures that will become obsolete in the OECD, average annual capital spending in the coming decades will need to be 1% of GDP higher than average annual spending in the 2000-13 period (IEA, 2014).[13] Improving energy efficiency will require further spending equivalent to 1.3% of GDP per year, and additional investment of 0.6% of GDP may be needed to limit the increase in global temperatures to 2 °C. Furthermore, targeted investment in storage and grid management technologies will be needed to facilitate the increased penetration of renewable sources of energy to meet pre-specified government goals (Johnstone and Hascic, 2012).
- In the water sector, in order to maintain existing infrastructure and to meet the needs associated with socioeconomic and environmental factors, such as rising expectations of water quality, increased pollution abatement costs, and the disruptions to resources

Figure 3.13. **Infrastructure investment has been weak across the OECD**

Nominal infrastructure investment share of GDP



Note: Infrastructure includes public and private investment in utilities, transportation, and communications.
Source: *OECD Economic Outlook 97 database*; national statistical offices; and OECD calculations.

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13. It should be noted that the 2013 investment level was much higher than the 2000-13 average and close to the required future level for maintenance and replacement investment.

associated with increased climate variability, average annual investment in the OECD is estimated to have to rise to around 1.3% of GDP between 2015 and 2025 (Ashley and Cashman, 2006).[14]

- In the transportation sector, estimates suggest that there is a need to sustain average annual investment in strategic transport infrastructure of around 1.4% of GDP between 2015 and 2030 (OECD, 2012).[15] Furthermore, OECD estimates of social efficiency in the road transport sector, which take travel time, accidents and emissions into consideration, are low in a number of countries (Braconier et al., 2013).

Infrastructure investment requirements are likely to rise in EMEs, despite the high levels of investment in some of the largest economies. As these countries continue to urbanise and industrialise at an unprecedented rate, there is an overwhelming strain and an urgent need to expand and modernise existing infrastructure networks, though, as in OECD economies, investment requirements will depend on the extent to which negative externalities will be priced.[16] For instance, average annual investment in the energy sector as a whole in the non-OECD area would need to increase by more than 60% in 2014-35 compared with average annual investment in the 2000-13 period to satisfy expanding primary energy demand (IEA, 2014).

Investment in transport infrastructure will be particularly important going forward. According to the *ITF Transport Outlook 2015* (OECD/ITF, 2015), global road and rail passenger travel will increase by between 120% and 230% and growth in global road and rail freight volumes will increase by anywhere between 230% and 420%. EMEs will account for the largest share of these increases, with 90% of all urban-dwellers living in EMEs by 2050, and China and India will account for over 50% of world surface transport by 2050, an increase from the current 35%.

Forces affecting business investment

This section reviews potential determinants of business fixed investment, the largest component of total investment, and assesses the extent to which they have been acting to constrain investment growth since the start of the crisis. The initial focus is on output growth and the user cost of capital, two of the principal determinants of investment in many empirical models (Box 3.2; Annex 3.1). Then factors related to firms' balance sheets, uncertainty and regulations are analysed.

The role of aggregate demand

The modest pace of the recovery in the advanced OECD economies from the crisis has been one factor keeping investment growth in check. Empirical analyses typically find that output growth has a key role in explaining short-term swings in investment (Chirinko, 1993). New OECD empirical analysis based on a model linking investment with GDP confirms the importance of output developments in explaining movements in business

14. For comparison, investment in water infrastructure in the United States averaged 0.2% of GDP in the 2000-13 period.
15. Strategic transport infrastructure includes airports, ports, new rail construction, and oil and gas transportation and distribution.
16. The domestic market prices of fossil fuels are significantly distorted by large government subsidies in most countries. Recent IMF estimates suggest that eliminating existing energy subsidies could cut global carbon dioxide emissions by more than 20% and raise government revenue by 3.6% of global GDP (Coady et al., 2015).

Box 3.2. **The drivers of business investment in advanced OECD countries**

This box summarises OECD estimates of the drivers of business capital stock and its changes (Table below). The empirical investigation draws on the neo-classical model of investment. It is based on a two-stage error correction modelling framework for a panel of 15 advanced OECD economies (see Annex 3.1 for more details).

Anticompetitive regulation hampers capital accumulation in the long run

In the long run, business capital stock (capital stock excluding housing) should be related to the level of real output, the user cost of capital and product market regulation. The estimation results indicate that the output elasticity of the capital stock is close to 1, implying a stable capital-to-output ratio in the long run. The cost of capital turns out not to affect the capital stock significantly, which is in line with earlier findings (Sharpe and Suarez, 2014). Only the nominal interest rate has the expected negative sign, in contrast to the real interest rate and relative investment prices, which are included in the user cost of capital (Box 3.4). The elasticity on product market regulation, captured by the OECD's energy, transport and communications regulation (ETCR) indicator is strongly negative and increases over time. This implies that more stringent product market regulation is associated with a lower capital stock.

Accelerator effects are reinforced by foreign demand growth

Estimations of short-term dynamics in the error correction model incorporating an accelerator effect confirm the importance of domestic output growth for changes in the capital stock (net business investment, excluding housing, over lagged capital stock). They also show that foreign demand growth is positively correlated with changes in the capital stock beyond the direct impact of net exports.

Increased uncertainty and financial constraints slow down capital accumulation

Additional short-term drivers suggest that a higher level of country-specific economic policy uncertainty, an increase in global policy uncertainty and higher inflation volatility are associated with lower changes in the capital stock. Increasing financial constraints are negatively related to investment for a subgroup of European countries.

The long- and short-term drivers of business capital stock

LONG-RUN RELATIONSHIP *dependent variable = log capital stock*	1985 2013		1993 2013	
log real output	1.23	**	1.05	**
log long-term interest rate	-0.08	**	-0.02	
log ETCR indicator	-0.06	**	-0.09	**
No. obs	1674		1239	
No. of countries	15		15	

SHORT-RUN DYNAMICS *dependent variable = d(log capital stock)*	1985 2013		1993 2013		1985 2013		1985 2013		1985 2013	
d(log real output) (-1 to -3)	0.467		0.309		0.249		0.462		0.264	
d(log foreign output) (-1)	0.353	**	0.339	**	0.243	**	0.302	**	0.221	**
cpi_volatility(-1)	-0.0004		-0.0004	*						
cpi_volatility(-1)^2	-8.E-06			*						
log economic policy uncertainty (-1)					-0.0020	**				
d(log global uncertainty) (-1)							-0.0018	**		
financial constraints (-1)									-0.0003	**
No. obs	1634		1243		1230		1644		805	
No. of countries	15		15		15		15		8	

Note: * and ** denote statistical significance at the 10% and 5% levels, based on robust standard errors. The long-term relationship includes country and year fixed effects, the short-term dynamics include country fixed effects. The full short-run dynamics including the error correction term and the lagged dependent variable is reported in Annex 3.1. The coefficient estimates for the short-run dynamics are normalised by the lagged dependent variable. d(log real output) (-1 to -3) sums up the effect of d(log real output)(-1), d(log real output)(-2) and d(log real output)(-3).

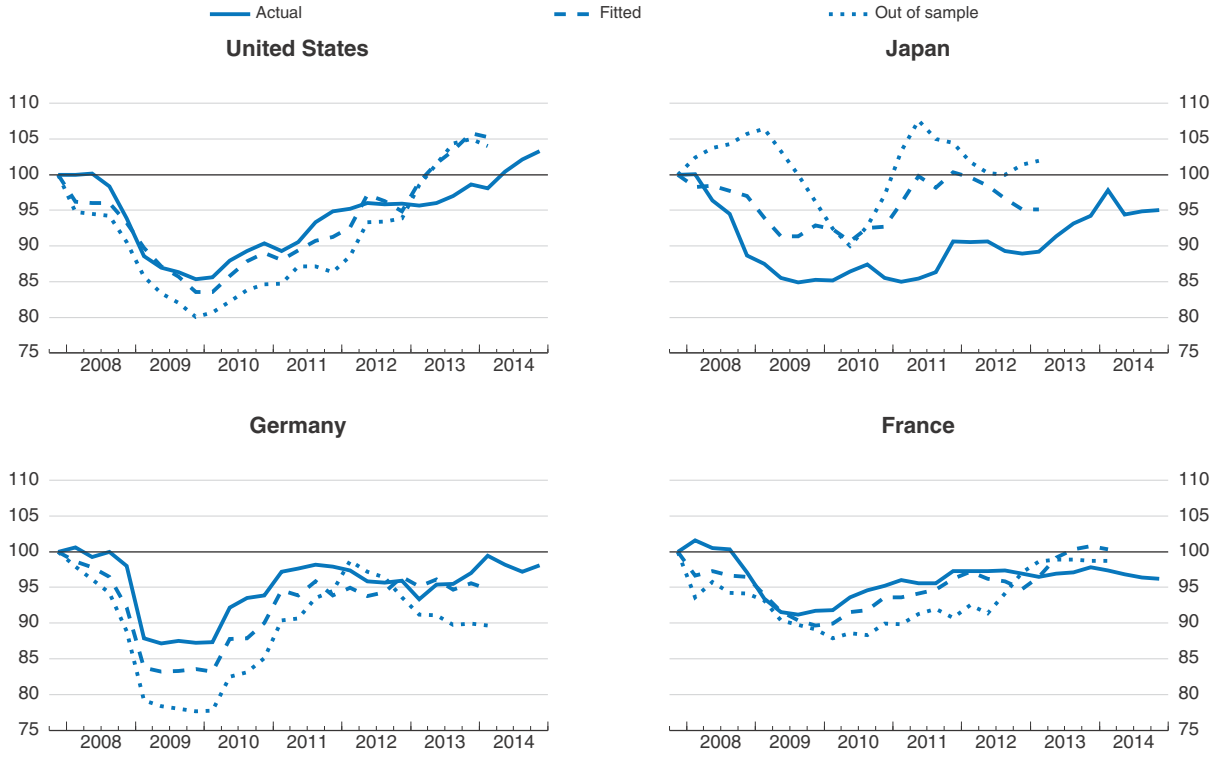
Source: OECD calculations.

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investment (Figure 3.14; Box 3.2; Annex 3.1).[17] Although the findings differ somewhat across the economies examined, the model largely tracks the downturn in investment at the height of the crisis and the dynamics of investment in recent years. So, it remains that the predominant factor associated with sluggish investment since the crisis is persistently weak output developments, both domestic and global. In effect, many economies have become stuck in a low-growth and low-investment equilibrium, with persistent unemployment, stagnant wages, and non-robust consumption. The model and empirical work, however, would also be consistent with a higher-level equilibrium, whereby more robust investment generates more jobs, higher wages, and stronger consumption, which then ratifies the stronger investment. The key is how to get from the low-level equilibrium to the higher-level one.

Figure 3.14. **A simple accelerator model of business investment**

Index 2007q4 = 100



Note: The figure depicts out-of-sample forecast for and in-sample fit of investment estimated until 2007Q4 and 2014Q1, respectively, based on equation (1) in Annex 3.1. Actual GDP series are used to calculate forecast and model fit for the 2008-14 sample period.
Source: OECD Economic Outlook 97 database; and OECD calculations.

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17. Country-specific estimations are based on equation (1) in Annex 3.1, where the level of investment is explained by current and lagged changes in real GDP, and replacement investment. An automatic model selection is performed allowing for up to 16 lags. For Japan, the model selection gives a lag length of zero. Therefore, results shown in Figure 3.14 are based on a model including 8 lags of change in output for this country.

Subdued domestic demand growth, and thus weak investment via the accelerator mechanism, is partly due to sluggish private consumption growth. A number of factors account for weak consumption growth.

- In the near term, household balance sheets remain bloated with debt in some countries (Annex 1.1). Indeed, the savings rates have increased strongly in some countries (Chapter 1). Even as households get increased purchasing power through oil price declines or exchange rate adjustments, they use these benefits to deleverage. While necessary for household financial stability, collectively this behaviour can lead to weak consumption at the macro level.
- Slow-growth in consumption can also result from the nature of post-crisis jobs and wage dynamics. An immediate reaction to the crisis led firms in some countries to increase reliance on temporary or other atypical job contracts, with little job progression or opportunities for training. Associated, the depth and length of the crisis has led to an exceptional moderation in both nominal and real wage growth, with a substantial proportion of workers experiencing real wage declines (*OECD Employment Outlooks* – OECD, 2013, 2014c). While helping promote the competitiveness of the economy, particularly important in the context of some European economies, this significant wage moderation has likely limited consumption growth (and therefore investment) while also fuelled inequality.

There are long-run consequences of the weak labour market and unequal income climate that further feeds back to undermine investment today and potential growth in the future. Today's rising income inequality appears to hold back investments in education, a key factor in potential output growth (*In It Together: Why Less Inequality Benefits All* – OECD, 2015h).

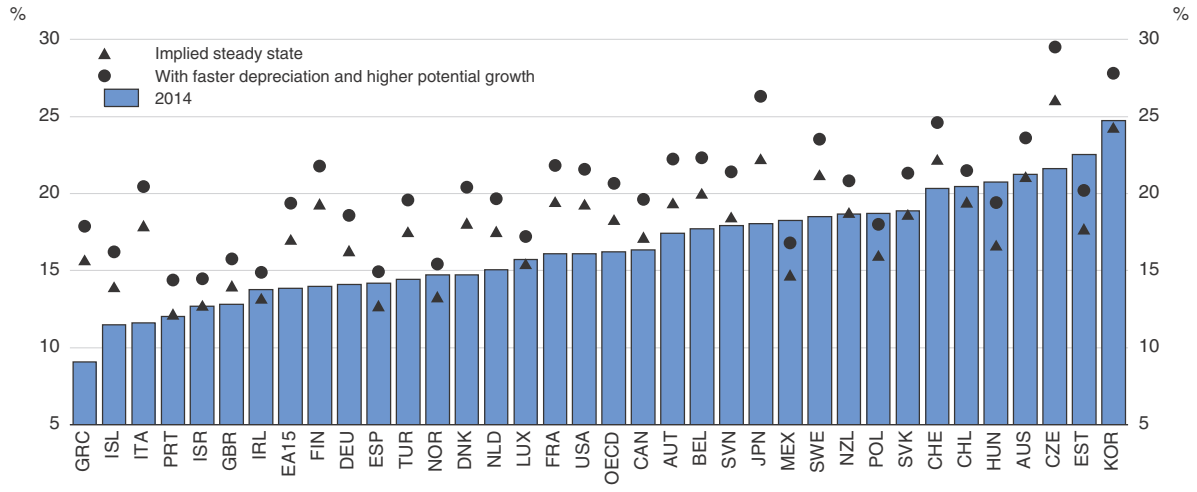
Significantly stronger investment levels are needed in most economies if potential growth – which represents the capacity to raise living standards, enhance diffusion of innovations and repay obligations – is to be increased in the medium term. An indication of the differences between current investment levels and longer-term benchmarks is provided by calibrated estimates of the steady-state investment-to-output ratio using OECD long-term projections that implicitly imply a return to pre-crisis potential growth rates for the OECD area as a whole as well as for the United States and the euro area (Lewis et al., 2014).[18] Updated estimates, incorporating intangible investment into the capital stock and non-housing fixed capital investment, suggest that current investment levels in OECD economies are below their benchmark steady-state levels. The average shortfall for the OECD is 2.5%, with one-third of the countries estimated to have larger shortfalls (Figure 3.15). These shortfalls would be even higher, for higher values of the depreciation rate or if structural reforms were to significantly boost trend output growth. If trend output growth and the depreciation rate were to be ½ percentage point higher each, the benchmark investment-to-output ratio, and hence the current investment shortfall, would be an additional 2.4 percentage points higher in the OECD, taking the total shortfall to nearly 5 percentage points.

For many large companies, global or regional demand may be as important as domestic demand for their investment decisions (Box 3.2). Equally, there may be a channel

18. The steady-state level of investment to (potential) output is given by: $i^* = \frac{k^*(g+\delta)}{(1+g)}$, where k^* is the steady-state capital-output ratio, δ is the depreciation rate and g is the endogenous potential growth rate at full employment, which is dependent upon labour utilisation, physical and human capital intensity and multi-factor productivity.

Figure 3.15. **Investment ratios are below benchmark steady-state estimates in most OECD economies**

Non-residential investment as a percentage of potential GDP



Note: Countries are ordered by the 2014 investment ratio.
Source: *OECD Economic Outlook 97 database*; Lewis et al. (2014); and OECD calculations.

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via business confidence, with depressed foreign markets undermining domestic animal spirits over and above that induced by weak exports. A weak international environment might also lower the profits of foreign subsidiaries of domestic corporations and thereby limit the internal funds available to support capital expansion at home.

New empirical and survey evidence also point to the importance of global as well as domestic demand contributing to lower investment levels. Research reported in Box 3.2 and Annex 3.1shows that an increase in foreign growth is found to increase the level of investment in the short term by more than is already accounted for by the impact of higher export growth on domestic output growth. Respondents to the BIAC 2015 Business Climate Survey also cite insufficient global demand more often than insufficient domestic demand as a "very important" constraint on investment in their country (Box 3.3).

Box 3.3. **The BIAC Business Climate Survey 2015**

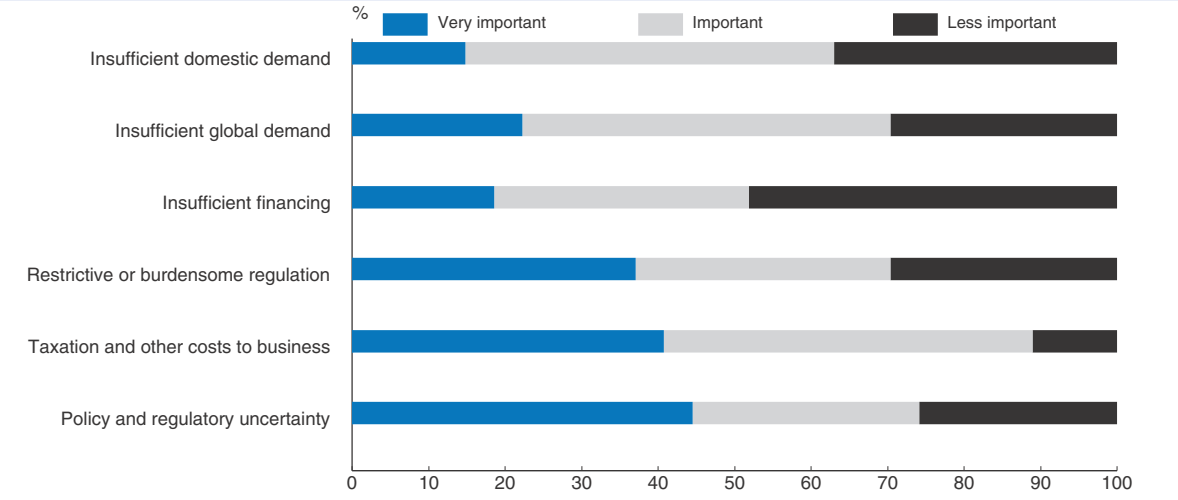
One source of information about the current factors restraining corporate investment is the Business Climate Survey undertaken by the Business and Industry Advisory Committee to the OECD (BIAC) in late March and early April 2015. The survey included a number of different questions on investment, including one in which respondents were asked to identify the main restraints on investment at present from a list of six options, covering national and global demand, insufficient financing, restrictive or burdensome regulations, taxes and other costs, and policy/regulatory uncertainty. Respondents were given the option of choosing between "Very important", "Important" or "Less important". Other questions covered the general business climate and employment prospects.

The responses to the survey differ from those to a typical business survey in that the replies were received from national business associations, thereby providing a summary overview of the conditions prevailing in their respective locations. Overall, responses were received from 27 national business associations, covering both OECD and non-member countries.

Box 3.3. **The BIAC Business Climate Survey 2015** *(cont.)*

The percentage of replies received to each possible restraint on investment is shown below.

BIAC Business Climate Survey: Constraints on capital spending



Note: As a percentage of respondents to the question 'What are the most important factors that may be constraining investment in your country at present, if any?'.
Source: BIAC Business Climate Survey 2015, available at *www.biac.org*.

StatLink http://dx.doi.org/10.1787/888933221668

Overall, respondents identify policy and regulatory uncertainty, as well as taxation and other costs to business, as being the most important investment constraints, followed closely by restrictive or burdensome regulation. A comparatively smaller share of respondents cite insufficient financing and global/domestic demand as being the most important constraint on capital spending in their country, but these are nevertheless still cited as "Very important" or "Important" by more than half of all respondents.

The user cost of capital

The user cost of capital and its components (Box 3.4 and Figure 3.16), which in theory have an important impact on business capital spending in the long run, are now unlikely to be a constraint on investment growth, at least for large companies. Indeed, only a handful of countries in the BIAC survey (Box 3.3) identify the lack of sufficient finance as a very important problem for investment.

Financing costs have recently fallen to exceptionally low levels. Both investment grade and junk grade companies can now borrow at rates not far above ultra-low government bond yields, and the cost of equity is similarly low, reflecting the recent strength of global stock markets. These developments have been driven, at least in part, by exceptionally supportive monetary policies, including policy rates that are close to zero, forward guidance and quantitative easing. Very low interest rates have also boosted equity prices, with Tobin's Q – proxied by the ratio of the stock market valuation of businesses to their net worth – rising to very high levels in the United States.[19] However, the implementation of

19. Tobin's Q now exceeds 1.1, which is its highest level since 1945 with the exception of the dot-com boom period when it rose to 1.6. However, as mentioned in Annex 3.1, this indicator has not been successful in explaining aggregate investment.

Box 3.4. **The user cost of capital**

The user cost of capital can be derived using a Hall-Jorgenson rental rate formula for the cost of a unit of capital services. A representative measure of the real user cost of capital, as shown in Figure 3.16, is constructed using the formula:

$$UCC = \frac{P^K}{P^Y}(\theta(1-\tau)i + (1-\theta)i - \pi + \delta)\left(\frac{1}{1-EMTR}\right),$$

where P^K/P^Y is the relative price of business investment to GDP; θ is the fraction of debt in corporate liabilities (using the 1999-2013 average); τ is the statutory corporate tax rate; i is the long-term government bond rate (i.e. abstracting from the differences between business and government borrowing rates); π is the change in the GDP deflator; δ is the real depreciation rate on the business and public capital stock; and *EMTR* is the effective marginal tax rate obtained from the Oxford University Centre for Business Taxation (CBT) Tax Database which allows for the deductibility of depreciation expenses, though not investment tax credits. The statutory rate is used with these data to backcast the tax wedge in those countries in which the CBT Tax Database does not have complete coverage over the sample period analysed.

The above formula can be decomposed into three components: the relative price of investment goods, financing term and the tax wedge. The financing term can subsequently be broken down into the real tax-adjusted interest rate and the real depreciation rate. As demonstrated in Figure 3.16 for G7 countries, the most cyclical component is the real tax-adjusted interest rate, which has declined to close to zero over the past year. The remaining components exhibit secular trends:

- The long-term decline in the relative price of investment goods, largely reflecting ICT-related quality improvements, appears to have slowed sharply from around 2005 onwards.
- The gradual increase in depreciation rates discussed earlier has contributed to the rise in the cost of capital. At present, average depreciation rates of around 4½ per cent are by far the biggest component of the real cost of capital in most countries.
- The corporate tax wedge has gradually drifted down over time, reflecting governments' policies to reduce corporate taxation.

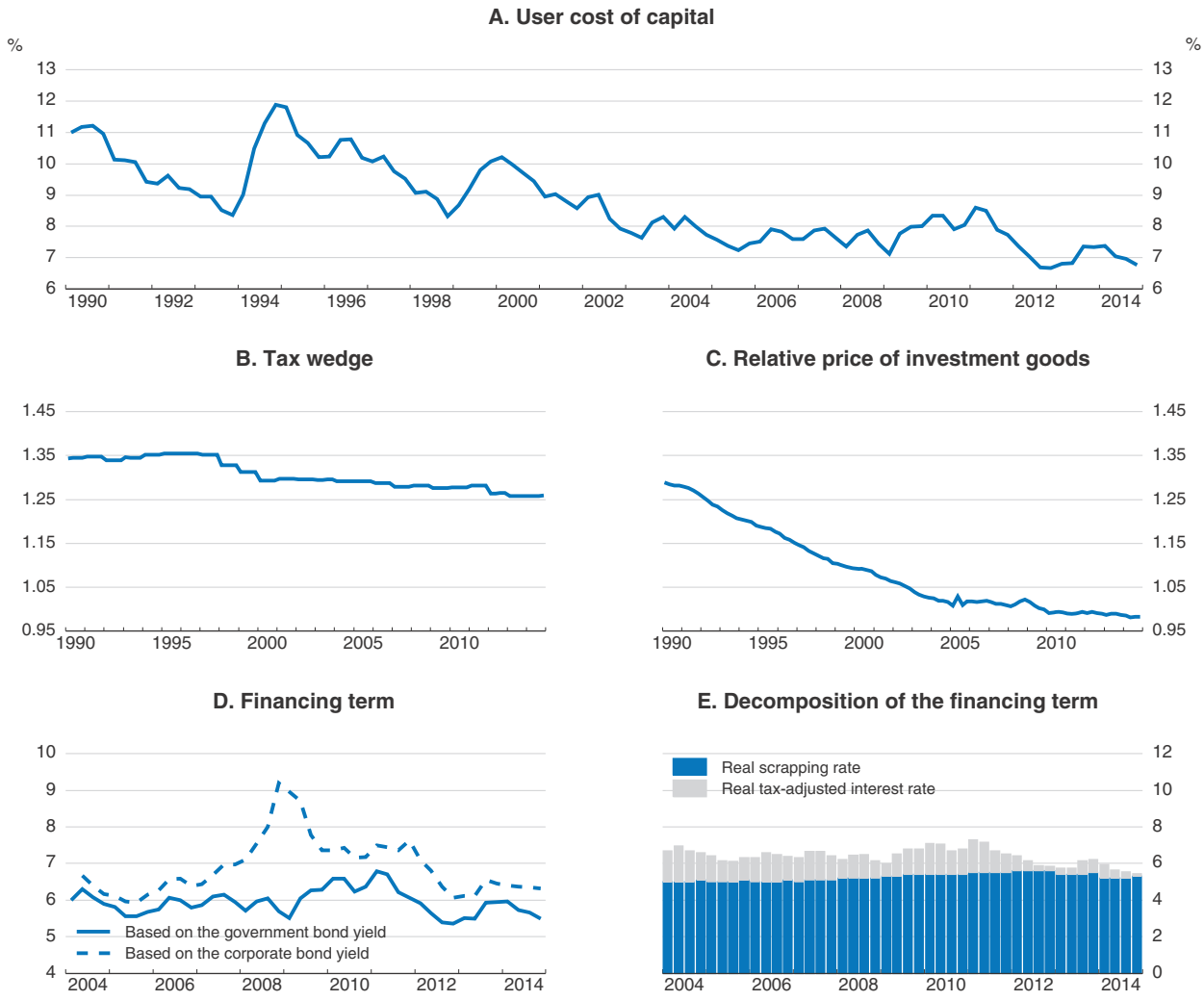
such very supportive policy stances over a protracted period has not succeeded in reviving capital spending significantly. A further decline in financing costs was prevented by rising depreciation rates.

For small firms and other borrowers that are traditionally dependent on bank credit, the user cost of capital is likely to be higher than shown, and possibly substantially higher, due to the constraints on credit supply arising from weak or impaired banking systems. This "credit channel" is likely to have been particularly important at the height of the financial crisis and early in the recovery, but is still present in several economies, especially in the euro area, and likely to be restraining investment (ECB, 2013; IMF, 2015; Box 3.2; Annex 3.1). Thus, the spreads between average bank loan rates and government bond yields have risen since the immediate pre-crisis period in European economies and Canada (Figure 3.17).[20] Bank lending standards are now unwinding, but have not yet sufficiently offset the substantial tightening in the immediate aftermath of the crisis, especially in the euro area (Figure 3.18). Evidence from a number of corporate surveys suggests that the constraints imposed by adverse financial conditions during the crisis have now faded to pre-crisis levels in most economies, but not in the euro area (Figure 3.19).

20. This is an imperfect proxy for the marginal cost of new funds.

Figure 3.16. **The user cost of capital has declined over time**

Weighted average of G7 countries

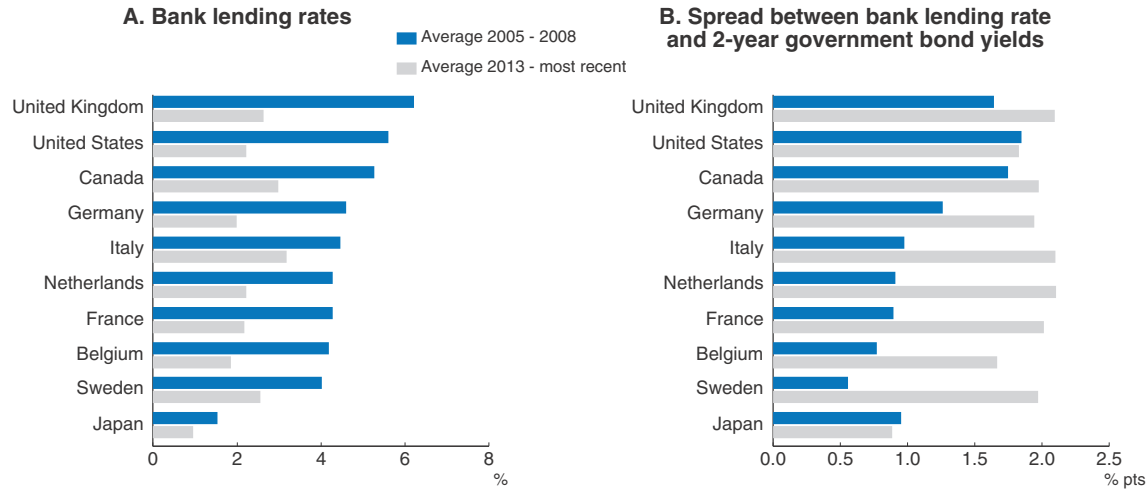


Note: The financing term incorporates the tax deductibility of debt interest payments and is inflation-adjusted.
Source: *OECD Economic Outlook 97 database*; Datastream; Oxford University Centre for Business Taxation; and OECD calculations.

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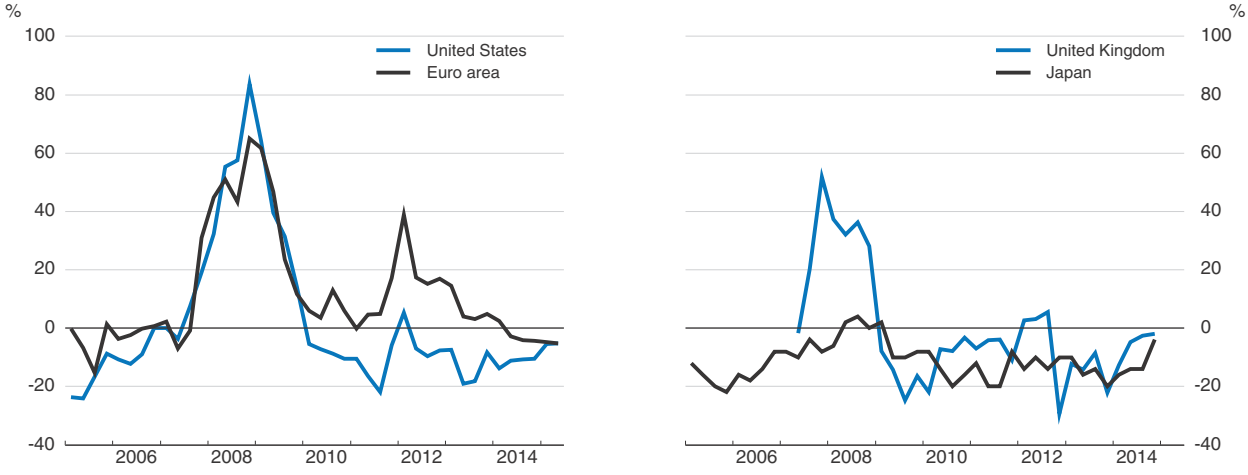
Investment should have been boosted by lower corporate tax rates, in line with empirical evidence (OECD, 2010). Indeed, over half of OECD countries have reduced statutory corporate tax rates since 2007. However, in the case of multinational corporations that engage in tax-motivated profit shifting (OECD, 2015d), the investment response may have been muted. Given that they had already shifted their taxable income to low-tax jurisdictions, their effective average and marginal tax rates were already lower than domestic tax parameters would imply. Consequently, changes in domestic tax rates have had little effect on their effective rates. Indeed, recent OECD analysis finds that capital spending of such companies is significantly less responsive to changes in domestic tax systems than that of companies with limited international profit-shifting opportunities (Johannson et al., 2015). Some countries have also introduced temporary tax credits or strengthened investment allowances for a fixed period since the crisis began. This may

Figure 3.17. **Bank lending rates have declined but spreads have risen**



Note: Weighted average across all maturities. Average maturities may differ across countries. Data are lending rates (all maturities) for loans to non-financial corporations for the United States, rates for new loans to non-financial corporations and averages across member countries for the euro area, rates for new loans to non-financial corporations and households for Japan, rates for new loans to non-financial corporations for the United Kingdom, rates for new prime loans to non-financial corporations for Canada, rates for new loans to non-financial corporations for Sweden.
Source: Bank of England; Bank of Japan; Datastream; European Central Bank; Riksbank; US Federal Reserve; and OECD calculations.
StatLink http://dx.doi.org/10.1787/888933221542

Figure 3.18. **Credit standards tightened significantly in 2008-09**
Net percentage of banks tightening standards



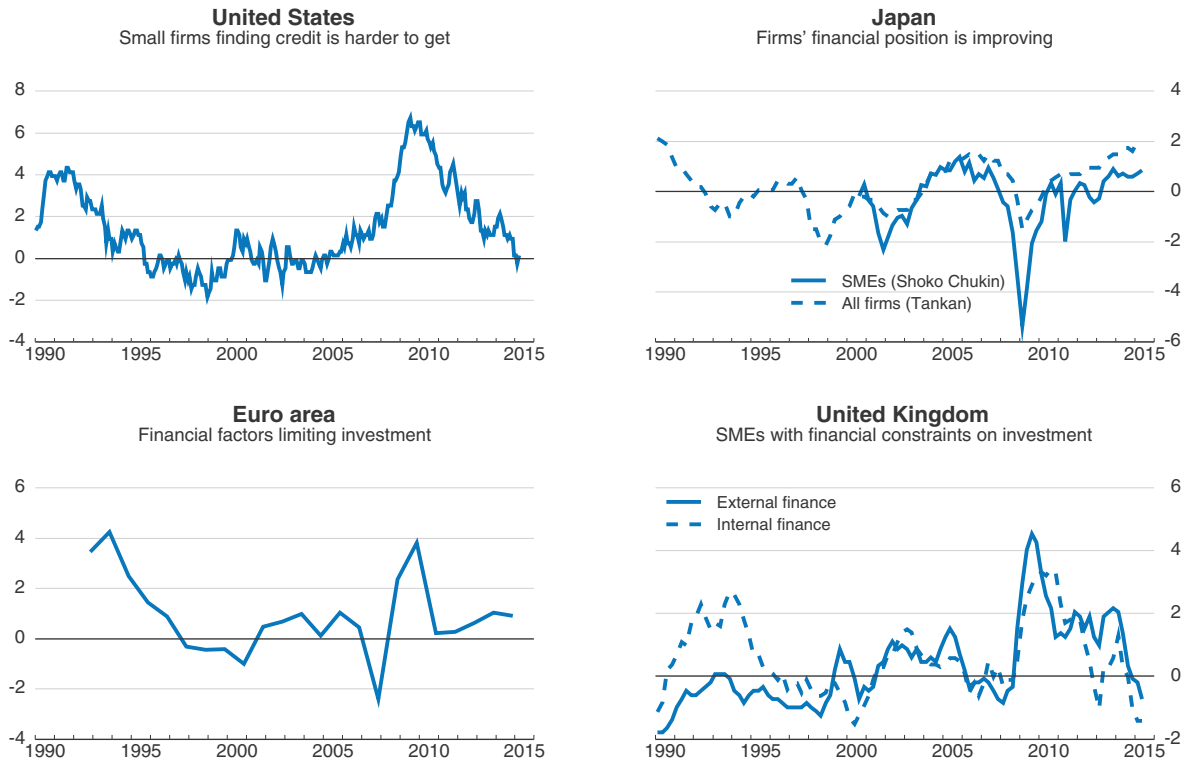
Note: Positive numbers indicate credit availability contracting and negative numbers indicate credit loosening. For the United States, the survey question relates to bank loans to large and medium-sized firms, the euro area to large enterprises, the United Kingdom to the overall corporate sector, and for Japan to large firms.
Source: Bank of England; Bank of Japan; European Central Bank; and US Federal Reserve.
StatLink http://dx.doi.org/10.1787/888933221556

have affected investment positively at the margin, notably by bringing forward investment plans to benefit from the temporary tax relief.

As generally measured, the relative price of investment has been broadly constant since just before the onset of the financial crisis in 2007 and thus has not contributed to

Figure 3.19. **Financial factors have constrained investment in recent years**

Normalised over 1996-2007; in standard deviations



Note: US data are from the NFIB survey and smoothed using a 3-month moving average. UK data are from the CBI survey and smoothed using a 4-quarter moving average. Euro area data are for manufacturing firms.
Source: Datastream; European Commission; and OECD calculations.

StatLink http://dx.doi.org/10.1787/888933221562

lowering the user cost of capital. However, the recent stability of the relative price of investment may partly be due to quality improvements which have not yet been sufficiently incorporated into ICT prices.[21] Further work is needed to assess the extent to which this mis-measurement may be affecting the assessments of relative price and capital spending.

Corporate balance sheets and profitability

Although the composition of non-financial corporate balance sheets at the onset of the crisis depressed capital spending, it should not be constraining corporate investment significantly at present. Despite marked differences across a number of OECD economies and the aggregate euro area economies, three important features stand out (Table 3.2):

- As the crisis got underway in 2008, debt leverage (expressed relative to equity) was at relatively high levels in all economies, in part reflecting the collapse in stock markets as

21. Indeed, new work by Byrne et al., (2015) shows that there are large discrepancies between the published PPI price for microprocessor units when compared with prices estimated using a hedonic measure that accounts for quality improvements given the prevailing market pricing regime for semiconductors. They estimate that between 2008 and 2013, prices fell by an average annual rate of 43% compared to an average decline of 8% according to the PPI data.

Table 3.2. **Significant changes have occurred in non-financial corporate balance sheets since the crisis began**

	Debt-to-equity ratio			Share of cash & deposits in total assets (%)			Share of debt securities in debt (%)		
	Average 99Q1-07Q4	2008Q4	2014Q3	Average 99Q1-07Q4	2008Q4	2014Q3	Average 99Q1-07Q4	2008Q4	2014Q3
United States	0.62	0.87	0.58	8.88	7.81	9.21	24.25	20.80	25.84
Euro area	1.09	1.30	0.94	10.15	11.77	11.80	5.31	4.87	8.57
Japan	1.65	2.04	1.14	23.10	24.52	24.15	12.03	10.52	9.60
Germany	1.29	1.57	1.12	10.24	11.76	10.91	3.80	5.05	5.29
France	0.67	0.90	0.70	4.36	6.20	7.47	12.85	9.89	16.70
United Kingdom	0.86	1.30	0.89	22.20	21.58	31.01	16.21	13.00	17.27
Italy	0.80	0.88	1.20	21.12	24.72	17.73	4.24	4.42	8.40
Canada	0.87	1.09	0.90	15.20	20.69	20.82	24.00	18.20	21.90
Australia	0.57	0.91	0.71	35.40	41.75	44.19	28.80	22.48	22.25
Belgium	0.94	0.95	0.75	9.71	8.08	9.49	2.91	2.75	6.08
Greece	0.94	2.65	1.47	63.72	57.84	57.31	7.28	16.78	1.23
Ireland	1.19	1.75	1.00	20.14	19.12	8.25	2.98	1.51	2.86
Korea	3.41	2.75	1.37	3.41	2.75	1.37	3.41	2.75	1.37
Norway	1.22	1.25	0.94	10.91	10.97	10.10	8.99	6.77	11.46
Portugal	1.48	1.76	1.51	12.92	10.70	10.21	6.34	8.86	10.57
Spain	1.01	1.41	0.87	9.93	11.15	11.19	1.44	0.66	1.71
Sweden	0.79	1.01	0.57	6.13	7.41	5.90	7.11	7.41	10.19

Note: Main differences with Table 2 in Lewis et al. (2014) refer to changes in classification of non-financial corporations in the new system of national accounts.

1. Average ratio are for the period 2001Q2 to 2007Q4 for Japan and Ireland.
2. Latest date is 2014Q2 for Japan, Canada, Korea and Norway.

Source: OECD Financial Accounts database SNA2008; Eurostat ESA2010; OECD Financial accounts SNA1993 and OECD calculations.

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well as the build-up of corporate debt. High leverage contributed to the large reductions in investment volumes at the height of the crisis (Davis, 2010; Lewis et al., 2014). However, non-financial corporate leverage has subsequently declined considerably in some but not all countries. In the United States, Japan and the aggregate euro area it is now at or below pre-crisis norms for non-financial firms. Consequently, this source of balance sheet pressure is unlikely to be acting as a significant restraint on investment levels in these economies, unless companies aim at reaching even lower leverage. In contrast, in Italy and Australia, and to a smaller extent in France, Portugal and the United Kingdom, debt leverage remains well above levels at the start of the crisis, suggesting it could now be limiting new investment.

- Liquidity does not appear to be a constraint on corporate expenditure. In most big OECD economies the post-crisis share of financial assets held as currency and deposits by non-financial enterprises is presently above longer-term norms. These higher levels of liquidity imply that large companies may now have only a limited need for external finance for new investment projects. The present levels of corporate liquidity imply that many forms of corporate expenditure – including mergers and acquisitions, fixed investment and dividends – could rise substantially as uncertainty eases and private demand strengthens. For example, the reductions in holdings of currency and deposits that would occur if the share of currency and deposits in total financial assets returned from the 2014 level to the average over 1999-2007 are equivalent to 15% of the 2014 level

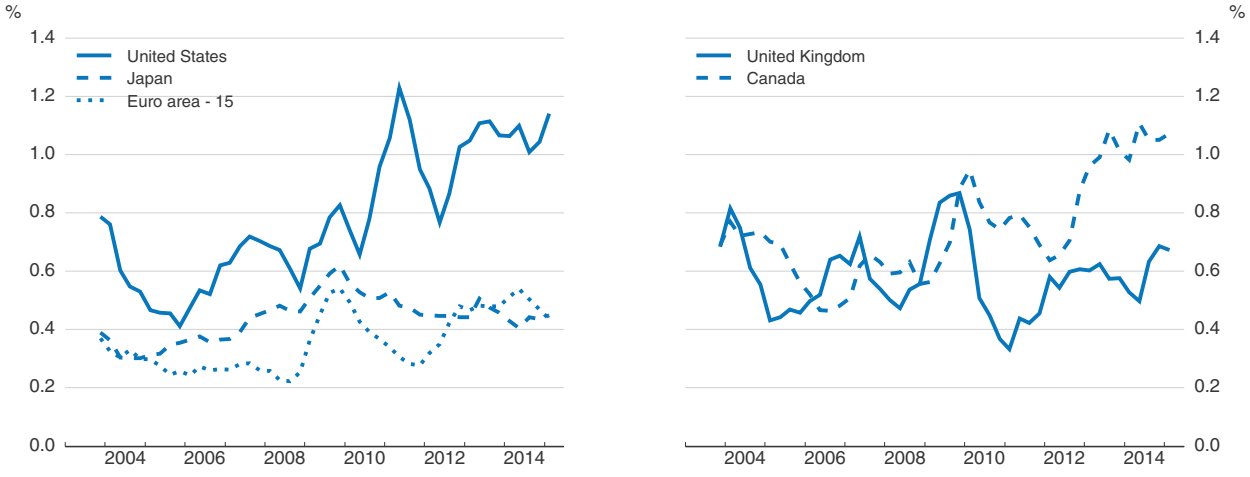
of business investment in Japan, 7% in Germany and 3% in the United States. However, to the extent that the build-up in cash holdings reflects precautionary motives arising from continued uncertainty about demand and external financing conditions (Bates et al., 2009; Sanchez and Yurdagul, 2013), the feed-through of improved liquidity into investment and other forms of corporate expenditure could take some time to emerge.

In some economies the share of debt securities in total debt has risen since the onset of the financial crisis. This development has been especially pronounced in France, Italy, Norway, the United Kingdom and the United States. In contrast, only small changes have occurred in Japan and Germany, where historically external finance has been based largely on bank credit. In the context of the low level of long-term interest rates, weak banking systems and investors' growing appetite for risk, additional corporate bond issuance has provided a means for companies in all the major countries to raise additional financing at a relatively low cost (Figure 3.20; OECD, 2015d). This should support corporate expenditure, potentially including investment.[22] However, the low cost of debt relative to equity has encouraged companies to borrow to return funds to shareholders, through buybacks and dividends (Blundell-Wignall and Roulet, 2015; OECD, 2015d). For instance, in 2014, US S&P 500 corporations bought back just over USD 565 billion of their own shares, an amount equivalent to around three-quarters of their total capital expenditures (FactSet, 2015).

Bank balance sheets in many countries deteriorated significantly with the onset of the financial crisis with large losses threating the solvency of banking systems. Public interventions prevented a financial collapse, but the crisis left banks weak, reducing their willingness to extend credit. This was particularly relevant in vulnerable euro area

Figure 3.20. **Non-financial corporations' gross bond issuance has recovered**

Four-quarter moving average, in per cent of GDP



Note: Gross bond issuance of private non-financial corporations in national and foreign currencies. Issuance covers publicly-offered private bonds for Japan, long-term securities other than shares at nominal value for the euro area, and non-financial corporate new bond issues for the United States.

Source: OECD Economic Outlook 97 database; Bank of England; European Central Bank; Japan Securities Dealers Association; US Federal Reserve; and OECD calculations.

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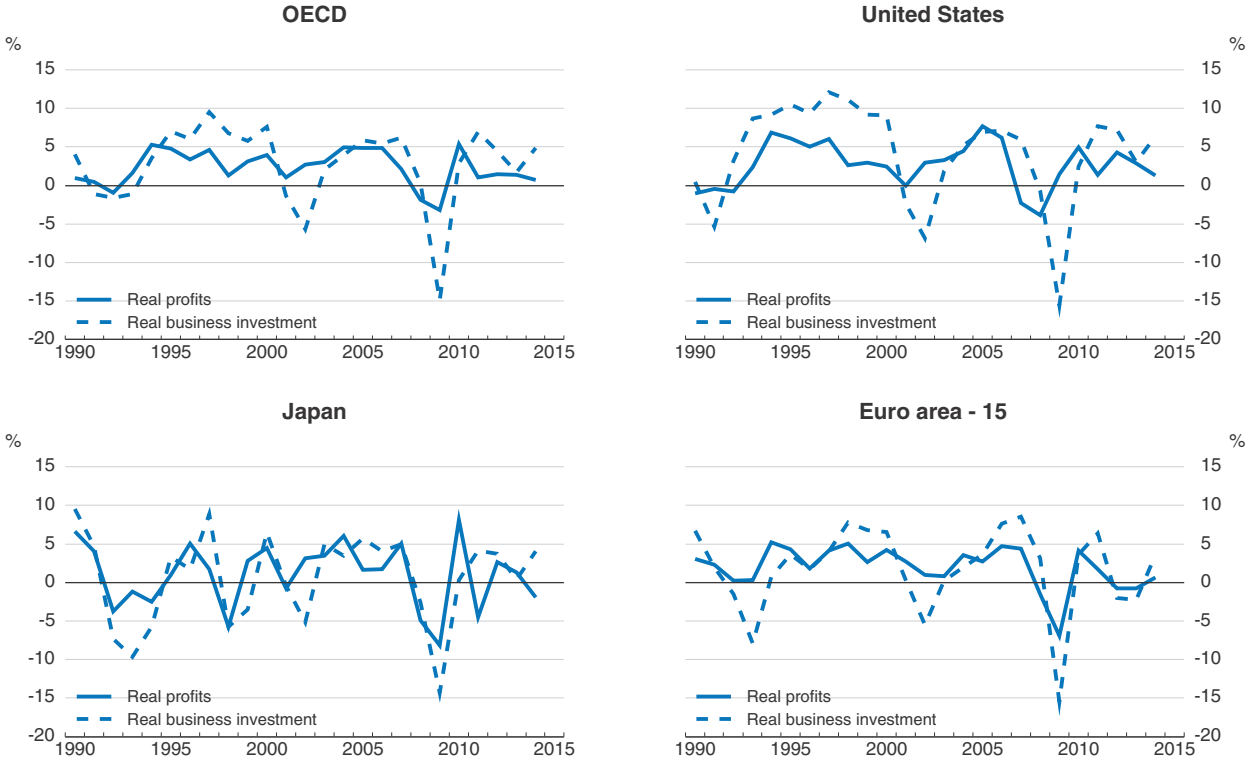
22. The source of financing also affects the type of investment: risky investment in innovation is more typically financed by equity rather than debt (Andrews and Criscuolo, 2013).

countries, where banks had initially problems in funding themselves at a reasonable cost. Moreover, where the recapitalisation of banks was initially slow and banks continue to be burdened with large non-performing loans (Annex 1.1). However, according to the ECB Bank Lending Survey, over recent years, the cost of finance and balance sheet constraints have become less important in constraining the supply of credit for the euro area as a whole (ECB, 2015).

Insufficient profitability should no longer hamper capital spending by corporations in the United States, but higher profitability may still be needed in a number of other economies to support stronger investment spending. The availability of internal finance through profitability and cash flow can be important for investment (Bond et al., 2003). Weaker cash flow can exacerbate the need for external finance, and also affect the ability of a firm to borrow and the cost of credit. The available data suggest that real corporate profits (financial and non-financial enterprises) rose by an average of 1% per year overall in the past four years, compared with a four-decade average of around 3% (Figure 3.21). However, there is considerable variation across countries, with profit growth remaining comparatively solid in the United States, but with the level of profits barely changing in real terms in the euro area and Japan. With the recovery in profits, the rate of return on equity

Figure 3.21. **Growth in real corporate profits has been solid in the United States but weaker elsewhere**

Annual percentage changes



Note: Real profits are gross operating surplus less income from self-employment, deflated by the GDP deflator. Countries with less than 19 years of profits data are excluded from the OECD aggregate; there are breaks prior to 1996 in years where additional countries are incorporated.

Source: OECD Economic Outlook 97 database; OECD National Accounts database; and OECD calculations.

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(i.e. net income as a share of shareholders' equity) of listed companies has returned to or exceeds pre-crisis levels in the United States but remains below pre-crisis levels in the euro area and Japan, and especially in EMEs (Blundell-Wignall and Roulet, 2015; OECD, 2015d).

Uncertainty

A potential explanation for weak capital spending is that perceived uncertainty about the economic outlook and policy developments may have increased markedly. At times of heightened uncertainty, postponing planned but hard-to-reverse decisions, such as fixed investment, can be a valuable option (Bernanke, 1983; Dixit and Pindyck, 1994), provided the same investment opportunity can be undertaken in the future. Thus, higher uncertainty affects investment negatively, which is confirmed in empirical studies (see Box 3.2and below), including the experience since the recent crisis and in particular for investment in structures (Ferrara and Guérin, 2015). This is also reflected in the largest proportion of respondents in the BIAC survey (Box 3.3), identifying economic and regulatory uncertainty as being a very important constraint on capital spending.

The appropriate measure of economic uncertainty is far from clear (Davis, 2010), with a range of different indicators being used in the empirical literature.

- Financial measures of uncertainty have evolved differently in recent years after a large upward jump at the height of the crisis. One widely used measure is stock market volatility.[23] This rose extremely sharply following the failure of Lehman Brothers in 2008 and also as the euro area crisis intensified significantly in 2010 and again in mid-2011 (Figure 3.22). This is estimated to have reduced investment since the onset of the crisis in the United States, the euro area and Japan (Davis, 2010; OECD, 2011a). However, stock market volatility has been around its historical averages over the last two years, and its recent level should not have a significant negative impact on investment.
- Measures of policy uncertainty have eased, but remain above pre-crisis levels. The Economic Policy Uncertainty Index (EPUI) is based on news stories related to uncertainty, the economy and policy, together with the dispersion of forecasts of inflation and budget deficits (Baker et al., 2013).[24] The relatively new literature using this index, or related variables, has highlighted possible linkages between uncertainty, investment growth (European Commission, 2013, 2014; IMF, 2015; Box 3.2; Annex 3.1) and GDP growth (Haddow et al., 2013). The EPUI points to elevated levels of uncertainty from 2007 to 2011, with a sharp rise at the start of the financial crisis and a further increase as the euro area crisis intensified in the latter half of 2011 (Figure 3.23). To this extent, measures of policy uncertainty provide a broadly similar picture to that derived from stock market volatility. However, more recently the alternative measures of uncertainty have diverged. Stock market volatility has declined towards pre-crisis norms, whereas the policy uncertainty indices have declined but have remained above pre-crisis levels, except in the United States.

23. Empirical evidence generally suggests that increased stock market volatility, and in particular the peaks in volatility, results in the postponement of investment decisions (Bloom et al., 2007; Bloom, 2009).
24. Measures of policy uncertainty are prone to revision. From April 2014 the EPUI changed the indices for the European countries and Canada to be based solely on the news-based measure, while the US measure continues to be based on a combination of data on news searches, dispersion of forecasts for key variables and an index of tax code expirations. The full uncertainty index for the United States is used here but it should be noted that the news-based measure has been more volatile and also remained higher than the overall policy measure.

Figure 3.22. **The implied volatility of share prices has moderated**

Monthly averages



Note: Implied volatility can be interpreted as market expectation of risk (future volatility) and is derived from at-the-money call option prices.

1. AMEX prior July 2007.
2. Average implied volatility for the period January 1999 to May 2015 for all countries but emerging market economies where the average refers to the period March 2011 to May 2015.
3. CBOE Emerging Markets ETF Volatility Index Options.

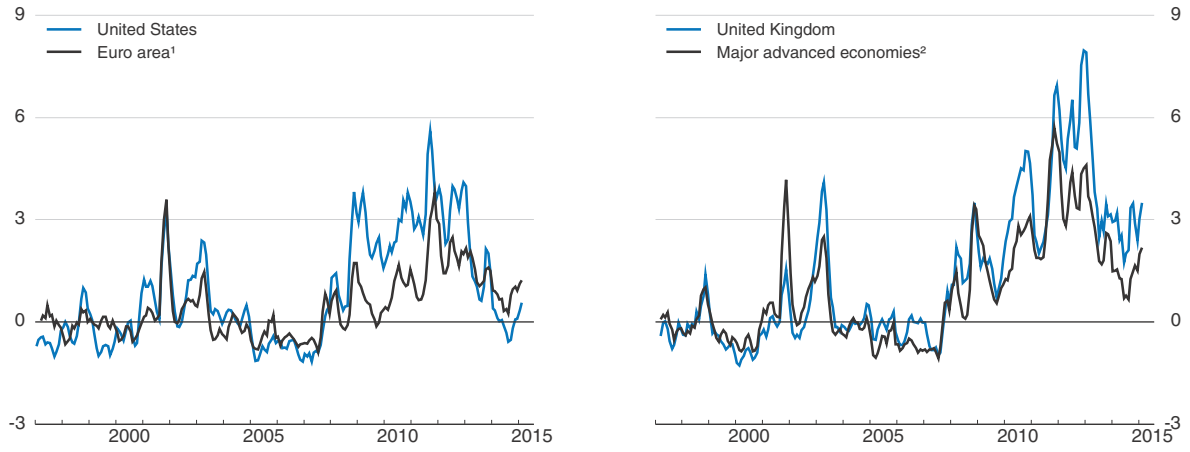
Source: Datastream.

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- Survey evidence suggests that in the United States concern about regulatory and tax uncertainty remains a constraint on business activity. Uncertainty as measured by the EPUI was probably related to expiring tax provisions and prospects for new taxes. The "tax code expiration" component of the US index rose rapidly in 2009, 2010 and 2012, reaching unprecedented levels ahead of the impending "fiscal cliff" at end-2012 (Figure 3.24). Subsequently, the resolution of US budget negotiations and the debt ceiling has removed an important source of uncertainty. However, at the turn of 2014 and 2015 the component spiked again, as many temporary tax provisions expired, possibly having a negative effect on business investment. Small businesses in the United States still highlight uncertainty about regulation as being the greatest constraint on business activity. Poor sales, taxes and regulation are currently seen as the main problems for small businesses (Figure 3.24).
- Concerns about growth prospects and financial vulnerabilities in EMEs are another potential source of uncertainty, and if true, undermine the global growth component important for investment decisions. The policy uncertainty indices for China and India point to heightened levels of uncertainty in recent years, particularly from mid-2011 to

Figure 3.23. **Measures of policy uncertainty have fallen but remain elevated**

3-month-moving average of non-seasonally adjusted data, normalised over 1997-2007, in standard deviations

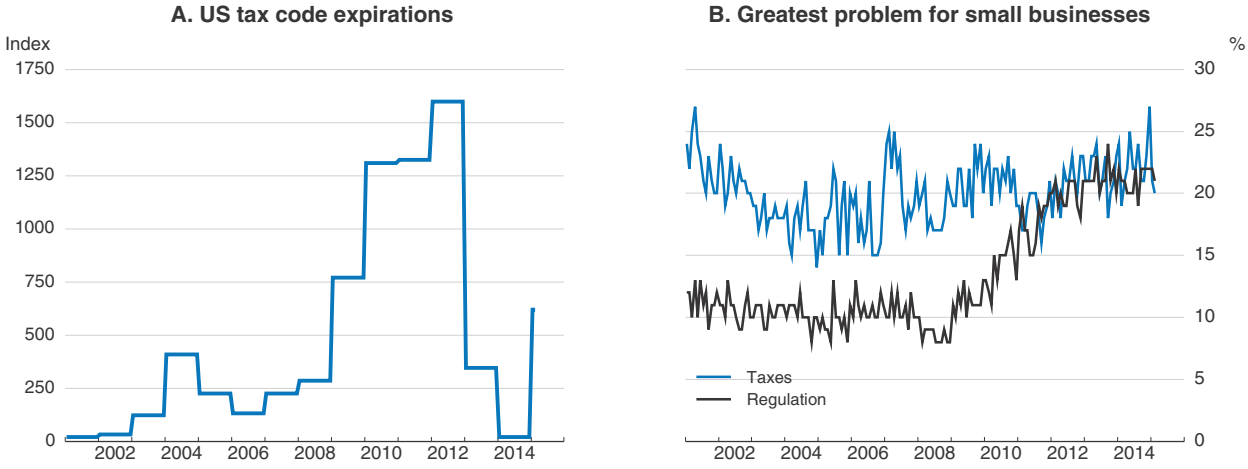


1. Weighted average of the index in the three largest euro area economies.
2. Excluding Japan; first principal component calculated from the Economic Policy Uncertainty Indices for Canada, France, Germany, Italy, the United Kingdom and the United States.

Source: Scott Baker, Nicolas Bloom and Stephen J. Davis at *www.PolicyUncertainty.com*; and OECD calculations.

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Figure 3.24. **Regulatory and taxation issues appear to have added to uncertainty in the United States**



Note: Small business responses are a percentage of total responses from the NFIB survey. Tax code expirations are the weighted sum of the discounted total dollar amount of federal tax code provisions expiring in the following 10 years.

Source: Datastream; Scott Baker, Nicolas Bloom and Stephen J. Davis at *www.PolicyUncertainty.com*.

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mid-2013 and since mid-2014. Similarly, measures of equity market volatility in EMEs suggest uncertainty was elevated during 2011 but is now closer to normal levels, notwithstanding several small bouts of higher volatility.

- A delay in concluding multilateral trade agreements also adds to uncertainty and may have delayed investment decisions of businesses in the countries involved.

Some longer-term uncertainties that could be weighing on spending on long-term projects may not be well captured by any of the indices mentioned above. These are typically associated with uncertainties about how fundamental challenges facing societies will be resolved:

- Population ageing is already putting pressure on public finances in many countries and the total ex ante cost to budgets due to higher pension, health and long-term care outlays could amount to 2½ per cent of GDP on average (Table 3.3), with substantially higher costs in several countries. In the absence of decisions as to how these future budget pressures will be addressed, the risk that businesses and investors will be called on to pay higher taxes to fund higher ageing-related outlays may negatively affect capital spending today. Such concerns are likely to be aggravated by the relatively high level of public debt and very low returns on safe assets, which has a negative impact on the positions of defined-benefit corporate pension schemes.

Table 3.3. **Changes in public spending on health and pensions for selected OECD countries**

Change 2015-30, per cent of GDP

	Health care[1]	Long-term care[1]	Pensions	Total
Australia	1.2	0.2	0.7	2.1
Austria	1.3	0.2	2.3	3.9
Belgium	1.1	0.3	3.6	5.0
Canada	1.4	0.2	1.2	2.9
Chile	1.4	0.5	-0.7	1.2
Czech Republic	1.1	0.2	0.3	1.7
Denmark	1.3	0.2	0.3	1.8
Estonia	0.9	0.2	0.4	1.5
Finland	1.2	0.2	2.8	4.2
France	1.2	0.2	0.5	1.9
Germany	1.3	0.3	1.5	3.1
Greece	1.2	0.3	0.0	1.5
Hungary	0.9	0.3	-0.8	0.4
Ireland	1.2	0.1	0.7	2.0
Iceland	1.2	0.2	1.1	2.5
Israel	1.3	0.3	0.5	2.1
Italy	1.3	0.3	-0.4	1.2
Japan	1.4	0.3	..	1.7
Korea	1.7	0.4	1.4	3.5
Luxembourg	1.4	0.3	4.1	5.8
Mexico	1.3	0.4	0.4	2.1
Netherlands	1.4	0.3	2.3	4.0
Norway	1.3	0.2	2.0	3.5
New Zealand	1.1	0.1	1.9	3.1
Poland	1.1	0.2	0.2	1.6
Portugal	1.3	0.2	-0.1	1.4
Slovak Republic	1.2	0.3	1.4	2.9
Slovenia	1.3	0.3	1.5	3.1
Spain	1.3	0.4	0.2	1.8
Sweden	1.0	0.1	0.4	1.6
Switzerland	1.3	0.2	1.5	3.0
Turkey	1.2	0.3	1.5	3.0
United Kingdom	1.1	0.2	0.3	1.6
United States	1.2	0.1	0.1	1.5
OECD (unweighted) average	**1.2**	**0.3**	**1.0**	**2.5**

Note: Where projections are not available over the period 2015-30, linear interpolation has been applied.
1. Based on "Cost-containment scenario" (Oliveira Martins and de la Maisonneuve, 2013).
Source: European Commission (2012); OECD Pensions at a Glance (2011); Merola and Sutherland (2012) and Bank of Israel.

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- Climate change policy goals to limit the rise in global temperature to 2° C will require significant changes in taxation and regulation at national and international levels. Uncertainty about how the global community will deal with this challenge can weigh primarily on private capital spending in the energy and transportation industries, but might also have broader effects. An early and clear resolution on this issue might spur positive capital spending as firms react to opportunities that open up as a result of measures to contain climate change.

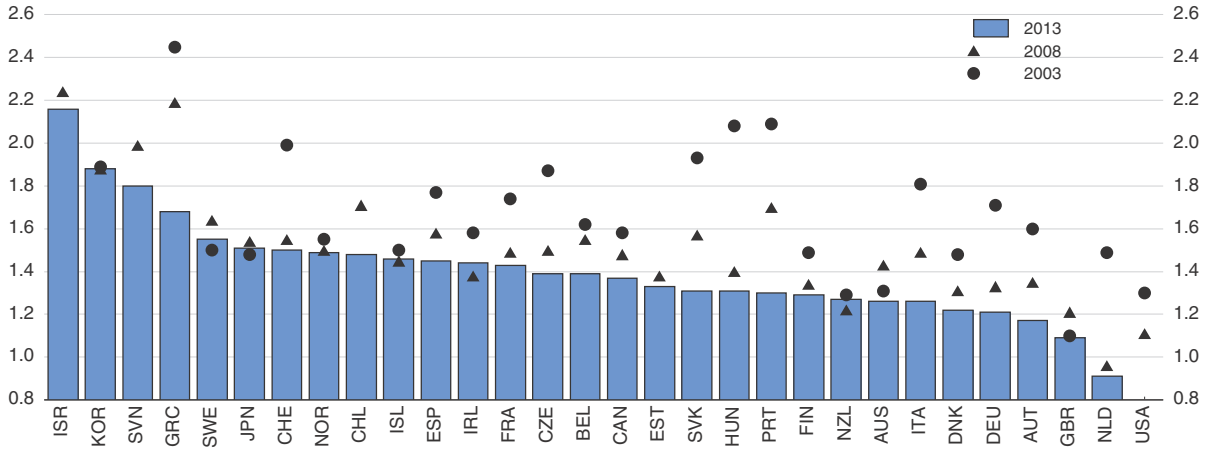
Regulation and competition

Reductions in product market regulations across the OECD since the crisis began, particularly in the vulnerable euro area countries, should improve the prospects for future investment growth (Figure 3.25). This is in line with OECD empirical evidence which finds that anti-competitive product market regulations, particularly barriers to entry and to trade and competition, are negatively associated with investment and capital accumulation (Alesina et al., 2005; Nicoletti and Scarpetta, 2005).[25] The survey and empirical evidence reported in this paper also highlights the extent to which regulations are hampering corporate investment:

- Empirical analysis reported in Box 3.2 and Annex 3.1indicates that product market regulation, as measured by the OECD indicator of regulations in energy, transport and communications (ETCR), depresses the level of the capital stock in the long term and investment levels in the short term.
- Survey evidence indicates that businesses consider regulations to be holding back capital spending. Thus, respondents to the BIAC business climate survey cite restrictive

Figure 3.25. **Product market regulation has fallen in some but not all countries**

Index scale of 0-6 from least to most restrictive



Note: 2013 observation is not available for the United States.
Source: *OECD Product Market Regulation Database.*

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25. In theory, the impact of greater product market competition on investment is uncertain. It can either increase the incentives for firms to undertake new investments to stay ahead of competitors or, by hitting the profitability of incumbents, reduce their ability to easily finance new investment.

or burdensome regulation to be a "very important" constraint on investment in their countries to a greater extent than insufficient domestic or global demand (Box 3.3).

- With the advancement of digital technology and its potential to facilitate transactions, regulations that influence the ease at which digital platforms and other computer-mediated transactions can be introduced are likely to become more important as a determinant of investment in the future.

FDI-specific regulations have a direct influence on a country's ability to attract internationally mobile fixed capital investments. The OECD FDI regulatory restrictiveness indicator provides a measure of overt national regulatory restrictions on FDI. Four main types of factors are considered: equity restrictions, screening and approval requirements, restrictions on foreign key personnel, and other operational restrictions (such as limits on purchase of land or on repatriation of profits and capital). Inward FDI restrictions have eased over time, both in OECD economies and the BRIICS countries, but still remain much higher on average in the BRIICS than in the OECD.[26]

Reforms to ease inward FDI restrictions could have a significant and sizeable positive impact on the level of inward FDI, especially in Europe (Nicoletti et al., 2003). New OECD estimates also illustrate the potential gains from further regulatory harmonisation in Europe, with a reduction of one-fifth in regulatory differences between two countries estimated to raise inward FDI by around 15% (Box 3.5). Environmental regulations can also

Box 3.5. **The effect of PMR heterogeneity on FDI**

Preliminary OECD work (Fournier, 2015b; Annex 3.3) investigates the effect of policies on bilateral FDI stocks with a gravity model (Table below). Following Santos Silva and Tenreyro (2006), a Poisson pseudo-maximum likelihood (PPML) estimator is used. As a robustness check, some regressions are also estimated by a linear estimator, with the logarithm of FDI stock as the dependent variable.

A key finding is that heterogeneity in product market regulations (PMR) has a significant negative effect on FDI. Heterogeneity is defined as the share of different regulatory settings between two countries based on the OECD PMR indicator at the question level (Fournier, 2015a; Annex 3.3). This suggests that a broad reform package that would cut the divergence of regulations between countries by one-fifth would increase FDI by around 15%.

Other findings include:

- In terms of specific policy areas, the divergence of antitrust exemptions, barriers in service provision, network sector barriers and command and control regulation all have significant negative impacts on FDI.
- FDI restrictions as measured by the FDI restrictiveness index also have a clear negative impact.
- The complexity of regulatory procedures has a negative impact on FDI. If countries that have the most complex regulatory procedures moved toward the average of the half of countries with the least complex regulations, FDI could increase by about 15%.
- There is some evidence that belonging to the EU Single Market can have a positive effect on FDI on top of the effect already captured by regulation indicators. By contrast, there is a negative effect for the NAFTA area, which may reflect a substitution effect in favour of trade (see Fournier et al., 2015, for evidence of the large positive effect of NAFTA on trade).

26. A handful of OECD economies, including New Zealand, Mexico, Canada, Korea and Iceland, continue to have comparatively strong FDI restrictions in 2014, as measured by the OECD FDI regulatory restrictiveness indicator.

Box 3.5. **The effect of PMR heterogeneity on FDI** *(cont.)*

FDI determinants

Estimation method	Poisson			Linear		
PMR^{h}_{ijt}	**-1.67*** **	**-1.54** **	**-0.71**	**-2.83*** **	**-2.95*** **	**-2.55*** **
Same legal system$_{ij}$	0.46***	0.45***	0.43***	0.61***	0.61***	0.63***
FDI restrictiveness$_{it}$	-0.25*		-0.37**	-0.056		-0.14
Complexity of Regulatory Procedures$_{it}$	-0.15***	-0.16***	-0.17***	0.021	0.0100	-0.0092
European Economic Area$_{it}$	-0.13	-0.21	-0.53*	0.92***	0.66**	0.84***
European Economic Area$_{jt}$	-0.036	-0.056	-0.54	-0.039	0.13	-0.051
European Economic Area$_{ijt}$	0.32	0.33	0.54**	0.12	0.11	0.13
NAFTA$_{ij}$	-1.22***	-1.20***	-0.85***	-0.99	-1.02	-1.25*
N	2,017	2,017	1,951	2,017	2,017	1,951
R^2	0.893	0.889	0.913	0.817	0.818	0.819
Country and year fixed effects	YES	YES	YES	YES	YES	YES
Controls for PMR levels in seven subdomains	NO	YES	NO	NO	YES	NO
Controls for size and factor dissimilarities	NO	NO	YES	NO	NO	YES

Note: Asterisks (*, **, ***) indicate the significance level (10%, 5%, 1%) of the coefficients. i denotes the inward country and j the outward country. PMR^{h}_{ijt} = Heterogeneity of the PMR indicator; NAFTA$_{ij}$ = North America Free Trade Agreement pair dummy; FDI restrictiveness$_{it}$= PMR sub-component built with the OECD FDI restrictiveness index. Poisson = Poisson pseudo-maximum likelihood. Linear = Log-linear specification. Standard gravity model determinants and various other determinants are added on top of the variables shown in this table (Annex 3.3)

Source: OECD calculations.

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affect the location for internationally mobile investments, particularly for greenfield investments (Bialek and Weichenreider, 2015; Box 3.1).

Forces affecting public/infrastructure investment

Public investment includes investment in economic and social infrastructure, defence equipment and on intellectual property. In addition to the direct impact that higher investment spending has on demand, there are a number of different channels through which it can also affect the long-term level of potential output:

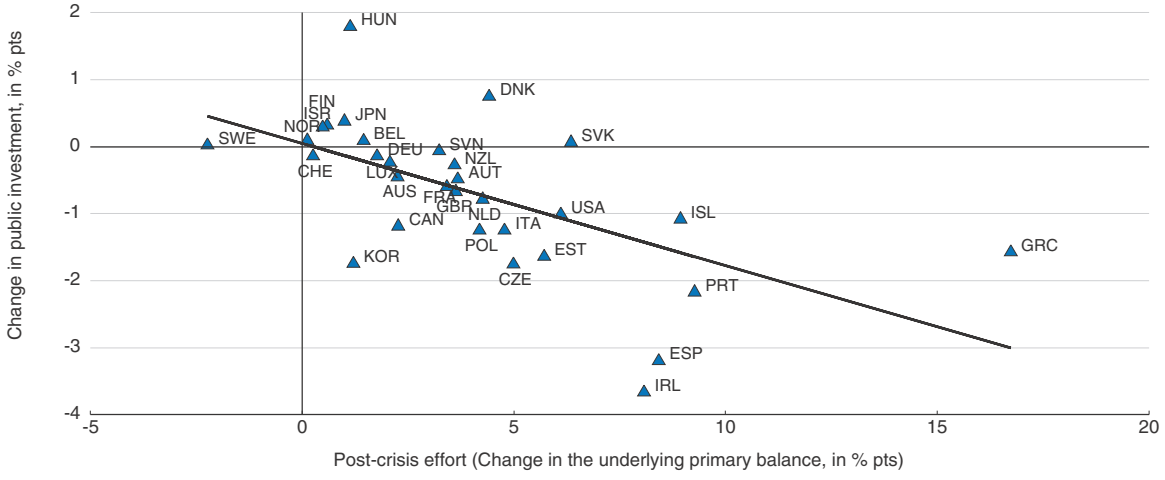
- Empirical evidence points to significant positive effects from public infrastructure on productivity (Fernald, 1999) and also economic growth (Bom and Ligthart, 2014). These effects may, however, be non-linear, for instance due to threshold effects in network externalities (Fernald, 1999; Sutherland et al., 2009). Public spending on education and health are also estimated to have a significant positive impact on long-term potential output (Barbiero and Cournède, 2013).
- Publicly funded basic research has led to the subsequent development of many important technologies (Singer, 2014). Evidence also points to a positive impact on private sector innovative activity (Azoulay et al., 2015) and also on the growth of total factor productivity (Guellec and van Pottelsberghe de la Potterie, 2004). OECD research also suggests that high public spending on basic research enhances absorptive capacity and the ability to learn from new innovations at the global frontier (OECD, 2015a).

Fiscal consolidation effects

The reliance on public investment cuts to reduce budget deficits is costly in terms of demand stabilisation, with several studies suggesting that the fiscal multiplier associated with government investment spending is greater than 1 and higher than for other fiscal instruments. For example, Auerbach and Gorodnichenko (2012), using US data, find a fiscal multiplier of 1 for government expenditure in general, but 2.1 for government investment. Evidence across a range of economies also suggests that public investment multipliers are generally greater than those for government consumption and exceed 1 in some cases (Ilzetzki et al., 2011). For this reason, cutting public investment is one of the least desirable fiscal consolidation instruments (Cournède et al., 2013). This is particularly likely to be the case if public capital spending is cut in strategic areas with significant network effects, or ones in which the social rate of return is high, as such a policy would block investment in related activities.

Despite this, many governments have cut investment in fixed capital to meet their fiscal consolidation objectives in the aftermath of the crisis. Investment in fixed capital by OECD governments declined by an average of 0.6% of GDP between 2010 and 2013, accounting for about one-quarter of fiscal consolidation efforts. The decline was much larger in some countries, exceeding 2.5% of GDP in Greece, Spain and Ireland and accounting for around two-fifths of the consolidation undertaken in Spain. A relationship between a country's fiscal consolidation effort over this period and the cuts made to public fixed investment is evident – on average, 1% of GDP in consolidation has been associated with a 0.3% of GDP cut in public investment (Figure 3.26). Hence, such consolidation efforts, rather than achieve the objective of reducing debt-to-GDP ratios tend to increase it, moving the economy further away from the achievement of medium-term sustainability.

Figure 3.26. **Public investment has declined the most in countries with high fiscal consolidation**

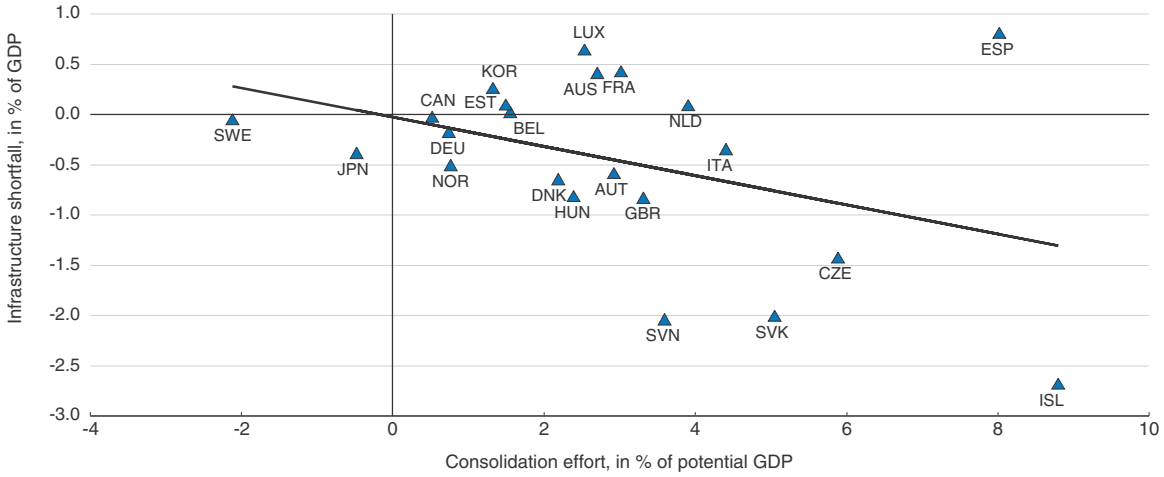


Note: Underlying primary balance and public investment are expressed in per cent of potential GDP. Consolidation denotes change in the underlying primary balance since start of post-crisis consolidation (2009/10 for most countries) until 2013. Greece is not included in the chart.

Source: *OECD Economic Outlook 97 database*; and OECD calculations.

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Figure 3.27. **High levels of fiscal consolidation are associated with larger gross infrastructure investment shortfalls**



Note: Greece is excluded from the correlation. The infrastructure shortfall is the difference between post-2009 and 1997-2007 averages.
Source: OECD Economic Outlook 97 database; national statistical offices; and OECD calculations.

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Post-crisis fiscal consolidation efforts also appear to be linked to post-crisis infrastructure investment shortfalls (Figure 3.27).[27] These shortfalls are measured as the share of infrastructure investment in GDP since 2007 relative to a long pre-crisis period average. While the negative correlation is weaker than with government fixed investment spending (shown previously), a few countries that have carried out relatively large fiscal consolidations also have had relatively large infrastructure investment gaps since the crisis (the Czech Republic, Greece, Iceland, the Slovak Republic and Slovenia).

Regulatory policies related to infrastructure investment

Infrastructure projects often entail large fixed costs, the investment decisions are irreversible and their provision usually reflects some kind of market failure (such as externalities or natural monopolies) that needs to be addressed by government intervention. The provision and use of infrastructure is therefore sensitive to regulation, in particular concerning the desired market structure, access regimes and pricing, and also the burden of risks. OECD estimates suggest that reducing barriers to entry in network industries can foster higher rates of infrastructure investment (Sutherland et al., 2009).

The OECD indicators of regulation in ETCR, covering seven network sectors (telecoms, electricity, gas, post, rail, air passenger transport and road freight), show a reduction in regulatory barriers across almost all OECD countries between 2008 and 2013. However, a large dispersion across countries remains when looking at individual sectors. This can hinder efficiency and investment, particularly in cross-border network infrastructure. Improvements in the quality of trade and transport infrastructure could also have a

27. Infrastructure investment includes private sector expenditure, for instance through public-private partnerships (PPPs). Moreover, some government expenditure meant for infrastructure – for instance those going through EU structural funds – may not be recorded as investment expenditure in the national accounts but rather as capital transfers. And if the funds are ultimately transferred to and disbursed by private actors, they may be recorded as private investment.

significant impact on levels of international trade in many countries, including Turkey (Ojala and Çelebi, 2015). New OECD firm-level evidence points to a negative impact on capital investment by firms operating in infrastructure sectors from product market regulations (including ETCR) and FDI restrictions (Annex 3.2).

Market failures suggest that public interventions are necessary to reduce greenhouse gas emissions. To this end, several governments have encouraged investment in clean energy, notably wind and solar photovoltaic energy, through direct subsidisation or guaranteed premium feed-in tariffs from such energy sources. This has successfully induced a significant expansion in wind and photovoltaic energy generation and also efficiency gains in the clean energy sectors. International trade and investment have played an important role in this process. However, there is concern that government interventions may at times have restrained trade and FDI in such energy generation. Indeed, recent OECD research indicates that imposing local content requirements as an eligibility condition for subsidies or premium feed-in tariffs reduces FDI in photovoltaic energy generation (Box 3.6).

The importance of cost-benefit analysis

To ensure that public investment delivers long-term gains, it is necessary to select projects on the basis of a rigorous cost-benefit analysis.

- Cost-benefit analysis is already used to identify the best projects in many countries. One key component of the Investment Plan for Europe, the so-called "Juncker Plan", is to assess and provide information on the viability of proposed long-term investment projects for public policy-makers as well as potential private investors (Box 3.7).
- A particular challenge for policy-makers is to select projects under current circumstances, where the costs of investment are abnormally low and possibly exaggerate the viability of some projects.
- Due to the nature of network infrastructure, benefits may be underestimated unless there is an accurate assessment of the impact of externalities on other economic areas included in the analysis (Sutherland et al., 2009).
- The effects of climate change, and the uncertainty surrounding the global policy response, raise further cost-benefit challenges to policy-makers who need to account for externalities and unknown long-term costs.

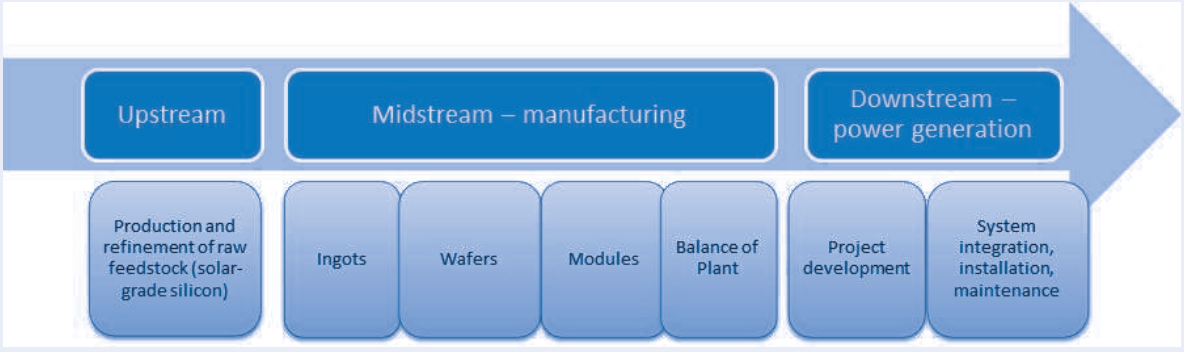
Implications for policy

Stronger investment is necessary to shift economies to a higher equilibrium growth path. Effectively implemented macroeconomic policy that stimulates aggregate demand will play an important role in reviving global investment. This needs to be accompanied by structural reforms that increase economic growth prospects in the long term and strengthen confidence and raise wealth and aggregate demand in the short term. The appropriate demand management and structural policy stances are discussed in Chapters 1 and 2. Given the finding that domestic investment responds to both domestic and global demand, effective international co-ordination of demand management policies should be promoted. Joint action produces stronger effects than piecemeal measures implemented by individual economies in isolation. Similarly, consistent structural policies that remove or reduce border protection are likely to be particularly effective in generating profitable investment opportunities. Account also needs to be taken of potentially

Box 3.6. **Overcoming barriers to international investment in clean energy**[1]

In the past decade, governments have provided substantial support to clean energy which has benefited both domestic and international investment. Globally, public support to clean energy amounted to USD 121 billion in 2013 (IEA, 2014b). At least 138 countries had implemented clean-energy support policies as of early 2014 (REN21, 2014). While incentive schemes had to coexist with investment disincentives such as Fossil Fuel Subsidies as well as other market and regulatory rigidities that favour fossil fuel incumbency in the electricity sector, they have contributed to enhancing clean energy investment worldwide. In addition, as international trade and investment have played a major role in decreasing their input prices, the solar photovoltaic (PV) and wind energy sectors have become increasingly competitive. The value chain and the task specialisation in the solar PV sector are described in the Figure below.

Overview of the solar PV energy value chain (Crystalline silicon technology)



Source: OECD (2015e), *Overcoming Barriers to International Investment in Clean Energy*, OECD Publishing, Paris.

New investment in clean energy increased six-fold between 2004 and 2011, reaching USD 279 billion in 2011, before declining in 2012-13. Solar and wind energy have received the largest share of new investment flows – USD 114 billion and USD 80 billion respectively in 2013.

Since the 2008 financial crisis, however, the perceived potential of the clean energy sector to act as a lever for growth and employment has led several OECD countries and emerging market economies (EMEs) to design green industrial policies aimed at protecting domestic manufacturers, notably through local-content requirements (LCRs). Local-content requirements typically require solar or wind developers to source a specific share of jobs, components or costs locally to be eligible for policy support or public tenders. A forthcoming OECD report on Overcoming Barriers to International Investment in Clean Energy shows that such requirements have been designed or implemented by at least 21 countries, including 16 OECD and EMEs, mostly since 2009,[2] and assesses their impacts across the solar PV and wind energy value chains (Table below).

In a context of global value chains, new empirical evidence shows that LCRs have hindered global international investment flows in solar PV and wind energy. This might be related to the fact that such policies increase the cost or downgrade the quality of intermediate inputs, leading to less competitive activities in downstream segments of the value chain, which are associated with more value creation (Figure below). The estimated detrimental effect of LCRs is slightly stronger when both domestic and international investments are considered. This indicates that LCRs do not have positive impacts on domestic investment flows.

Box 3.6. **Overcoming barriers to international investment in clean energy**[1] *(cont.)*

In addition, according to results from a new 2014 OECD Investor Survey on "Achieving a Level Playing Field for International Investment in Clean Energy",[3] LCRs stood out as the main policy impediment for international investors in solar PV and wind energy. Unsurprisingly, a majority of international investors involved in downstream activities of the solar and wind energy sectors selected LCRs as an impediment (Table below). More unexpectedly, a majority of international investors involved in upstream or midstream activities also identified LCRs as an impediment. This result suggests that LCRs can hinder international investment across the value chains.

Policy makers might thus want to reconsider whether or not discriminatory measures in favour of domestic manufacturers enhance job and value creation in the clean energy sector.

Summary of local-content requirements (LCR) in wind and solar energy across OECD countries and EMEs

Country	Level	Type of measure and sector(s)[1]	Year of implementation (status)
Brazil	National	Access to financing for wind	2009 (Ongoing)
	National	Access to financing for solar	Forthcoming - 2017
Canada	Subnational	Ontario: FiT eligibility for solar and wind	2009-2014
	Subnational	Quebec: Tender eligibility for wind	2003
China	National	Tender eligibility for wind	2003 (abandoned in 2009)
	National	Access to financing for wind	2008 (abandoned in 2011)
France	National	FiT bonus eligibility for solar	2013 (repealed in 2014)
Greece	National	FiT bonus eligibility for solar	2012 (ongoing)
India	National	Tender and FiT eligibility for solar	2010-22 (ongoing)
Indonesia	National	FiT bonus eligibility for solar	2013 (ongoing)
Italy	National	FiT bonus eligibility for solar	2012-13 (FiT expired in July 2013)
Russia	National	Tender eligibility for solar and wind	2013 (ongoing)
South Africa	National	Tender or FiT eligibility for wind and solar	2012 (ongoing)
Spain	Subnational	Galicia, Navarra, Castile and Leon, and Valencia: FiT or tender eligibility for wind	1999 for Navarra; 2004 for Galicia; Abandoned in 2012-13 via retroactive changes.
Turkey	National	FiT bonus eligibility for solar and wind	2010 (ongoing)
United States	Subnational	FiT bonus eligibility for solar and wind on state FiT or resale price of electricity in California, Ohio, Washington and New Jersey; tax rebate eligibility in Massachusetts	2012 for California and Massachusetts (ongoing); 2007 for Ohio (only in the 2007 solicitaition round); 2006 for Washington (abandoned in 2011); ongoing for New Jersey

1. FiT: feed-in tariff.

Source: OECD (2015e), *Overcoming Barriers to International Investment in Clean Energy*, OECD Publishing, Paris, forthcoming; updated as of September 2014.

Percentage of international investors from different segments of the solar and wind energy value chains who identified LCRs as an impediment

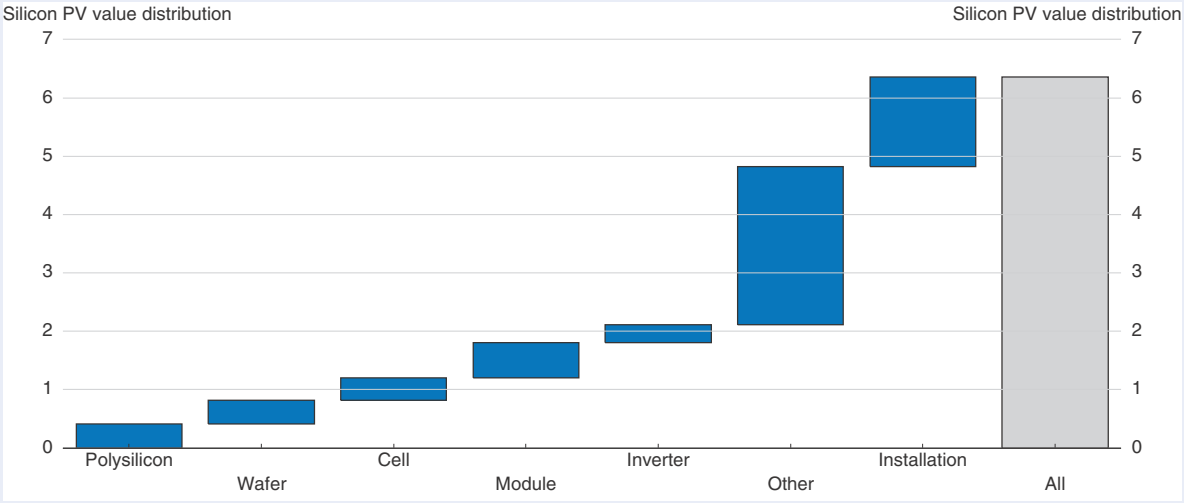
Solar PV energy		Wind energy	
Upstream or midstream	Downstream	Upstream or midstream	Downstream
75%	**73%**	**70%**	**72%**

Note: Based on a sample of 42 international investor respondents. The results include responses from 8 international investors who operate across upstream, midstream and downstream segments.

Source: OECD 2014 Investor Survey, in OECD (2015e).

Box 3.6. **Overcoming barriers to international investment in clean energy**[1] *(cont.)*

More than half of generated value lies downstream of module production



Source: Natural Resources Defence Council (NRDC) (2012), Laying the Foundation for a Bright Future: Assessing Progress Under Phase 1 of India's National Solar Mission, Interim Report, April 2012; quoting GTM Research, 2011; European Photovoltaic Industry Association (EPIA) and Greenpeace, 2006, 2011; Rutovitz and Atherton, 2009; The Solar Foundation, 2011; Based on unsubsidised value chain analysis of U.S. silicon PV market. Roughly similar value distribution for thin-film technologies.

StatLink http://dx.doi.org/10.1787/888933225464

1. Based on OECD (2015e).
2. As of September 2014.
3. The Survey was administered from April to June 2014 through an online questionnaire sent to leading global manufacturers, project developers, and financiers in the solar PV and wind energy sectors. Results are based on a sample of 62 respondents working for 59 companies involved across the upstream, midstream and downstream segments of solar-PV and wind-energy value chains.

important synergies between different types of investment that can have favourable feedback effects. For instance, strengthening the domestic research base and infrastructure could help to strengthen potential growth as well as attract internationally mobile investments (Barrell and Pain, 1999). In turn, these could boost domestic investment, both directly and indirectly through spillover effects.

Aggregate demand policies

Monetary policy in the main OECD areas is already providing an extraordinarily strong stimulus and policy is set to ease further with asset purchases in Japan and the euro area in 2015 and 2016. The associated reduction in financing costs, especially for large companies, should in principle support capital spending. Monetary policy easing beyond what is now planned needs to be assessed against potential negative side effects on future financial stability and the potential to prompt investment projects with low rates of return. Macro-prudential oversight and proper cost-benefit analysis would leave monetary policy less encumbered. And, measures to improve the transmission of monetary policy are needed, notably in the euro area, so that companies, particularly SMEs, can benefit from easy credit conditions. This will require measures to strengthen the financial solidity of banks, including steps to improve the quality and quantity of their capital.

Fiscal policy options exist to support growth and equity friendly fiscal stance.

- A budget neutral reallocation of public spending towards investment would provide a boost to demand, given that investment multipliers are usually bigger than those of other spending components (Ilzetzki et al., 2011; Auerbach and Gorodnichenko, 2012). For example, with the differential multipliers discussed above, a 1% of GDP reallocation of spending in low-multiplier categories to investment could raise GDP by up to 1%.
- There are good arguments for increasing public capital spending, even if it increases government borrowing. Infrastructure is perceived to be deficient and most governments can borrow at very low interest rates for long maturities. Public capital spending would strengthen demand in the short term, but the extent of the demand effects in the short term and the beneficial long-term effects would depend on the type and quality of government capital spending. Particularly powerful and beneficial government investment would include:
  - *Government investment that would pave the way for private investment.* Such synergistic capital spending would have social rates of return in excess of private ones. It could include, for example, additional public R&D spending in basic research that might later spur commercial R&D investment and ultimately new tangible investment, or public infrastructure spending that helps support private spending to take advantage of location. It could also involve investing in knowledge infrastructure, such as high-speed broadband networks, with potentially beneficial effects for productivity.
  - *Government investment with favourable side effects in other areas of government policies, notably climate change and the environment*. Apart from basic R&D investment in greenhouse-gas-reduction technologies, such public investment could ensure that a lack of networks (e.g. a network of recharging points for electric vehicles or a network of disposal points for special waste) does not hold back related private investment projects. Alternatively, government can provide investment subsidies or impose regulations. Such interventions are likely to be cost effective if monitoring costs are high or if pollution emitters are widely dispersed.
  - *Public-private partnerships (PPP) that leverage public investment and improve efficiency.* While there is probably some scope to expand PPP arrangements that increase investment and operational efficiency at an acceptable cost and risk to future public budgets, PPPs primarily motivated by accounting considerations should be avoided (Araújo and Sutherland, 2010). Careful consideration will need to be given as to how risk is assessed and appropriately allocated between the public and private sectors. In Europe, where investment has been weak in a number of countries, the implementation of the Juncker Plan – with its PPPs and its aim of providing an enabling regulatory environment for investment – is a step in the right direction (Box 3.7).

Indirect fiscal mechanisms also offer potential to stimulate private investment, for example, by introducing temporary tax credits or accelerated depreciation of capital equipment for tax purposes. These have been used in many countries since the onset of the crisis (see above). Examples include the temporary 100% expensing for business investment in the United States enacted in 2010 and temporary corporate tax relief in Japan in 2014 and in the United Kingdom and France in 2015. Temporary tax breaks, such as a temporary acceleration in depreciation deductions can, in principle, have powerful effects by advancing capital spending (House and Shapiro, 2008; Eichfelder and Schneider, 2014), but may also be associated with deadweight costs. The effectiveness of such

Box 3.7. **The Juncker Plan – Investment Plan for Europe**

The Investment Plan for Europe, introduced by the European Commission led by Jean-Claude Juncker, is a package of measures aimed at unlocking public and private investment in the European Union economy over 2015-17. This box describes the plan and its potential effects on investment.

The three-pillar plan

- *Finance for investment via a new European Fund for Strategic Investment (EFSI)*. The EFSI is due to be set up by the Commission and the European Investment Bank (EIB) by September 2015. Its capital will consist of a EUR 5 billion contribution from the EIB and a EUR 16 billion guarantee from the EU budget. Half of this EUR 16 billion will be paid in, in a back-loaded manner, over 2016-20 by reallocating existing budget funds. The EFSI will also be open to contributions from third parties. Contributions from EU member states to EFSI capital will be treated favourably under the European fiscal rules (see below). The fund's capital of EUR 21 billion will be used to raise around three times as much funding by issuing bonds, and the funds thus raised will be used as "first loss protection" to attract other private or public sources to finance projects of about four times the risk-bearing capacity. Hence, every EUR 1 of EFSI capital is expected to result in about EUR 15 of real investment, with estimated total investment volume of EUR 315 billion (2.2% of 2014 EU GDP).
- *Providing a pipeline of projects at the EU level and technical assistance*.
  - A pipeline of projects will be established, to provide readily available and regularly updated information on viable projects. A Commission/EIB task force has identified around 2 000 potential projects with an investment volume of EUR 1.3 trillion, including projects worth EUR 500 billion that could be carried out over 2015-17. Key areas to be supported are: knowledge, innovation and the digital economy; energy union; transport infrastructure; social infrastructure; natural resources and the environment. About a quarter of the funds are dedicated for SMEs and mid-cap companies. Key project selection criteria are: EU value added (though not necessarily cross-border projects); economic viability with priority given to projects with high socio-economic returns; and projects that can start within the next three years.
  - A European Investment Advisory Hub for technical assistance will be established for project promoters, investors and public managing authorities. Use of innovative financial instruments, such as loans, equity and guarantees, as opposed to traditional grants, or high-quality securitisation will be encouraged, e.g. under the existing European Structural and Investment Funds.
- *The creation of an investment-friendly environment by the removal of regulatory and financial barriers to investment*. The Commission has committed itself to a more investment-friendly environment by providing greater regulatory predictability, removing barriers to investment across Europe and further reinforcing the Single Market. Key issues that need to be addressed are: the creation of a Capital Markets Union to reduce fragmentation in the EU's financial markets and to complement still dominant bank financing, to reduce funding costs and increase access to financing for SMEs and mid-caps; establishment and/or full implementation of the European Energy Union and Digital Single Market; and further integration of telecommunications and transport markets. Increased unification and reduction of barriers in other services and product markets are also important.

The impact on investment

The plan focuses on infrastructure, network industries and innovation, which have strong positive externalities and hence potential to spawn private sector investment. The EFSI will be managed independently and project selection will be based on pre-defined criteria without any regional, national or sectorial bias, which should help ensure high socio-economic returns. This and the application of state aid rules should also prevent crowding-out of private investment by ensuring that only high-risk projects, that could not otherwise be carried out, will be supported. However, it remains to be seen whether the supported projects are able to generate a high enough financial rate of return to attract enough private co-funding, if social value added is one of the main selection criteria as this is usually associated with lower financial returns and/or returns generated over much longer periods.

Box 3.7. **The Juncker Plan – Investment Plan for Europe** *(cont.)*

The plan could help catalyse private investment using public support by a targeted relaxation of some of the fiscal constraints. EU member states' contributions to the EFSI capital will be treated favourably in the application of the Stability and Growth Pact (SGP). They will not affect structural positions, since they would effectively constitute one-off measures. In assessing deviations from debt and deficit targets, the contributions will be treated as a relevant mitigating factor (similarly to European Stability Mechanism contributions), if the excess over the target can be deemed small and temporary. So far, however, no country has expressed interest in contributing directly to EFSI capital. Five countries to date have committed to contributing through their national promotional banks via co-financing of platforms or projects that would receive funding from the EFSI, with France, Germany and Italy committing EUR 8 billion each, Spain EUR 1.5 billion and Luxembourg EUR 80 million.[1] The national promotional banks are usually classified outside the public sector, so their operations do not affect public finances. If, however, such project co-financing contributions were made directly by a member state, the favourable application of the SGP would only be possible if the country is eligible for the so-called "investment clause" application.[2]

1. Representing, respectively, about 0.4%, 0.3%, 0.5%, 0.15% and 0.2% of national nominal 2014 GDP. The actual annual GDP shares would be lower depending on how the contributions are spread over time.
2. This applies when the country's GDP growth is negative or its negative output gap is greater than 1.5% of GDP, the headline deficit does not exceed the 3% of GDP reference value and a safety margin to this reference is preserved, and the total public investment cannot decrease (i.e. EFSI co-financed expenditure is not a substitute for nationally financed investments).

measures when underlying investment is very weak remains an open question, although they may play a particularly effective role to loosen financial constraints for SMEs

Reducing uncertainty

The authorities have a particular responsibility to reduce policy-related uncertainty that is found to weigh on the investment decisions of corporations and investors. This requires action in several domestic areas:

- On the fiscal front, some countries need to focus on legislating credible strategies to deal with fiscal positions that are unsustainable at (and in some cases, nearly unachievable) current growth rates. This implies attention to both sides of the fiscal ledger, announcement of a credible path, and believable approaches to accounting for growth and the consequences of structural policies for inclusiveness as well as growth.
  - Because of historical deviations from stated budget paths, some euro area countries will find the reward for a credible path less than what others, with less of a history, receive in the market. Dealing with the political ramifications of this differentiation may add to uncertainty.
  - In Japan, fiscal sustainability must be ensured to reduce an important source of uncertainty. In this respect, a credible fiscal consolidation plan as well as faster output growth through bold structural reforms, including those in Japan's growth strategy, are required.
  - Uncertainty related to how the fiscal costs of ageing and higher health-related spending will be funded would be reduced with early reforms that set out and legislate on how benefit and service entitlements, taxes and contributions will evolve in the future.
  - In some countries there is a need to ensure that budget brinkmanship does not generate uncertainty. Repeated episodes of tensions linked to the raising of the debt

ceiling and other budget milestones in the United States have dented confidence, and complex budget rules and the ad hoc granting of exceptions in the euro area have reduced the credibility of fiscal frameworks.

- On the monetary policy front, greater clarity about the eventual strategy to normalise policy would help to reduce uncertainty. The US Federal Reserve, where the start of normalisation is not far off, has issued general guidance on how it intends to raise interest rates and adjust the size of its balance sheet. Other monetary authorities will need to follow suit, but can potentially benefit from the experience of US normalisation.

Moreover, actions on the international front are also needed:

- A prompt global agreement on how and where to tax profits of multinational corporations would lift a potential source of uncertainty for such entities.
- The international community also needs to complete the regulatory overhaul of the financial sector. In particular, further clarity on the resolution of cross-border financial institutions and regulations about long-term lending would help reduce uncertainty that may weigh on the lending and investment decisions of banks.
- A quick conclusion of multilateral trade agreements, in particular of the Trans-Pacific Partnership and the Transatlantic Trade and Investment Partnership, could reduce regulatory uncertainty in countries involved.
- The international community has yet to agree on how to limit future climate change and the eventual decisions will determine whether important investment projects are commercially sound or not. Continued procrastination in this area will compromise the ultimate goal and make investors more hesitant in committing long-term funds to lumpy investments where there is a strong risk of path dependency.

Structural policies to foster investment in both capital and labour for the long term

Financial policies

An appropriate framework needs to be established to ensure that financial institutions provide adequate finance to sound long-term investment projects. In principle, the incentives for the provision of such finance are strong for longer-term projects with clearly defined rates of return and allocation of risks.

- Since the crisis, global financial reforms under the aegis of the G20 and domestic reforms have aimed to increase the resilience of the financial system to shocks and to avoid a repeat of financial excesses. In the process, the cost to institutional investors of providing long-term funds for infrastructure and other long-term investment has been raised by requiring pension funds and insurance companies to have stronger capital backing for such illiquid assets. It is important to ensure that these changes do not discourage such institutions from providing long-term funds (OECD, 2014a).
- More broadly, as stressed in OECD reports to the G20, framework conditions need to be improved to encourage institutional investors to provide long-term funds. In the energy sector, when social externalities are priced inadequately and where political and project risks can be large, this could involve, for example, reducing risks associated with green bonds (i.e. bonds issued specifically to finance climate change mitigation investment) through credit enhancements that would qualify such bonds as investment grade and hence suitable vehicles for institutional investors. A comprehensive assessment of the

policies needed to promote increased participation of institutional investors in funding long-term investment is provided in OECD (2014a; 2015d).

Regulatory frameworks in private product and infrastructure markets at home and abroad

The easing of entry and operational controls in markets where competition is feasible and the establishment of a well-functioning regulatory regime for infrastructure provision would support long-term investment.

- Easing restrictions and constraints in product markets is also an important area where governments can stimulate investment. Lowering entry barriers and reducing regulatory burdens would lower firms' costs of adjusting their existing capital stock (Alesina et al., 2005). Progress in this area has stalled across the OECD. As mentioned above, updated product market regulation indicators suggest that only modest reforms have been undertaken to reduce restraining regulations over the past five years (Koske et al., 2015). Addressing this area is of importance not only to investment performance but overall growth.
- Governments also play an important role in improving the regulatory environment and funding arrangements to ensure appropriate infrastructure provision. Long-term planning is particularly important in the area of infrastructure investment, where the construction period and service lives are relatively long, and where private investment may be needed to fill financing gaps through public-private partnerships (see above). In this context, exploiting to a greater degree user charges could help to ensure that infrastructure is used efficiently and identify where there are clear shortfalls (de Mello and Sutherland, 2014). Greater information sharing on the long-term financial performance of past investments in infrastructure assets and their associated risks would also benefit potential institutional investors in infrastructure.
- Government planning and a clear regulatory framework are particularly important in EMEs, where higher perceived instability and uncertainty might deter private investors from providing much needed financing. To limit uncertainty, EMEs need to ensure that proper dispute resolution, contract renegotiation policies, and land acquisition policies are in place with regards to potential infrastructure projects (OECD, 2015f). Reforming the management practices and efficiencies of large state-owned enterprises that co-ordinate and undertake a lot of infrastructure-related investment in some EMEs is also important to enable access to funding from international investors.
- Foreign direct investment flows should not be subject to barriers as an open FDI regime promotes the best allocation of global investment. Capital spending may increase in both source and destination countries when vertical FDI is involved, leading to the build-up of global value chains. Nonetheless, as measured by the OECD FDI regulatory restrictiveness index, several OECD and non-OECD economies impose overt constraints on inward FDI, as reflected in the list of reservations lodged by adhering countries under the OECD Code of Liberalisation of Capital Movements. A renewed drive to ease or eliminate such overt barriers would spur capital spending. Where the main objectives of such restraints are not to keep out foreign capital, better targeted instruments should be used for such aims.

Removing obstacles to intangibles and other knowledge-based investments

Investment in intangible assets and other forms of KBC benefit from policies that enable a fertile environment for the introduction and diffusion of frontier ideas and technologies. Many of the policy priorities identified in the OECD Innovation Strategy 2015 (OECD, 2015g) would help boost investment in KBC and capital spending more generally. Apart from measures mentioned above to establish well-functioning product and capital markets, specific policies to foster KBC investment should be implemented (Andrews and Criscuolo, 2013).

- R&D tax incentive schemes should be refundable, contain carry-over provisions or allow for payroll withholding tax credits on R&D wages so as to avoid overly favouring incumbents at the expense of young firms.
- Intellectual property rights (IPR) systems should be updated so that they are more in tune with the fast-changing nature of innovation today. For example, while well-defined patent rights can provide firms with the incentive to innovate, especially in the chemicals and pharmaceutical sectors, rising litigation costs are undermining the effectiveness of the patent system in promoting innovation in the software sector. More generally, IPR regimes need to be coupled with pro-competition policies to ensure maximum effect.
- The free flow of data should be promoted, to facilitate computer-mediated transactions and management and the associated build-up of private KBC. In particular, regulations that hinder the development of digital platforms should be adjusted, while ensuring that quality, safety and working standards are respected.
- Bankruptcy regimes that do not excessively penalise business failure are associated with more rapid technological diffusion, a higher entry rate of new firms (which are an important source for the creation of new technologies) and more efficient resource allocation to underpin the growth of innovative firms.

Ensuring the availability of human capital for long-term investment and growth

Recent work by the OECD suggests that high and rising income inequality in many OECD countries can have not only damaging social consequences but also hinder long-term economic growth, largely by hurting the human capital investment of the bottom 40% of the population (OECD, 2015h). Fostering opportunities for the bottom 40% can help move the economy and society out of a low-growth equilibrium trap in the medium and longer term. Improving the adaptability of the labour market in the near term can help underpin the investment in human capital for the longer term. Measures to shore up the incomes of low-wage workers vary by country depending on current circumstances and existing policies, but could include changes in statutory minimum wages, in-work benefits and tax policies directed toward low-income households (OECD, 2015i).

Bibliography

Alesina, A., et al. (2005), "Regulation and Investment", *Journal of the European Economic Association*, Vol. 3, pp. 1-35.

American Society of Civil Engineers (2013), "2013 Report Card for America's Infrastructure", *www.infrastructurereportcard.org/wp-content/uploads/2013ReportCardforAmericasInfrastructure.pdf*.

Anderson, J.E., E van Wincoop (2003), "Gravity with Gravitas: A Solution to the Border Puzzle", *American Economic Review*, Vol. 93(1), pp. 170-192.

Andrews, D., A. Caldera Sánchez and Å. Johansson (2011), "Housing Markets and Structural Policies in OECD Countries", *OECD Economics Department Working Papers*, No. 836, OECD Publishing, Paris.

Andrews, D. and C. Criscuolo (2013), "Knowledge Based Capital, Innovation and Resource Allocation", *OECD Economics Department Working Papers*, No. 1046, OECD Publishing, Paris.

Araújo, S. and D. Sutherland (2010), "Public-Private Partnerships and Investment in Infrastructure", *OECD Economics Department Working Papers,* No. 803, OECD Publishing, Paris.

Arbatli, E. (2011), "Economic Policies and FDI Inflows to Emerging Market Economies", *IMF Working Papers*, No. WP/11/192.

Ashley, R and A. Cashman (2006), "The Impacts of Change on the Long-term Future Demand for Water Sector Infrastructure", in *Infrastructure to 2030: Telecom, Land Transport, Water and Electricity*, OECD Publishing, Paris.

Auerbach, A.J., and Y. Gorodnichenko (2012), "Fiscal Multipliers in Recession and Expansion," in A. Alesina and F. Giavazzi, (eds), "Fiscal Policy after the Financial Crisis," University of Chicago Press.

Azouley, P., J. Graff Zevin, D. Li and B. Sampat (2015), "Public R&D and Private Sector Patenting: Evidence from NIH Funding Rules", *NBER Working Papers*, No. 20889.

Baker, S., N. Bloom and S. Davis (2013), "Measuring Economic Policy Uncertainty", *Chicago Booth Research Papers*, No. 13-02.

Barbiero, O. and B. Cournède (2013), "New Econometric Estimates of Long-Term Growth Effects of Different Areas of Public Spending", *OECD Economics Department Working Papers*, No. 1100, OECD Publishing, Paris.

Barrell, R. and N. Pain (1999), "Domestic Institutions, Agglomerations and Foreign Direct Investment in Europe", *European Economic Review*, Vol. 43.

Bates, T.W., K.M. Kahle, and R.M. Stulz (2009), "Why Do U.S. Firms Hold so Much More Cash than They Used To?", *Journal of Finance*, Vol. 64.

Belderbos, R., K. Fukao, K. Ito and W. Letterie (2013), "Global Fixed Capital Investment by Multinational Firms", *Economica*, Vol. 80.

Bernanke, B. (1983), "Irreversibility, Uncertainty and Cyclical Investment", *Quarterly Journal of Economics*, Vol. 98.

Bialek, S. and A. Weichenrieder (2015), "Do Stringent Environmental Policies Deter FDI? M&A versus Greenfield", *CESIFO Working Papers*, No. 5262.

Bloom, N. (2009), "The Impact of Uncertainty Shocks", *Econometrica*, Vol. 77.

Bloom, N., S. Bond and J. van Reenen (2007), "Uncertainty and Investment Dynamics", *Review of Economic Studies*, Vol. 74, No. 3, pp. 391-415.

Blundell-Wignall, A. and C. Roulet (2015), "Infrastructure versus other investments in the global economy and stagnation hypotheses: What do company data tell us?", *OECD Journal: Financial Market Trends,* Vol. 2014(2), pp. 7-45.

Bom, P. and J. Ligthart (2014), "What Have We Learned from Three Decades of Research on the Productivity of Public Capital", *Journal of Economic Surveys*, Vol. 28.

Bond. S., J.A. Elston, J. Mairesse and B. Mulkay (2003), "Financial Factors and Investment in Belgium, France, Germany and the United Kingdom: A Comparison Using Company Panel Data", *Review of Economics and Statistics*, Vol. 85.

Braconier, H., M. Pisu and D. Bloch (2013), "The Performance of Road Transport Infrastructure and its Links to Policies", *OECD Economics Department Working Papers*, No. 1016, OECD Publishing, Paris.

Braunerhjelm, P., L. Oxelheim and P. Thulin (2005), "The Relationship between Domestic and Outward Foreign Direct Investment: The Role of Industry-Specific Factors", *International Business Review*, Vol. 14.

Byrne, D., D. Oliner and D. Sichel (2015), "How Fast are Semiconductor Prices Falling?", *NBER Working Papers*, No. 21074.

Chirinko, R. (1993), "Business Fixed Investment Spending: Modelling Strategies, Empirical Results, and Policy Implications", *Journal of Economic Literature*, Vol. XXXI, pp. 1875-1911.

Coady, D., I. Parry, L. Sears and B. Shang (2015), "How Large are Global Energy Subsidies", *IMF Working Papers*, No. 15/105, Washington.

Coiteux, M., P. Rizzetto, L. Suchanek and J. Voll (2014), "Why Do Canadian Firms Invest and Operate Abroad? Implications for Canadian Exports", *Bank of Canada Discussion Paper*, No. 2014-7.

Corrado, C., J. Haskel, C. Jona-Lasinio and M. Iommi (2012), "Intangible Capital and Growth in Advanced Economies: Measurement Methods and Comparative Results", INTAN-Invest *Mimeo.*

Cournède, B., A. Goujard, A. Pina and A. de Serres (2013), "Choosing Fiscal Consolidation Instruments Compatible with Growth and Equity", *OECD Economic Policy Papers*, No. 7, OECD Publishing, Paris.

CPB (2015), "Investment in the OECD: Pre- and Post-crisis Developments", *CPB Communication*, May 19, CPB Netherlands Bureau for Economic Policy Analysis.

Davis, E. P. (2010), "Asset Prices and Real Economic Activity", *OECD Economics Department Working Papers*, No. 764, OECD Publishing, Paris.

Desai, M., C. Foley and J. Hines (2005), "Foreign Direct Investment and the Domestic Capital stock", *American Economic Review*, Vol. 95.

Desai, M., C.F. Foley and J. R. Hines (2009), "Domestic Effects of the Foreign Activities of U.S. Multinationals", *American Economic Journal: Economic Policy*, Vol. 1.

Dixit, A. and R.S. Pindyck (1994), *Investment Under Uncertainty,* Princeton University Press.

Dobbs et al., (2013), *Infrastructure productivity: How to save $1 trillion a year*, McKinsey Global Institute.

ECB (2013), "The Perceived External Financing Gap Indicator for Small and Medium-sized Enterprises in the Euro Area", Box 2, *ECB Monthly Bulletin,* August, pp. 19-24.

ECB (2015), *The Euro Area Bank Lending Survey. First quarter of 2015*, April 2015.

Eichfelder, S. and K. Schneider (2014), "Tax Incentives and Business Investment: Evidence from German Bonus Depreciation", *CESIFO Working Papers*, No. 4805.

European Commission (2012), "The 2012 Ageing Report: Economic and budgetary projections for the 27 EU Member States (2010-60), *European Economy,* 2012 (2).

European Commission (2013), "Box 1.2: The Impact of Uncertainty on Productive Investment", *Quarterly report on the euro area*, No 12/2.

European Commission (2014), "Box 1.1: The Economic Effects of Policy Uncertainty", *European Economic Forecast – Winter 2014*.

FactSet (2015), *FactSet Buyback Quarterly*, March 16.

Feldstein, M. (1995), "The Effects of Outbound Foreign Direct Investment on the Domestic Capital Stock." in *The Effects of Taxation on Multinational Corporations*, M. Feldstein, J. Hines and R.G. Hubbard (eds.), University of Chicago Press.

Fernald, J. G. (1999), "Roads to Prosperity? Assessing the Link between Public Capital and Productivity", *American Economic Review*, Vol. 89.

Ferrara, L. and P. Guérin (2015), "What Are The Macroeconomic Effects of High-Frequency Uncertainty Shocks?", *Economix Working Papers*, No. 2015-12.

Fournier, J.. (2015a), "The Heterogeneity of Product Market Regulations", *OECD Economics Department Working Papers*, No. 1182, OECD Publishing, Paris.

Fournier, J. (2015b), "The negative effect of regulatory divergence on foreign direct investment", *OECD Economics Department Working Papers*, OECD Publishing, Pairs (forthcoming).

Fournier, J. et al. (2015), "Implicit Regulatory Barriers in the EU Single Market: New Empirical Evidence from Gravity Models", *OECD Economics Department Working Papers*, No. 1181, OECD Publishing.

Gala, V.D. and B. Julio (2012), "Convergence in Corporate Investment", *mimeo*, London Business School.

Globerman, S. (2012), *Canadian Outward FDI and Its Implications for the Canadian Economy*, report for The Conference Board of Canada, May 2012.

Guellec, D. and B. van Pottelsberghe de la Potterie (2004), "From R&D to Productivity Growth: Do the Institutional Settings and the Source of Funds of R&D Matter?", *Oxford Bulletin of Economics and Statistics*, Vol. 66.

Haddow, A., C. Hare, J. Hooley and T. Shakir (2013), "Macroeconomic Uncertainty: What Is It, How Can We Measure It and Why Does It Matter?", *Bank of England Quarterly Bulletin,* Q2 2013.

Head, K. and J. Ries (2008), "FDI as an Outcome of the Market for Corporate Control: Theory and Evidence", *Journal of International Economics*, Vol. 74 (1), pp. 2-20.

Herzer, D. (2008), "The Causal Relationship Between Domestic and Outward Investment: Evidence For Italy", *Applied Financial Economics Letters*, Vol. 4.

Herzer, D. and M. Schrooten (2008), "Outward FDI and Domestic Investment in Two Industrialised Countries", *Economics Letters*, Vol. 99.

House, C. and M. Shapiro (2008), "Temporary Investment Tax Incentives: Theory With Evidence", *American Economic Review*, Vol. 98.

IEA (2014a), *World Energy Investment Outlook – Special Report*, IEA, Paris, *https://www.iea.org/publications/freepublications/publication/WEIO2014.pdf*

IEA (2014b), *World Energy Outlook 2014*, OECD/IEA Publishing, Paris.

IMF (2015), "Private Investment: What's the Holdup?", Chapter 4 in *World Economic Outlook*, April, International Monetary Fund, pp. 111-143.

Ilzetzki, E., E.G. Mendoza and C. A. Végh (2011), "How Big (Small?) Are Fiscal Multipliers?" *IMF Working Papers*, No. 11/52, Washington.

Johannson et al. (2015), "Economic Implications of Multinational Tax Planning", *OECD Economics Department Working Papers*, OECD Publishing, Paris (forthcoming).

Johnstone, N. and I. Hascic (2012), "Increasing the penetration of intermittent renewable energy: Innovation in energy storage and grid management", in OECD, *Energy and Climate Policy: Bending the Technological Trajectory,* OECD Publishing.

Koske, I., et al. (2015), "The 2013 update of the OECD's database on product market regulation: Policy insights for OECD and non-OECD countries", *OECD Economics Department Working Papers*, No. 1200, OECD Publishing, Paris.

Lewis, C. et al. (2014), "Investment Gaps after the Crisis", *OECD Economics Department Working Papers*, No. 1168, OECD Publishing, Paris.

Lindh, T. and B. Malmberg (2008), "Demography and Housing Demand – What Can We Learn from Residential Construction Data?", *Journal of Population Economics*, Vol. 21(3), July, pp. 521-539.

de Mello, L. and D. Sutherland (2014), "Financing Infrastructure", *International Centre for Public Policy Working Papers*, No. 14-09.

Merola, R. and D. Sutherland (2012), "Fiscal Consolidation: Part 3. Long-Run Projections and Fiscal Gap Calculations", *OECD Economics Department Working Papers*, No. 934, OECD Publishing, Paris.

Monarch, R., J. Park and J. Sivadasan (2014), "Gains From Offshoring? Evidence from US Microdata", *Federal Reserve International Finance Discussion Papers*, No. 1124.

Nicoletti, G., S. Golub, D. Hajkova, D. Mirza and K.-Y. Yoo (2003), "The Influence of Policies on Trade and FDI", *OECD Economic Studies*, No. 36.

Nicoletti, G. and S. Scarpetta (2005), "Regulation and Economic Performance: Product Market Reforms and Productivity in the OECD", *OECD Economics Department Working Papers*, No. 460, OECD Publishing.

OECD (2007), "Water Infrastructure and Water-related Services: Trends and Challenges Affecting Future Development", in *Infrastructure to 2030 – Vol. 2*, OECD Publishing, Paris.

OECD (2008), *OECD Benchmark Definition of Foreign Direct Investment, Fourth Edition*. OECD Publishing, Paris.

OECD (2010), *Tax Policy Reform and Economic Growth,* OECD Publishing, Paris.

OECD (2011a), "Risk Awareness, Uncertainty and Confidence", Box 2 in *OECD Economic Outlook,* November 2011, OECD Publishing, Paris.

OECD (2011b), *OECD Pensions at a Glance*, OECD Publishing, Paris.

OECD (2012), *Strategic Transport Infrastructure Needs to 2030,* OECD Publishing, Paris.

OECD (2013), *OECD Employment Outlook 2013*, OECD Publishing, Paris.

OECD (2014a), *Private Financing and Government Support to Promote Long-Term Investment in Infrastructure*, OECD Publishing, Paris.

OECD (2014b), *Measuring the Digital Economy: A New Perspective*, OECD Publishing, Paris.

OECD (2014c), *OECD Employment Outlook 2014*, OECD Publishing, Paris.

OECD (2015a), "The Future of Productivity", *OECD Economics Department Working Papers*, OECD Publishing, Paris (forthcoming).

OECD (2015b), *Mapping Channels to Mobilise Institutional Investment in Sustainable Energy*, OECD Publishing, Paris.

OECD (2015c), "Excess Capacity in the Global Steel Industry and the Implications of New Investment Projects", *OECD Science, Technology and Industry Policy Papers*, No. 18, OECD Publishing, Paris.

OECD (2015d), *OECD Business and Finance Outlook*, OECD Publishing, Paris (forthcoming).

OECD (2015e), "Overcoming Barriers to International Investment in Clean Energy", OECD Publishing, Paris (forthcoming).

OECD (2015f), "Fostering Investment in Infrastructure: Lessons Learned from OECD Investment Policy Reviews", OECD Publishing, Paris. *www.oecd.org/daf/inv/investment-policy/Fostering-Investment-in-Infrastructure.pdf*.

OECD (2015g), *Innovation Strategy*, OECD Publishing, Paris.

OECD (2015h), *In It Together: Why Less Inequality Benefits All*, OECD Publishing, Paris.

OECD (2015i), *OECD Employment Outlook 2015*, OECD Publishing, Paris (forthcoming).

OECD/ITF (2015), *ITF Transport Outlook 2015*, OECD Publishing, Paris/ITF, Paris.

Ojala, L. and D. Çelebi (2015), "The World Bank's Logistics Performance Index (LPI) and Drivers of Logistics Performance", prepared for the International Transport Forum Roundtable on Logistics Development Strategies and their Performance Measurements (9-10 March 2015, Queretaro).

Oliveira Martins, J. and C. de la Maisonneuve (2014), "The Future of Health and Long-Term Care Spending", *OECD Economic Studies*, OECD Publishing, Paris.

REN21 (2014), *Renewables 2014: Global Status Report*, Renewable Energy Policy Network for the 21st Century.

Sánchez, J.M. and E. Yurdagul (2013), "Why are Corporations Holding So Much Cash?", *The Regional Economist*, January, Federal Reserve Bank of St. Louis.

Santos Silva, J.M.C., and S. Tenreyro (2006), "The Log of Gravity", *The Review of Economics and Statistics,* Vol. 88(4), pp. 641-658.

Singer, P. (2014), "Federally Supported Innovation: 22 Examples of Major Technology Advances that Stemmed from Federal Research Support", The Information Technology and Innovation Foundation, February.

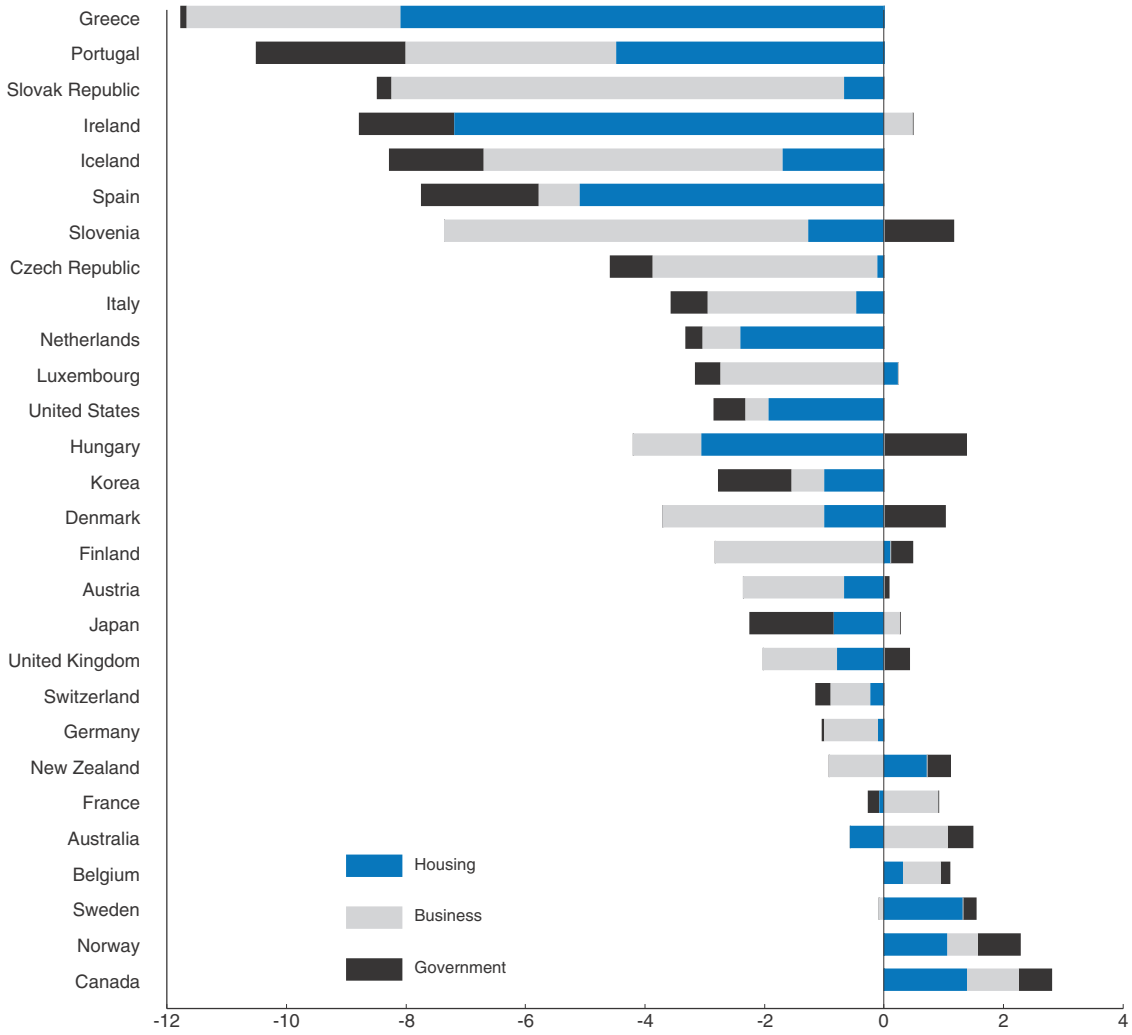
Sutherland, D., S. Araújo, B. Égert and T. Kozluk (2009), "Infrastructure Investment: Links to Growth and the Role of Public Policies", *OECD Economics Department Working Paper*, No. 686, OECD Publishing, Paris.

Whelan, K. (2000), "A Guide to the Use of Chain Aggregated NIPA Data", *Board of Governors of the Federal Reserve, Finance and Economics Discussion Series,* FEDS 2000-35, Washington, DC.

Young, G. (1999), "The Influence of Foreign Factor Prices and International Taxation on Fixed Investment in the UK", *Oxford Economic Papers*, Vol. 51.

Figure 3.A1. **The composition of investment shortfalls differs across countries**

Per cent of GDP, 2014 minus 1996-2007 average



Note: In countries where either government or housing investment data for 2014 are not yet available, OECD Economic Outlook 97 projections are used (Hungary, Ireland, Korea, Luxembourg, Poland, Switzerland). In countries where no business investment data exist, it is calculated as a residual.

Source: OECD Economic Outlook 97 database; European Commission; and OECD calculations.

StatLink http://dx.doi.org/10.1787/888933225475

Table 3.A1. **Global capital spending shortfalls of OECD listed companies**

As a per cent of global sales, 2013 minus 2002-2007 average

	All sectors			Infrastructure			General Industry		
	Average	Latest	Gap	Average	Latest	Gap	Average	Latest	Gap
	2002-07	2013		2002-07	2013		2002-07	2013	
Australia	10.20	10.45	0.24	14.78	14.00	-0.79	9.43	9.82	0.40
Austria	10.18	9.00	-1.18	-	-	-	10.18	9.00	-1.18
Belgium	7.73	5.86	-1.87	16.03	10.26	-5.77	6.51	5.27	-1.24
Canada	11.75	14.61	2.85	25.69	27.29	1.60	8.74	11.51	2.77
Chile	10.59	9.81	-0.78	13.32	12.59	-0.72	9.87	9.42	-0.45
Czech Republic	8.80	9.32	0.51	-	-	-	8.80	9.32	0.51
Denmark	10.62	7.67	-2.95	13.85	8.98	-4.86	5.43	5.51	0.08
Finland	4.82	4.31	-0.51	-	-	-	4.82	4.31	-0.51
France	6.70	7.14	0.44	9.05	10.63	1.59	6.28	6.69	0.41
Germany	5.33	5.17	-0.17	7.87	6.98	-0.88	5.03	4.99	-0.05
Greece	9.59	6.66	-2.93	12.56	7.56	-5.00	8.14	5.89	-2.25
Ireland	4.51	2.77	-1.74	-	-	-	4.51	2.77	-1.74
Israel	10.37	6.34	-4.03	6.99	4.03	-2.96	11.94	7.10	-4.84
Italy	8.82	7.85	-0.97	12.58	11.41	-1.17	7.86	7.24	-0.62
Japan	5.64	5.41	-0.23	8.69	9.36	0.67	5.25	4.82	-0.43
Korea	7.79	5.72	-2.08	6.41	5.85	-0.57	8.04	5.70	-2.34
Luxembourg	5.48	5.96	0.48	-	-	-	5.48	5.96	0.48
Mexico	10.62	10.09	-0.52	12.91	7.84	-5.06	9.94	10.34	0.40
Netherlands	4.51	7.55	3.04	8.64	9.94	1.31	4.18	7.48	3.30
New Zealand	7.66	8.57	0.91	15.28	21.18	5.89	5.38	5.27	-0.11
Norway	10.79	12.00	1.21	21.94	16.78	-5.16	9.05	11.20	2.15
Poland	9.85	7.78	-2.07	9.90	6.31	-3.60	9.45	9.33	-0.12
Portugal	10.40	7.34	-3.07	19.65	12.47	-7.18	8.42	6.84	-1.58
Slovenia	8.40	4.40	-4.01	-	-	-	8.40	4.40	-4.01
Spain	11.29	7.63	-3.66	12.99	15.71	2.72	10.85	5.15	-5.70
Sweden	5.41	5.13	-0.28	9.75	17.06	7.31	5.08	4.42	-0.66
Switzerland	4.82	5.59	0.77	6.86	8.51	1.65	4.67	5.31	0.64
Turkey	5.68	7.23	1.55	4.48	8.69	4.21	6.04	6.81	0.77
United Kingdom	7.27	8.05	0.78	14.15	17.25	3.10	6.35	6.75	0.40
United States	6.37	6.97	0.60	12.63	15.43	2.80	5.38	5.46	0.08
Euro area	6.63	6.56	-0.08	10.24	10.48	0.25	6.10	6.12	0.02
Total OECD	6.64	6.95	0.31	11.89	13.38	1.50	5.84	5.95	0.11
Brazil	8.10	14.93	6.83	13.16	18.30	5.15	7.17	14.37	7.21
China	14.18	8.55	-5.64	28.85	20.15	-8.70	12.41	7.60	-4.81
India	10.49	10.31	-0.17	10.64	9.84	-0.80	10.40	10.70	0.30
Indonesia	11.48	10.73	-0.75	37.36	26.58	-10.78	5.46	7.98	2.51
Russian Federation	13.96	16.76	2.80	24.63	15.54	-9.09	13.39	16.88	3.49
South Africa	9.11	8.82	-0.29	16.89	10.28	-6.61	8.53	8.74	0.21
Total BRIICS	12.82	11.51	-1.31	19.14	15.67	-3.47	11.87	10.97	-0.90

Source: Bloomberg; Blundell-Wignall and Roulet (2015).

StatLink http://dx.doi.org/10.1787/888933222488

ANNEX 3.1

The drivers of business investment in advanced OECD countries

This annex revisits and expands earlier empirical work on the drivers of changes in business capital stocks.

Modelling investment

An accelerator model is a simple and commonly used way to model investment. It assumes that (gross) investment (I_t) can be split into net investment and replacement investment. Replacement investment in period *t* equals the depreciation of the capital stock in *t*-1 (δK_{t-1}, where δ is the depreciation rate). Net investment is assumed to equal to changes in the desired capital stock. In turn, the desired stock of capital (K^*) is considered to be a linear function of output (Y). Hence, real investment can be written as current and past real GDP growth and lagged capital stock:[28]

$$I_t = \sum_{i=0}^{n} \beta_i \Delta Y_{t-i} + \delta K_{t-1} \quad (1)$$

Obviously, investment can depend on more than just output growth and lagged capital stock. According to the neoclassical model, the desired stock of capital is not only a positive function of output but it also depends negatively on the user cost of capital (*UCC*) (Box 3.4; Chirinko, 1993; Oliner et al., 1995):

$$I_t = \sum_{i=0}^{n} \beta_i \Delta (Y_{t-i}\, UCC_{t-i}^{-\sigma}) + \delta K_{t-1} \quad (2)$$

where σ is a constant elasticity of substitution between capital and labour in the production function (Chirinko, 1993). Tevlin and Whelan (2003) argue that the capital stock is a non-stationary variable and propose a stationarised variant of equation (2) in growth rates:

$$I_t = \sum_{i=0}^{n} \beta_i \Delta (Y_{t-i}\, UCC_{t-i}^{-\sigma}) + \delta K_{t-1} \quad (3)$$

Fundamentally, there exists a long-run relationship linking the desired stock of capital to the level of output and the user cost of capital:

$$K^* = \alpha Y \cdot UCC^{-\sigma} \quad (4)$$

28. Equation (1) is usually estimated in constant domestic prices (Oliner et al., 1995; Lee and Rabanal, 2010; Barkbu et al., 2015; IMF, 2015).

Log-linearisation and the error correction representation give the following equation:[29]

$$\Delta k_t = \gamma k_{t-1} + \beta y_{t-1} + \delta ucc_{t-1} + \theta \Delta y_t + \pi \Delta ucc_t \quad (5)$$

New empirical evidence on the drivers of business capital stock in advanced OECD countries

The modelling of changes in business capital stock (investment)[30] in this annex builds on equation (5), which is amended along two dimensions.

- First, the level of the stringency of product market regulation, captured by the OECD's energy transport and communications regulation (ETCR) indicator, is introduced to the long-run relationship. Tighter regulation can be expected to result in less investment and a lower capital stock in the long run.
- Second, the short-term dynamics are augmented by variables often used in empirical investment models. These variables do not exhibit a long-term trend. They include variables, which have a negative relationship with investment/changes in capital stock, such as global and country-specific economic policy uncertainty, stock market and inflation volatility and financial constraints; and a positive relationship like excess equity returns. The hypothesis is also tested whether changes in external demand (world output minus a particular country's output) affect the capital stock beyond the effect of net exports.

The testable equation takes the following form:

$$\Delta k_t = c + \gamma k_{t-1} + \sum_{i=1}^{n} \beta_i x_{i,t-1} + \mu \Delta k_{t-1} + \sum_{i=1}^{n} \delta_i \Delta x_{i,t} + \sum_{j=1}^{m} \theta_j z_{j,t} + \varepsilon_t \quad (6)$$

where $\gamma k_{t-1} + \sum_{i=1}^{n} \beta_i x_{i,t-1}$ gives the long-run relationship including the n long-term covariates, $\sum_{i=1}^{n} \delta_i \Delta x_{i,t}$ are the dynamic terms of the long-run variables (output, UCC and ETCR) and $\sum_{j=1}^{m} \theta_j z_{j,t}$ is the additional set of m covariates entering the short-term dynamics.

Equation (6) is estimated for a panel of 15 OECD countries for 1985Q4 to 2013Q4 at quarterly frequency.[31] The estimation involves two stages.[32] In the first stage the long-run relationship linking the capital stock, real output, the user cost of capital and product

29. Alternative models are Tobin's Q model and Euler equations. Tobin's Q links investment to the ratio of market value of corporate assets to the replacement cost these assets. The difficulty is that Tobin's Q at the macro level can be constructed using firm level data on listed companies. Furthermore, those data may not be representative for countries with predominantly bank finance. Euler equations are based on a dynamic optimisation problem of a representative firm wanting to maximise its present value and describe investment to its past linear and quadratic form. These models have not been very successful in explaining aggregate investment (Oliner et al., 1995; Philippon, 2009). Recent empirical work by the IMF (Lee and Rabanal, 2010; Barkbu et al., 2015) relied, however, on the Q model.
30. Business capital stock/investment is defined as total capital stock/investment excluding housing capital stock/investment.
31. Fifteen OECD countries are included: Australia, Belgium, Canada, Denmark, Finland, France, Germany, Japan, Korea, the Netherlands, New Zealand, Sweden, Switzerland, the United Kingdom and the United States.
32. The two-stage approach provides more flexibility compared with a single-equation error correction model. First, it allows for the use of country and year fixed effects in the long-run relationship and including only country fixed effects in the short-term dynamics. In the single-equation approach, one can put either only country fixed effects or country and year fixed effects both in the long-run and short-run relationships. For instance, if the measure of global uncertainty, capturing common trends, enters the short-run dynamics, year fixed effects cannot be used. This means that year fixed effects would not be included in the long-run relationship.

market regulation is estimated using the dynamic OLS (DOLS) estimator.[33] The DOLS takes care of endogeneity and serial correlation in the residuals. In a second stage, an error correction model is estimated using the lagged deviation from the long-run relationship estimated in the first stage, the first differenced long-run variables[34] and variables capturing uncertainty and volatility, credit constraints and equity returns. An endogenous lag selection procedure sets three lags for real domestic output growth.

Panel unit root and cointegration tests were applied to test the order of integration of the variables and to see whether they are linked via a cointegrating vector. Panel unit root tests (Im et al., 2003) indicate that the potential drivers have a unit root in levels but are stationary in first differences. The capital stock itself seems to have a stochastic trend even though tests including a constant indicate that it might be even an I(2) process (stationary

Table 3.A1.1. **The long-run drivers of the capital stock: panel unit root and cointegration tests**

OECD, 1985-2013, quarterly data

PANEL UNIT ROOT TESTS	Im, Pesaran and Shin test					
	null hypothesis: unit root (heterogenous unit roots)					
	p-value					
	level		first differences		second differences	
	c	c+t	c	c+t	c	c+t
log(capital stock)	0.076	0.889	0.807	0.003	0.000	0.000
log(real output)	0.161	0.993	0.000	0.000	0.000	0.000
log(long interest rates)	0.997	0.000	0.000	0.000	0.000	0.000
log(relative investment prices)	0.592	0.684	0.000	0.000	0.000	0.000
log(etcr)	0.999	0.785	0.000	0.000	0.000	0.000
real business investment/capital stock	0.248	0.129	0.000	0.000	0.000	0.000

PANEL COINTEGRATION TESTS	Pedroni cointegration test	
	log(capital stock), log(real output), log(long-term interest rate), log(etcr)	
	null hypothesis: no cointegration	
	p-value	
	no deterministic trend	with deterministic trend
Panel v-Statistic	0.032	0.000
Panel rho-Statistic	0.968	0.974
Panel PP-Statistic	0.956	0.988
Panel ADF-Statistic	0.960	0.985
Group rho-Statistic	0.999	0.997
Group PP-Statistic	0.992	0.996
Group ADF-Statistic	0.984	0.993

Note: c = constant included in the panel unit root test, c+t = constant and trend included in the panel unit root test.
Source: OECD calculations.

StatLink http://dx.doi.org/10.1787/888933222491

33. Capital stock considered here is total capital stock excluding capital stock in housing. The user cost of capital is decomposed into nominal long-term rates and relative investment prices (business investment deflator over GDP deflator). The tax component is not considered here due to data availability issues. The annual ETCR indicator is converted into a quarterly series by setting the four quarters of any year equal to the annual observation in that year.
34. They turn out to be statistically insignificant.

only in second differences).[35] Given the non-stationary nature of the data, it is necessary to check whether the five series of interest are linked through a cointegrating vector. Variants of the Pedroni cointegration test (except the panel v-statistic) reject the null of no cointegration (Pedroni, 1999). This confirms that a level relationship connecting the capital stock to its drivers is not a spurious one (Table 3.A1.1).

Anticompetitive regulation hampers the capital stock accumulation in the long run

The estimated long-run relationship suggests that the output elasticity is close to one, implying a stable capital-to-output ratio in the long run (Table 3.A1.2). The elasticities on nominal long-term interest rates and product market regulation are negative. Relative investment prices and long-run real interest rates tend to have positive sign: they are therefore not included in the long-run relationship.[36] This is line with earlier empirical results (Sharpe and Suarez, 2014) and may be due to the very different real interest elasticity of the components of the capital stock. Rolling window estimations indicate the interest elasticity declines and the negative elasticity on the ETCR indicator increases over time.

Table 3.A1.2. **The long-run drivers of the capital stock: coefficient estimates**

OECD, 1985-2013, quarterly data

LONG-RUN RELATIONSHIP (Dynamic OLS estimates)

dependent variable = log capital stock

	FULL	SUBPERIODS				
	1985/2013	**1986/2006**	**1987/2007**	**1989/2009**	**1991/2011**	**1993/2013**
c	**-5.58** **	-4.36 **	-3.94 **	-1.76	-0.05	-0.49
log real output	**1.23** **	1.19 **	1.18 **	1.10 **	1.04 **	1.05 **
log long-term interest rate	**-0.08** **	-0.12 **	-0.13 **	-0.14 **	-0.09 **	-0.02
log ETCR indicator	**-0.06** **	0.01	-0.02	-0.05 **	-0.07 **	-0.09 **
No. obs	**1674**	1260	1260	1260	1260	1239
No. of countries	15	15	15	15	15	15

Note: * and ** denote statistical significance at the 10% and 5% levels, based on robust standard errors. The estimations include country and time fixed effects.
Source: OECD calculations.

StatLink http://dx.doi.org/10.1787/888933222508

Accelerator effects reinforced by foreign demand growth

In the second-stage estimation, which looks at short-term dynamics, foreign demand growth shows, besides domestic output effects, a positive correlation to changes in business capital stock (net investment over lagged capital stock) beyond the direct impact of net exports.[37]

35. Using output growth in the steady state and the depreciation rate of the capital stock, the gross investment-to-capital stock ratio should be constant. As a result, the capital stock could be replaced by gross investment. Nevertheless, this does not hold in practice for our sample: the gross investment-to-capital stock ratio has a unit root (Table 3.A1.1).
36. These results are not reported here. Future work should first distinguish between public and private business capital and, in a second stage, look at the different types of private business capital.
37. Contemporaneous real output growth is not used to avoid simultaneity bias. Nevertheless, this can give rise to an omitted variable bias. Indeed, adding contemporaneous real output growth reduces the coefficient estimate on foreign output growth and often renders the coefficient estimates statistically insignificant (not reported here).

Uncertainty and financial constraints

Additional short-term drivers in the error correction model suggest that a higher level of country-specific economic policy uncertainty, an increase in global policy uncertainty and higher inflation volatility are associated with lower investment.[38] Increasing financial constraints, measuring the share of firms facing difficulties to access external funding based on EC surveys, are negatively related to changes in the capital stock for a subgroup of European countries (Table 3.A1.3). By contrast, stock market volatility shows little co-movement with changes in the capital stock. Excess equity returns and stock market returns have the expected positive sign.

Table 3.A1.3. **The short-run drivers of the capital stock: coefficient estimates**

OECD, 1985-2013, quarterly data

SHORT-RUN DYNAMICS	*dependent variable = d(log capital stock)*											
	1985 2013	1987 2007	1993 2013	**1985 2013**	1987 2007	1993 2013	**1985 2013**	1987 2007	1993 2013	**1985 2013**	1987 2007	1993 2013
coefficient estimates such as estimated in the error correction model												
c	**-4.3E-05**	1.2E-04	-1.2E-05	**5.5E-04** **	1.0E-03 **	5.4E-04 **	**4.2E-06**	1.6E-04 *	3.7E-05	**2.0E-04** **	5.6E-04 **	2.5E-04 **
error correction term	**-0.001** **	-0.002 **	-0.001 **	**-0.002** **	-0.003 **	-0.002 **	**-0.001** **	-0.002 **	-0.001 **	**-0.001** *	-0.001	-0.001 *
d(log capital stock)(-1)	**0.960** **	0.947 **	0.950 **	**0.950** **	0.934 **	0.947 **	**0.958** **	0.944 **	0.950 **	**0.919** **	0.875 **	0.902 **
d(log real output) (-1)	**0.004**	0.003	0.004	**0.003**	0.002	0.006 *	**0.004**	0.004	0.005 *	**0.002**	0.000	0.000
d(log real output) (-2)	**0.009** **	0.011 **	0.007 **	**0.006** **	0.008 **	0.004 *	**0.010** **	0.011 **	0.008 **	**0.012** **	0.015 **	0.012 **
d(log real output) (-3)	**0.006** **	0.007 **	0.004 *	**0.004** *	0.004	0.003	**0.006** **	0.007 **	0.004 *	**0.008** **	0.011 **	0.007 **
d(log foreign output) (-1)	**0.014** **	0.006	0.017 **	**0.012** **	0.000	0.013 **	**0.013** **	0.006	0.015 **	**0.018** **	0.010 *	0.021 **
cpi_volatility(-1)	**-1.6E-05**	-1.4E-05	-2.0E-05 *									
cpi_volatility(-1)^2	**-3.0E-07**	-2.0E-07	-3.0E-07 *									
log economic policy uncertainty (-1)				-1.02E-04 **	-0.0002 **	-1E-04 **						
d(log global uncertainty) (-1)							-7.47E-05 **	-4E-05	-8E-05 **			
financial constraints (-1)										-2.19E-05 **	-4E-05 **	-2E-05 **
coefficient estimates adjusted for the lagged dependent variable: coeff(adj)=coeff(unadj)/(1-coeff(lagged dependent))												
c	**-4.E-05**	1.2E-04	-1.2E-05	**6.E-04**	1.0E-03	5.4E-04	**4.E-06**	1.6E-04	3.7E-05	**2.E-04**	5.6E-04	2.5E-04
error correction term	**-0.033**	-0.033	-0.024	**-0.042**	-0.044	-0.030	**-0.032**	-0.032	-0.023	**-0.011**	-0.007	-0.010
d(log capital stock)(-1)	**0.960**	0.947	0.950	**0.950**	0.934	0.947	**0.958**	0.944	0.950	**0.919**	0.875	0.902
d(log real output) (-1 to -3	**0.467**	0.404	0.309	**0.249**	0.217	0.253	**0.462**	0.397	0.333	**0.264**	0.216	0.191
d(log foreign output) (-1)	**0.353**	0.112	0.339	**0.243**	-0.001	0.244	**0.302**	0.106	0.299	**0.221**	0.084	0.213
cpi_volatility(-1)	**-4.E-04**	-2.6E-04	-4.0E-04									
cpi_volatility(-1)^2	**-8.E-06**	-3.8E-06	-6.0E-06									
log economic policy uncertainty (-1)				**-0.002**	-0.002	-0.002						
d(log global uncertainty) (-1)							**-0.002**	-0.001	-0.002			
financial constraints (-1)										**-0.00027**	-0.0003	-0.0002
No. obs	**1634**	1253	1243	**1230**	890	1099	**1644**	1260	1252	**805**	609	660
No. of countries	**15**	15	15	**15**	15	15	**15**	15	15	**8**	8	8

Note: * and ** denote statistical significance at the 10% and 5% levels, based on robust standard errors. The estimations include country fixed effects. Two sets of coefficient estimates are reported. The upper block gives the size and the significance of the coefficient estimates such as estimated in the error correction model. The lower block provides the coefficient estimates normalised by the lagged dependent variable: coeff(adj)=coeff(unadj)/(1-coeff(lagged dependent)). The coefficient reported on real output growth is obtained as the sum of the coefficients on d(log real output)(-1), d(log real output)(-2) and d(log real output)(-3), corrected for the lagged dependent variable. Statistical significance is not reported in the lower block, it corresponds to the ones reported in the upper block.

Source: OECD calculations.

StatLink http://dx.doi.org/10.1787/888933222519

38. The country-specific and global economic policy uncertainty series are obtained from *www.policyuncertainty.com/research.html*. The country-specific policy uncertainty indicator is available only for a limited number of countries. Therefore, the following approximations were done: Germany's series is used for Denmark, Finland, the Netherlands, Sweden and Switzerland; France's for Belgium; Canada's for Australia and New Zealand; and Japan's for Korea.

Bibliography

Barkbu, B., S.P. Berkmen, P. Lukyantsau, S. Saksonovs and H. Schoelermann (2015), "Investment in the euro area: why has it been weak?", *IMF Working Papers*, No. WP/815/832.

Chirinko, R. (1993), "Business fixed investment spending: modelling strategies, empirical results, and policy implications", *Journal of Economic Literature*, Vol. 31(4), pp. 1875-1911.

Im, K.S., M.H. Pesaran and Y. Shin (2003), "Testing for Unit Roots in Heterogeneous Panels", *Journal of Econometrics*, Vol. (115), pp. 53-74.

Lee, J. and P. Rabanal (2010), "Forecasting U.S. investment", *IMF Working Papers,* No. WP/10/246.

Oliner, S., G. Rudebusch and D. Sichel (1995), "New and old models of business investment: a comparison of forecasting performance", *Journal of Money, Credit and Banking*, Vol. 27(3), pp. 806-826.

Pedroni, P. (1999), "Critical Values for Cointegration Tests in Heterogeneous Panels with Multiple Regressors", *Oxford Bulletin of Economics and Statistics*, Vol. 61, pp. 653-670.

Philippon, T. (2009), "The bond market's Q", *The Quarterly Journal of Economics*, Vol. 124(3), pp. 1011-1056.

Sharpe, S.A. and G.A. Suarez (2014), "The sensitivity of investment to interest rates: Evidence from a survey of CFOs", *Federal Reserve Board, Finance and Economics Discussion Series*, No. 2014-02.

Tevlin, S. and K. Whelan (2003), "Explaining the investment boom in the 1990s", *Journal of Money, Credit and Banking*, Vol. 35(1), pp. 1-22.

ANNEX 3.2

Testing OECD Structural Indicators on Company Investment Data

The OECD has completed a major exercise of collecting company data on capital expenditure, and all the associated financial data, including inter alia, rates of return on equity (ROE) and the costs of equity (COE), for 10,000 listed companies across 75 countries over the period 2002 to 2013. The data were separated into infrastructure companies (following MSCI sector guidelines) and other general industries, and aggregated on a country basis (Box A2.1). These are the largest companies in the world and for the most part are multi-national enterprises (MNEs). In the general industrial sector, these companies operate in many countries and hence structural policies in any one will have a more diluted effect. Indeed, these companies may move parts of their business operations between jurisdictions favouring those with more profitable possibilities. This is less so for the infrastructure sector, however, where the company listed in a given country also tends to keep the majority of its operations in that country. For these companies, the structural policies of the home country will have a more direct effect on investment.

A model of capital spending for infrastructure companies was developed in Blundell-Wignall and Roulet (2015) to explain investment. It postulates that capital spending grows in line with sales (the accelerator type mechanism) but will be shifted from this trajectory by variations in several explanatory variables: ROE; COE; the cost of debt proxied by the AAA bond rate in the country; a dummy variable for the tax status of the country as an investment tax free zone (TAX); the company tax rate (CITR); an earnings expectation variable proxied by the ratio of stock market capitalisation to GDP (MCAP); and a measure of banking system openness captured by a variable based on the persistence of deviations from covered interest parity (VCIP). This base model was then used to test a number of OECD structural indicators to see whether they affected capital spending. Six structural indicators were tested with the following results:[39]

- *The effective marginal tax rates on capital (EMTR)*. The estimated coefficient on this variable has an incorrect sign. However, it is highly correlated with the company tax rate (correlation of 0.7), which in the base model has the correct negative sign, but drops in value with the effective rate. Including the latter is the preferred variable.

39. There is some apparent interaction between the tax zone dummy variable and some of the other indicators. The TAX variable is highest in emerging markets, particularly countries in south Asia and East Asia/Pacific, East Europe and the MENA countries. It is to be expected that some of the restrictiveness indexes would be correlated with a variable associated with a ranking of emerging countries.

Box A2.1. **Regression model test**

The regressions are run on a global balanced panel of 50 countries for the years 2002 to 2013. Individual company data for the main variables in millions of US dollars are aggregated by country for some 1328 non-financial companies operating in infrastructure sector. The model postulates that capital spending grows in line with sales (i.e. the dependent variable is global capital spending as a share of global sales) but will be shifted from this trajectory by variations in the explanatory variables.

The determinants of aggregate corporate capital spending in infrastructure sector

	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]
ROE	0.09 *** (3.71)	0.06 *** (3.20)	0.07 *** (3.81)	0.08 *** (4.16)	0.07 *** (3.78)	0.07 *** (3.54)	0.07 *** (3.91)	0.08 *** (4.28)
COE	0.04 (1.57)	0.02 (0.62)	0.004 (0.12)	0.03 (0.77)	0.003 (0.00)	-0.002 (-0.05)	0.005 (0.12)	0.03 (0.93)
COD	-0.17 ** (-2.15)	-0.25 *** (-3.00)	-0.26 *** (-3.12)	-0.26 *** (-3.12)	-0.28 *** (-3.17)	-0.26 *** (-3.09)	-0.26 *** (-3.10)	-0.27 *** (-3.32)
MCAP	0.01 *** (3.84)	0.03 *** (7.47)	0.03 *** (5.74)	0.03 *** (7.23)	0.03 *** (7.43)	0.03 *** (7.86)	0.03 *** (8.02)	0.03 *** (7.87)
VCIP	-0.04 *** (-4.93)	-0.03 *** (-3.18)	-0.03 *** (-2.88)	-0.05 *** (-4.85)	-0.04 *** (-3.99)	-0.03 *** (-3.06)	-0.03 *** (-2.97)	-0.06 *** (-6.27)
CITR	-0.12 *** (-2.88)	-0.65 *** (-8.97)	-0.17 *** (-3.68)	-0.13 *** (-2.99)	-0.10 *** (-2.49)	-0.13 *** (-2.91)	-0.16 *** (-3.72)	-0.07 * (-1.70)
TAX	0.04 *** (3.15)	0.09 *** (2.36)	0.10 *** (3.08)	0.17 *** (6.52)	0.23 *** (4.39)	0.15 *** (3.88)	0.05 (1.48)	0.30 *** (5.60)
EMTR	-	0.55 *** (9.77)	-	-	-	-	-	-
EPL	-	-	0.002 (0.45)	-	-	-	-	-
ETCR	-	-	-	-0.82 * (-1.81)	-	-	-	-0.34 (-0.57)
FDI	-	-	-	-	-0.23 *** (-5.56)	-	-	-0.28 *** (-4.78)
PMR	-	-	-	-	-	-0.01 ** (-2.10)	-	-0.004 (-0.68)
RCP	-	-	-	-	-	-	-0.0005 *** (-4.88)	-0.0001 (-0.38)
C	0.12 *** (6.22)	0.11 *** (5.29)	0.11 *** (3.55)	0.09 *** (3.87)	0.05 ** (2.29)	0.10 *** (4.55)	0.16 *** (8.55)	0.03 (0.77)
R^2	0.67	0.69	0.69	0.69	0.69	0.69	0.69	0.69
F-Stat	103.21	91.30	89.26	87.54	90.69	89.43	89.47	66.71
Prob(F)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Durbin-Watson stat	1.34	1.14	1.12	1.13	1.14	1.12	1.13	1.15
Total Obs.	462	373	373	367	373	373	373	367

Note: ROE: return on equity; COE: cost of equity (dividend yield plus the trend rate of growth of earnings); COD: cots of debt (yield of AAA-rating corporate bond index by country minus 1-year government bond yield); MCAP (market cap to GDP as an equity bullishness expected earnings variable); CITR (corporate gross income tax rate of the host country); TAX (the % of countries in the region that offer tax holidays & exemptions); EMTR (effective marginal tax rates on capital of the host country); EPL (OECD employment protection legislation indicator); ETCR (regulation in energy, transportation and communication indicator); FDI (FDI restrictiveness index); PMR (product market regulation indicator); and RCP (country rank number of corruption perception score).

Source: Bloomberg; PMR database; Oxford University Centre for Business Taxation; Transparency International and OECD calculations.

StatLink http://dx.doi.org/10.1787/888933222529

- *The OECD employment protection legislation indicator* (EPL). The EPL is scaled from 0 (least restrictions) to 6 (most restrictions). The EPL coefficient is not significant.
- *The OECD regulation in energy, transport and communication indicator (ETCR)*. The ETCR is scaled from 0 (least restrictions) to 6 (most restrictions). The ETCR has the correct negative sign and differs significantly from zero at the 10% confidence level.
- *The foreign direct investment restrictiveness index (FDI)*. The FDI is scaled from 0 (open) to 1 (close). The FDI coefficient has the correct negative sign and is strongly supported by the data at the 1% confidence level.
- *The OECD product market regulation indicator (PMR)*. The PMR is scaled from 0 (least restrictions) to 6 (most restrictions). This PMR coefficient has the correct negative sign and significant at the 5% confidence level.
- *The country rank number of corruption perception score (RCP)*. The RCP coefficient is correctly (negatively) signed and significant at the 1% confidence level.

When the variables with the correct signs are all included together, it is the FDI variable that dominates and it remains significant at the 1 % level. These results suggest that the variables EPL, ETCR, FDI, PMR and RCP are worth exploring further in terms of their effects on investment.

Bibliography

Blundell-Wignall, A. and C. Roulet (2015), "Infrastructure versus other investments in the global economy and stagnation hypotheses: What do company data tell us?", *OECD Journal: Financial Market Trends*, Vol. 2014/2.

ANNEX 3.3

Does the heterogeneity of product market regulations affect foreign direct investment?

This annex provides an overview of the methodology and the data used for the estimation of the effects of economic policies and other factors on foreign direct investment (FDI) stocks. It also provides empirical results.

Modelling foreign direct investment stocks

A gravity model is used to estimate the effect of policies on bilateral FDI stocks. This empirical approach is commonly used in the international trade literature, building on the theoretical foundations of Anderson and Van Wincoop (2003). Head and Ries (2008) provide a theoretical foundation of gravity models for cross-border investment in which inward FDI stocks are determined by the characteristics of countries and a vector of pair-specific variables reflecting monitoring costs.

Following Santos Silva and Tenreyro (2006), a Poisson pseudo-maximum likelihood (PPML) estimator is used due to a number of benefits that it has over linear estimation of a gravity equation. Santos Silva and Tenreyro (2006) show that a linear estimation of the log-linearised gravity equation relies on a specific assumption about the distribution of the residuals that does not necessarily hold in practice. In particular, estimates can be biased in the presence of heteroskedasticity. In addition, the Poisson model makes it possible to take into account cases where the dependent variable is equal to zero. The gravity equation specification is as follows:

$$FDI_{ijt} = \exp(\beta_1 ln(Y_{it}) + \beta_2 ln(Y_{jt}) + \sum_k \beta_{3,k} d_{ij}^k + \beta_4 \ln(R_{it}) + \beta_5 \ln(R_{jt}) + \sum_k \beta_{6,k} X_{it}^k + \sum_k \beta_{7,k} X_{jt}^k + \beta_8 FTA_{ijt} + \beta_9 FTA_{it} + \beta_{10} FTA_{jt} + \beta_{11} EA_{ijt} + \gamma PMR_{ijt}^h + u_i + v_j + \alpha_t) + \varepsilon_{ijt}$$

FDI_{ijt} denotes the inward FDI position of country i from country j in year t, Y_{it} denotes GDP, d_{ij}^k refers to a set of four variables typically included in gravity models: geographical distance, contiguity, the existence of a common language and a dummy variable equal to one if the host and investing countries share the same legal system. R_{it} denotes remoteness, defined as the GDP-weighted average of the distance between a country and its partners and X_{it}^k is a set of country-specific variables. FTA_{it}, FTA_{jt} and FTA_{ijt} are dummy variables to identify if individual countries are in free-trade areas or if country pairings are in the same free-trade area, and EA_{ijt} is a dummy that takes value one if the country pair is in the euro area. PMR_{ijt}^h denotes the bilateral heterogeneity of the Product Market Regulation (PMR) indicator. u_i, v_j and α_t denote the host country, investing country and year fixed effects respectively. ε_{ijt} denotes a zero-mean error.

To check that the results do not depend on the type of estimator, a linear estimator in which the dependent variable is the logarithm of FDI is also used. In alternative regressions, factor dissimilarity, human capital dissimilarity and size similarity are added as control variables as these can also be determinants of FDI (Markussen et al., 1996 and Markussen, 1997). To check that there is no bias due to the omission of country-specific features that can vary over time, a robustness check is carried out with time-varying host country (u_{it}) and investing country (v_{jt}) dummies. Such time-varying fixed effects capture the effect of the stringency of regulation, of any type of country-specific policy setting that can change over time (e.g. taxation) and of country-specific macroeconomic developments (e.g. exchange rate changes).

$$FDI_{ijt} = \exp(\sum_{k} \beta_{3,k} d_{ij}^{k} + \beta_{8} FTA_{ijt} + \beta_{11} EA_{ijt} + \gamma PMR_{ijt}^{h} + u_{it} + v_{jt}) + \varepsilon_{ijt}$$

Measuring the heterogeneity of product market regulations and FDI stocks

The bilateral heterogeneity of regulation is measured as the share of regulatory settings that differ between two countries, making use of the OECD PMR indicator as outlined in Fournier (2015b). This indicator is an economy-wide indicator measured every five years between 1998 and 2013 that covers a wide range of goods and service sectors (Koske et al., 2015). The methodology is similar to the one used by Kox et al. (2004). For each question considered in the questionnaire, a country pair is assigned the value 1 if the answer is different and 0 otherwise.[40] The data are aggregated using the same weights as in the overall PMR indicator. For a given country, its heterogeneity with respect to each other OECD country can be calculated, and an average of each of these bilateral measures provides insight how much a country differs from other OECD countries. The resulting economy-wide measure is a lower bound of regulatory heterogeneity as even when the answer is the same, regulation can differ for some aspects that are not captured in this questionnaire (e.g. a different design in the implementation of the same regulatory setting).

In the following estimations, inward FDI stocks in value (US dollars) reported in the OECD FDI databases are used. FDI is the category of international investment that reflects the objective of an entity to obtain a lasting interest in an enterprise resident in another country. The direct or indirect ownership of 10% or more of the voting power is considered as evidence of the existence of such a lasting interest: small participations that are typically not associated with a significant influence are not included. These FDI positions can be the result of greenfield investments or of mergers and acquisitions. The FDI stock is net: it is measured as the market value share capital and reserves plus debt due to the direct investors minus debt due to subsidiaries. The FDI bilateral data exhibit slightly more than 10% of zero stocks that are kept in the sample. In the log-linear estimations the log of FDI is replaced by zeros in these cases.

New empirical evidence on the drivers of foreign direct investment

The effect of the heterogeneity of product market regulation on FDI is clearly negative because the divergence in product market regulations generates costs that affect firms' decisions to invest abroad (Table 3.A3.1). The introduction of a broad reform package that

40. A few questions required some specific adjustments, see Fournier (2015a) for more detail.

Table 3.A3.1. **FDI determinants: baseline results**

Estimation method	Poisson			Linear		
$\ln(Y_{it})$	1.22***	1.37***	0.55*	0.93***	1.30***	0.92***
	(0.30)	(0.32)	(0.32)	(0.34)	(0.38)	(0.35)
$\ln(Y_{jt})$	1.45***	1.15***	0.82***	1.20***	1.08***	1.07***
	(0.31)	(0.36)	(0.25)	(0.30)	(0.37)	(0.30)
$\ln(dist_{ij})$	-0.64***	-0.64***	-0.58***	-1.16***	-1.16***	-1.18***
	(0.11)	(0.11)	(0.096)	(0.11)	(0.11)	(0.11)
$Cont_{ij}$	0.15	0.15	0.20	-0.17	-0.17	-0.18
	(0.16)	(0.16)	(0.13)	(0.23)	(0.23)	(0.23)
Same legal $system_{ij}$	0.46***	0.45***	0.43***	0.61***	0.61***	0.63***
	(0.097)	(0.098)	(0.088)	(0.12)	(0.12)	(0.12)
Common official $language_{ij}$	0.096	0.11	0.17	0.55***	0.55***	0.65***
	(0.15)	(0.15)	(0.13)	(0.21)	(0.21)	(0.22)
PMR^{h}_{ijt}	-1.67***	-1.54**	-0.71	-2.83***	-2.95***	-2.55***
	(0.60)	(0.72)	(0.55)	(0.82)	(0.85)	(0.83)
European Economic $Area_{it}$	-0.13	-0.21	-0.53*	0.92***	0.66**	0.84***
	(0.22)	(0.23)	(0.27)	(0.30)	(0.30)	(0.30)
European Economic $Area_{jt}$	-0.036	-0.056	-0.54	-0.039	0.13	-0.051
	(0.49)	(0.57)	(0.47)	(0.38)	(0.37)	(0.39)
European Economic $Area_{ijt}$	0.32	0.33	0.54**	0.12	0.11	0.13
	(0.27)	(0.26)	(0.26)	(0.20)	(0.20)	(0.20)
Euro $Area_{ijt}$	0.18	0.17	0.18	0.23	0.19	0.28*
	(0.15)	(0.15)	(0.12)	(0.17)	(0.17)	(0.17)
$NAFTA_{ij}$	-1.22***	-1.20***	-0.85***	-0.99	-1.02	-1.25*
	(0.29)	(0.29)	(0.27)	(0.65)	(0.65)	(0.65)
$\ln(\text{Nominal exchange rate}_{it})$	-0.62	-0.73*	-0.032	-0.94**	-0.99**	-0.65
	(0.39)	(0.41)	(0.41)	(0.47)	(0.47)	(0.51)
$\ln(\text{Nominal exchange rate}_{it})$	-0.89**	-0.43	-0.32	0.16	0.31	0.15
	(0.44)	(0.47)	(0.47)	(0.34)	(0.38)	(0.35)
Employment Protection $Legislation_{it}$	-0.18	-0.26	-0.062	-0.11	-0.31	-0.13
	(0.18)	(0.20)	(0.17)	(0.19)	(0.20)	(0.19)
Employment Protection $Legislation_{jt}$	-0.52*	-0.35	-0.43*	-0.17	0.036	-0.12
	(0.28)	(0.27)	(0.26)	(0.24)	(0.25)	(0.25)
$Tariff_{it}$	-0.045		-0.016	0.41***		0.37***
	(0.13)		(0.11)	(0.14)		(0.14)
$Tariff_{jt}$	0.24**		0.31**	-0.14		-0.15
	(0.12)		(0.13)	(0.15)		(0.15)
Complexity of Regulatory $Procedures_{it}$	-0.15***	-0.16***	-0.17***	0.021	0.0100	-0.0092
	(0.051)	(0.047)	(0.046)	(0.071)	(0.070)	(0.070)
FDI $restrictiveness_{it}$	-0.25*		-0.37**	-0.056		-0.14
	(0.14)		(0.19)	(0.13)		(0.14)
Constant	-14.5	-10.2	11.5	-19.6	-24.2	-15.1
	(9.65)	(11.3)	(8.30)	(14.5)	(16.1)	(15.0)
N	2,017	2,017	1,951	2,017	2,017	1,951
R^2	0.893	0.889	0.913	0.817	0.818	0.819
Controls for remoteness	YES	YES	YES	YES	YES	YES
Country and year fixed effects	YES	YES	YES	YES	YES	YES
Controls for PMR levels in seven subdomains	NO	YES	NO	NO	YES	NO
Controls for size and factor dissimilarities	NO	NO	YES	NO	NO	YES

Note: Asterisks (*, **, ***) indicate the significance level (10%, 5%, 1%) of the coefficients. i denotes the inward country and j the outward country. Standard errors adjusted for country-pair clusters are in parentheses. $Dist_{ij}$ = geographical distance, $Cont_{ij}$ = contiguity dummy, PMR^{h}_{ijt} = Heterogeneity of product market regulation, NAFTAij = North America Free Trade Agreement pair dummy; Nominal $exchange\ rate_{it}$ = Nominal dollar exchange rate, $Tariff_{it}$ = PMR indicator of trade tariffs. Poisson = Poisson pseudo-maximum likelihood.

Source: OECD calculations.

StatLink http://dx.doi.org/10.1787/888933225327

would cut the divergence of regulations between countries by one-fifth would increase FDI stocks by around 15%. In terms of specific policy areas, the divergence of antitrust exemptions, barriers in service provision, network sector barriers and command and control regulation all have significant negative effects on FDI (Fournier, 2015a). The negative effect of overall heterogeneity remains when one controls for the stringency of product market regulation (Table 3.A3.1, column 2 and 5), for non-policy dissimilarity indicators (Table 3.A3.1, column 3 and 6) and when one uses a linear, rather than the Poisson estimator (Table 3.A3.1, column 4 to 6). In addition, the alternative regressions with time-varying country fixed effects (Table 3.A3.2) show that this effect is robust to the control for any kind of country-specific change. Additional robustness checks provided in Fournier (2015a) show that the negative effect of regulatory heterogeneity on FDI stocks is also robust when one excludes countries with the highest FDI flows in relation to GDP, or when one uses a heterogeneity indicator based on the World Bank's Doing Business database.

Table 3.A3.2. **FDI determinants: robustness check with time varying fixed effects**

Estimation method	Poisson			Linear		
$\ln(dist_{ij})$	-0.61***	-0.57***	-0.56***	-1.18***	-1.21***	-1.14***
	(0.11)	(0.10)	(0.11)	(0.11)	(0.11)	(0.11)
$Cont_{ij}$	0.16	0.23*	0.17	-0.19	-0.22	-0.19
	(0.16)	(0.13)	(0.16)	(0.23)	(0.24)	(0.24)
Same legal $system_{ij}$	0.47***	0.40***	0.48***	0.64***	0.65***	0.69***
	(0.098)	(0.085)	(0.098)	(0.12)	(0.12)	(0.12)
Common official $language_{ij}$	0.065	0.12	0.0076	0.58***	0.70***	0.54**
	(0.14)	(0.13)	(0.15)	(0.22)	(0.22)	(0.21)
PMR^{h}_{ijt}	-1.81***	-1.29**	-2.34***	-2.31***	-1.87**	-2.08**
	(0.69)	(0.59)	(0.77)	(0.78)	(0.80)	(0.81)
European Economic $Area_{ijt}$	0.43*	0.52**	0.40	0.047	0.047	-0.086
	(0.25)	(0.25)	(0.26)	(0.20)	(0.20)	(0.20)
Euro $Area_{ijt}$	0.16	0.14	0.13	0.25	0.31	0.28
	(0.17)	(0.13)	(0.17)	(0.20)	(0.20)	(0.21)
$NAFTA_{ij}$	-1.08***	-0.88***	-1.20***	-1.00	-1.28**	-0.67
	(0.30)	(0.26)	(0.32)	(0.64)	(0.65)	(0.67)
Human capital $dissimilarity_{ijt}$		0.52			0.37	
		(0.39)			(0.49)	
Factor $dissimilarity_{ijt}$		-0.90***			0.16	
		(0.15)			(0.11)	
Size $similarity_{ijt}$		0.44***			0.35***	
		(0.051)			(0.066)	
Constant	13.3***	14.1***	13.1***	13.4***	21.2***	9.88***
	(1.45)	(1.24)	(1.42)	(1.40)	(1.91)	(1.34)
N	2,243	2,175	1,742	2,247	2,179	1,746
R^2	0.932	0.950	0.925	0.840	0.842	0.842
End of sample	2013	2013	2008	2013	2013	2008
Time varying country fixed effects	YES	YES	YES	YES	YES	YES

Note: Asterisks (*, **, ***) indicate the significance level (10%, 5%, 1%) of the coefficients. i denotes the inward country and j the outward country. Standard errors adjusted for country-pair clusters are in parentheses. $Dist_{ij}$ = geographical distance, $Cont_{ij}$ = contiguity dummy, PMR^{h}_{ijt} = Heterogeneity of product market regulation, Human capital $dissimilarity_{ijt}$ = absolute difference of the logarithm of the average number of years of schooling, Factor $dissimilarity_{ijt}$ = absolute difference of the logarithm of GDP per capita, which is a proxy for the capital stock per worker, Size $similarity_{ijt}$ = variable that captures the similarity of the size of GDP. Poisson = Poisson pseudo-maximum likelihood.

Source: OECD calculations.

StatLink http://dx.doi.org/10.1787/888933225337

These estimates also shed light on the effect of other policy determinants:

- In particular, the stringency of product market regulations itself matters in specific fields, on top of the effect of regulatory heterogeneity: the estimation with the Poisson model shows a negative effect for the complexity of regulatory procedures on FDI.
- As expected, FDI restrictions as measured by the OECD FDI restrictiveness index (Kalinova et al., 2010) reduce FDI.
- There is some evidence that belonging to the EU Single Market can have a positive effect on FDI on top of the effect already captured by the regulation indicators. This Single Market effect is not only present for FDI within the Single Market: FDI from OECD countries toward Single Market countries are boosted as well. By contrast, there is a negative effect for the NAFTA area, which may reflect a substitution effect in favour of trade (see Fournier et al., 2015, for evidence of the large positive effect of NAFTA on trade).
- The estimates show a positive effect of trade barriers, suggesting that FDI can be used to by-pass such barriers.
- Finally, employment protection legislation (EPL) can deter cross-border investment by impeding the restructuring associated with mergers and acquisitions. More evidence on the effect of EPL on FDI stocks is provided by estimates over a longer period in Fournier (2015a).

Bibliography

Anderson, J.E. and Van Wincoop (2003), "Gravity with Gravitas: A Solution to the Border Puzzle", *American Economic Review*, Vol. 93, pp. 170-192.

Fournier, J.-M. (2015a), "The Negative Effect of Regulatory Divergence on Foreign Direct Investment", *OECD Economics Department Working Papers*, forthcoming, OECD Publishing, Paris.

Fournier, J.-M. (2015b), "The Heterogeneity of Product Market Regulations", *OECD Economics Department Working Papers*, No. 1182, OECD Publishing, Paris.

Fournier, J.-M. et al. (2015), "Implicit Regulatory Barriers in the EU Single Market: New Empirical Evidence from Gravity Models", *OECD Economics Department Working Papers*, No. 1181, OECD Publishing.

Head, K. and J. Ries (2008), "FDI as an Outcome of the Market for Corporate Control: Theory and Evidence", *Journal of International Economics*, Vol. 74 (1), pp. 2-20.

Kalinova, B., Palerm, A. and S. Thomsen (2010), "OECD's FDI Restrictiveness Index: 2010 Update", *OECD Working Papers on International Investment*, No. 2010/3.

Koske, I. et al. (2015), "The 2013 Up-date of the OECD Product Market Regulation Indicators: Policy Insights for OECD and non-OECD Countries", *OECD Economics Department Working Papers*, No. 1200, OECD Publishing, Paris.

Kox, H., A. Lejour and R. Montizaan (2004), "The free movement of services within the EU", *CPB Document*, No. 69.

Markussen, J.R. (1997), "Trade versus Investment Liberalisation", *NBER Working Papers*, No. 6231.

Markussen, J.R, et al. (1996), "A Unified Treatment of Horizontal Direct Investment, Vertical Direct Investment, and the Pattern of Trade in Goods and Services", *NBER Working Papers*, No. 5696.

Santos Silva, J.M.C. and S. Tenreyro (2006), "The Log of Gravity", *The Review of Economics and Statistics*, Vol. 88(4), pp. 641-658.

STATISTICAL ANNEX

This annex contains data on key economic series which provide a background to the recent economic developments in the OECD area described in the main body of this report. Data for 2015 to 2016 are OECD estimates and projections. The data in some of the tables have been adjusted to conform to internationally agreed concepts and definitions in order to make them more comparable across countries, as well as consistent with historical data shown in other OECD publications. Regional aggregates are based on weights that change each period, with the weights depending on the series considered. For details on aggregation, see *OECD Economic Outlook* Sources and Methods.

The OECD projection methods and underlying statistical concepts and sources are described in detail in *OECD Economic Outlook* Sources and Methods (*www.oecd.org/eco/sources-and-methods.htm*).

Corrigenda for the current and earlier issues, as applicable, can be found at *www.oecd.org/about/publishing/corrigenda.htm*.

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.

NOTE ON QUARTERLY PROJECTIONS

OECD quarterly projections are on a seasonal and working-day-adjusted basis for selected key variables. This implies that differences between adjusted and unadjusted annual data may occur, though these in general are quite small. In some countries, official forecasts of annual figures do not include working-day adjustments. Even when official forecasts do adjust for working days, the size of the adjustment may in some cases differ from that used by the OECD.

Additional information

2014 weights used for real GDP regional aggregates

	OECD euro area[1]	OECD	World		OECD euro area[1]	OECD	World
Australia		2.2	1.0	Slovenia	0.5	0.1	0.1
Austria	3.0	0.8	0.4	Spain	12.3	3.2	1.5
Belgium	3.7	1.0	0.5	Sweden		0.9	0.4
Canada		3.2	1.5	Switzerland		1.0	0.5
Chile		0.8	0.4	Turkey		3.0	1.4
Czech Republic		0.6	0.3	United Kingdom		5.2	2.4
Denmark		0.5	0.2	United States		35.3	16.6
Estonia	0.3	0.1	0.0	Euro area	100.0	26.1	12.3
Finland	1.7	0.4	0.2	OECD total		100.0	47.0
France	19.5	5.1	2.4				
Germany	28.3	7.4	3.5			Non-OECD	World
Greece	2.2	0.6	0.3				
Hungary		0.5	0.2	Argentina		1.8	0.9
Iceland		0.0	0.0	Brazil		5.9	3.2
Ireland	1.8	0.5	0.2	China		31.2	16.6
Israel		0.6	0.3	Indonesia		4.8	2.5
Italy	16.7	4.3	2.0	India		13.1	6.9
Japan		9.5	4.5	Russian Federation		6.5	3.5
Korea		3.5	1.7	Saudi Arabia		2.9	1.5
Luxembourg	0.4	0.1	0.0	South Africa		1.3	0.7
Mexico		4.2	2.0	Dynamic Asian Economies		8.7	4.6
Netherlands	6.2	1.6	0.8	Other major oil producers		11.3	6.0
New Zealand		0.3	0.2	Rest of non-OECD		12.5	6.6
Norway		0.7	0.3				
Poland		1.9	0.9	Non-OECD countries		100.0	53.0
Portugal	2.3	0.6	0.3				
Slovak Republic	1.2	0.3	0.1	World			100.0

Note: Weights are calculated using nominal GDP at PPP rates in 2014. Regional aggregates are calculated using moving nominal GDP weights evaluated at PPP rates. Thus, the country weights differ from year to year. Also weights may vary for different components of GDP, as the weights are based on countries' share in the total of the particular component.

1. Countries that are members of both the euro area and the OECD.

Source: OECD Economic Outlook 97 database.

Irrevocable euro conversion rates

National currency unit per euro

Austria	13.7603	Italy	1936.27
Belgium	40.3399	Luxembourg	40.3399
Estonia	15.6466	Netherlands	2.20371
Finland	5.94573	Portugal	200.482
France	6.55957	Spain	166.386
Germany	1.95583	Slovak Republic	30.126
Greece	340.75	Slovenia	239.64
Ireland	0.78756		

Source : European Central Bank.

Non-OECD trade regions

Other industrialised Asia:	Dynamic Asia (Chinese Taipei; Hong Kong, China; Malaysia; Philippines; Singapore; Thailand and Vietnam) plus Indonesia and India.
Other oil producers:	Azerbaijan, Kazakhstan, Turkmenistan, Brunei, Timor-Leste, Bahrain, Iran, Iraq, Kuwait, Libya, Oman, Qatar, Saudi Arabia, United Arab Emirates, Yemen, Ecuador, Trinidad and Tobago, Venezuela, Algeria, Angola, Chad, Republic of Congo, Equatorial Guinea, Gabon, Nigeria, Sudan.

National accounts reporting systems, base years and latest data updates

The status of national accounts in the OECD countries is as follows :

	Expenditure accounts	Household accounts	Benchmark/ base year
Australia	SNA08 (1959q3-2014q4)	SNA08 (1959q3-2014q4)	2011/2012
Austria	ESA10 (1996q1-2014q4)	ESA10 (1995-2014)	2010
Belgium	ESA10 (1995q1-2014q4)	ESA10 (1995-2013)	2012
Canada	SNA08 (1961q1-2014q4)	SNA08 (1961q1-2014q4)	2007
Chile	SNA93 (1996q1-2015q1)	..	2008
Czech Republic	ESA10 (1996q1-2014q4)	ESA10 (1995-2013)	2010
Denmark	ESA10 (1995q1-2014q4)	ESA10 (1995-2014)	2010
Estonia	ESA10 (2000q1-2014q4)	ESA95 (2000-2013)	2010
Finland	ESA10 (1990q1-2014q4)	ESA10 (1995-2013)	2010
France	ESA10 (1949q1-2015q1)	ESA10 (1978-2013)	2010
Germany	ESA10 (1991q1-2015q1)	ESA10 (1991-2014)	2010
Greece	ESA10 (1995q1-2014q4)	..	2010
Hungary	ESA10 (1995q1-2014q4)	ESA10 (1999-2013)	2005
Iceland	SNA08 (1997q1-2014q4)	..	2005
Ireland	ESA10 (1997q1-2014q4)	ESA95 (1970-2013)	2012
Israel	SNA08 (1995q1-2015q1)	..	2010
Italy	ESA10 (1995q1-2014q4)	ESA10 (1995-2014)	2010
Japan	SNA93 (1994q1-2015q1)	SNA93 (1980-2013)	2005
Korea	SNA08 (1970q1-2015q1)	SNA08 (1975-2014)	2010
Luxembourg	ESA10 (1995q1-2014q3)	ESA95 (2007-2012)	2005
Mexico	SNA08 (1993q1-2014q4)	..	2008
Netherlands	ESA10 (1995q1-2015q1)	ESA10 (1995-2014)	2010
New Zealand	SNA93 (1987q4-2014q4)	SNA93 (1986-2013)	2009/2010
Norway	SNA08 (1978q1-2015q1)	SNA93 (1978-2013)	2012
Poland	ESA10 (2002q1-2014q4)	ESA95 (1995-2012)	2010
Portugal	ESA10 (1995q1-2014q4)	ESA10 (1999-2014)	2011
Slovak Republic	ESA10 (1997q1-2014q4)	ESA10 (1995-2013)	2010
Slovenia	ESA10 (1995q1-2014q4)	ESA10 (1995-2014)	2000
Spain	ESA10 (1995q1-2014q4)	ESA10 (2000-2013)	2010
Sweden	ESA10 (1995q1-2014q4)	ESA10 (1993q1-2014q4)	2013
Switzerland	ESA10 (1980q1-2014q4)	ESA10 (1995-2012)	2010
Turkey	SNA93 (1998q1-2014q4)	..	1998
United Kingdom	ESA10 (1963q1-2015q1)	ESA95 (1987q1-2014q4)	2011
United States	NIPA (SNA08) (1947q1-2015q1)	NIPA (SNA08) (1947q1-2015q1)	2009

Note: SNA: System of National Accounts. ESA: European Standardised Accounts. NIPA: National Income and Product Accounts. The numbers in brackets indicate the starting year for the time series and the latest available historical data included in this Outlook database.
BPM: Balance of Payments and International Investment Position Manual, edition 5 or 6.

National accounts reporting systems, base years and latest data updates *(con't)*

The status of national accounts in the OECD countries is as follows :

Government accounts		Balance of payments	
Financial	Non financial		
SNA08 (1959q3-2014q4)	SNA08 (1959q3-2014q4)	BPM6 (1959q3-2014q4)	Australia
ESA10 (1995-2014)	ESA10 (1995-2014)	BPM5 (1992q1-2014q4)	Austria
ESA10 (1998-2014)	ESA10 (1995-2014)	BPM6 (2008q1-2014q4)	Belgium
SNA08 (1961q1-2014q4)	SNA08 (1961q1-2014q4)	BPM6 (1981q1-2014q4)	Canada
..	..	BPM5 (2003q1-2014q4)	Chile
ESA10 (1998-2014)	ESA10 (1995-2014)	BPM6 (1993q1-2014q4)	Czech Republic
ESA10 (1994-2014)	ESA10 (1995-2014)	BPM6 (1995q1-2014q4)	Denmark
ESA10 (2000-2014)	ESA10 (2000-2014)	BPM6 (1993q1-2014q4)	Estonia
ESA10 (1995-2013)	ESA10 (1975-2014)	BPM6 (2006q1-2014q4)	Finland
ESA10 (1995-2014)	ESA10 (1978-2014)	BPM6 (2008q1-2014q4)	France
ESA10 (1991-2014)	ESA10 (1991-2014)	BPM6 (1991q1-2015q1)	Germany
ESA10 (1995-2014)	ESA10 (1995-2014)	BPM5 (1985q1-2014q4)	Greece
ESA10 (1995-2014)	ESA10 (1995-2014)	BPM6 (1995q1-2014q4)	Hungary
SNA08 (2003-2013)	SNA93 (1995-2013)	BPM6 (1995q1-2014q4)	Iceland
ESA10 (1990-2014)	ESA10 (1990-2014)	BPM6 (2002q1-2014q4)	Ireland
SNA08 (1995-2014)	SNA08 (1995-2013)	BPM5 (1995q1-2014q4)	Israel
ESA10 (1995-2014)	ESA10 (1995-2014)	BPM6 (1995q1-2014q4)	Italy
SNA93 (1994-2013)	SNA93 (1994-2013)	BPM6 (1994q1-2015q1)	Japan
SNA93 (2002-2012)	SNA08 (1975-2014)	BPM6 (1980q1-2014q4)	Korea
ESA10 (1990-2014)	ESA10 (1995-2014)	BPM6 (2002q1-2014q4)	Luxembourg
..	..	..	Mexico
ESA10 (1995-2014)	ESA10 (1995-2014)	BPM6 (2008q1-2014q4)	Netherlands
SNA93 (1960-2013)	SNA93 (1960-2013)	BPM6 (1987q1-2014q4)	New Zealand
SNA08 (1995-2014)	SNA08 (1995-2014)	BPM6 (1981q1-2014q4)	Norway
ESA10 (1998-2014)	ESA10 (2010-2014)	BPM6 (2004q1-2014q4)	Poland
ESA10 (1995-2014)	ESA10 (1995-2014)	BPM6 (1996q1-2014q4)	Portugal
ESA10 (1995-2013)	ESA10 (1995-2014)	BPM6 (2009q1-2014q4)	Slovak Republic
ESA10 (1995-2014)	ESA10 (1995-2014)	BPM6 (1996q1-2014q4)	Slovenia
ESA10 (1995-2014)	ESA10 (1995-2014)	BPM6 (1995q1-2014q4)	Spain
ESA10 (1997-2014)	ESA10 (1993-2014)	BPM6 (2006q1-2014q4)	Sweden
ESA10 (1999-2012)	ESA10 (1995-2014)	BPM6 (2000q1-2014q4)	Switzerland
..	..	BPM5 (1984q1-2014q4)	Turkey
ESA95 (1987q1-2014q4)	ESA95 (1987q1-2014q4)	BPM6 (1955q1-2014q4)	United Kingdom
NIPA (SNA08) (1952q1-2014q4)	NIPA (SNA08) (1947q1-2015q1)	BPM6 (1960q1-2014q4)	United States

Note: SNA: System of National Accounts. ESA: European Standardised Accounts. NIPA: National Income and Product Accounts. The numbers in brackets indicate the starting year for the time series and the latest available historical data included in this Outlook database.
BPM: Balance of Payments and International Investment Position Manual, edition 5 or 6.

Annex Tables

Demand and Output

1. Real GDP . . . 289
2. Nominal GDP . . . 290
3. Real private consumption expenditure . . . 291
4. Real public consumption expenditure . . . 292
5. Real total gross fixed capital formation . . . 293
6. Real gross private non-residential fixed capital formation . . . 294
7. Real gross residential fixed capital formation . . . 295
8. Real total domestic demand . . . 296
9. Foreign balance contributions to changes in real GDP . . . 297
10. Output gaps . . . 298

Wages, Costs, Unemployment and Inflation

11. Compensation per employee in the total economy . . . 299
12. Labour productivity in the total economy . . . 300
13. Unemployment rates: commonly used definitions . . . 301
14. Harmonised unemployment rates . . . 302
15. Labour force, employment and unemployment . . . 303
16. GDP deflators . . . 304
17. Private consumption deflators . . . 305
18. Consumer price indices . . . 306
19. Oil and other primary commodity markets . . . 307

Key Supply-side Data

20. Employment and labour force . . . 308
21. Potential GDP and productive capital stock . . . 309
22. Structural unemployment and unit labour costs . . . 310

Saving

23. Household saving rates . . . 311
24. Gross national saving . . . 312

Fiscal Balances and Public Indebteness

25. General government total outlays . . . 313
26. General government total tax and non-tax receipts . . . 314
27. General government financial balances . . . 315
28. General government cyclically-adjusted balances . . . 316
29. General government underlying balances . . . 317
30. General government underlying primary balances . . . 318
31. General government net debt interest payments . . . 319

32. General government gross financial liabilities 320
33. General government net financial liabilities 321

Interest Rates and Exchange Rates

34. Short-term interest rates 322
35. Long-term interest rates 323
36. Nominal exchange rates (*vis-à-vis* the US dollar) 324
37. Effective exchange rates 325

External Trade and Payments

38. Export volumes of goods and services 326
39. Import volumes of goods and services 327
40. Export prices of goods and services 328
41. Import prices of goods and services 329
42. Competitive positions: relative consumer prices 330
43. Competitive positions: relative unit labour costs 331
44. Export performance for total goods and services 332
45. Shares in world exports and imports 333
46. Geographical structure of world trade growth 334
47. Trade balances for goods and services 335
48. Balance of primary income 336
49. Balance of secondary income 337
50. Current account balances 338
51. Current account balances as a percentage of GDP 339
52. Structure of current account balances of major world regions 340
53. Export market growth in goods and services 341
54. Import penetration 342

Other Background Data

55. Quarterly demand and output projections 343
56. Quarterly price, cost and unemployment projections 345
57. Contributions to changes in real GDP in OECD countries 346
58. Household wealth and indebtedness 348
59. House prices 349
60. House price ratios 351
61. Maastricht definition of general government gross public debt 352

Annex Table 1. **Real GDP**

Percentage change from previous year

	Average 1990-00	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	Fourth quarter 2014	Fourth quarter 2015	Fourth quarter 2016
Australia	3.4	2.6	4.0	3.0	4.0	3.2	2.7	4.5	2.5	1.6	2.3	2.6	3.7	2.0	2.7	2.3	2.9	2.5	2.5	3.1
Austria	2.6	1.2	1.6	0.7	2.6	2.2	3.6	3.5	1.3	-3.7	1.8	3.2	1.0	0.1	0.4	0.6	1.7	0.0	1.2	1.8
Belgium	2.2	0.9	1.6	0.9	3.4	1.9	2.6	3.0	1.0	-2.6	2.5	1.6	0.1	0.3	1.1	1.3	1.8	1.0	1.6	1.8
Brazil	..	1.3	3.0	1.3	5.6	3.2	4.0	6.0	5.0	-0.2	7.6	3.9	1.8	2.7	0.2	-0.8	1.1	..	..	..
Canada	2.9	1.7	2.8	1.9	3.1	3.2	2.6	2.0	1.2	-2.7	3.4	3.0	1.9	2.0	2.4	1.5	2.3	2.5	1.2	2.4
Chile	6.6	3.3	2.7	3.8	6.9	6.2	5.8	5.2	3.2	-1.0	5.7	5.8	5.5	4.3	1.8	2.9	3.7	1.9	3.3	4.2
China	10.4	8.3	9.1	10.0	10.1	11.3	12.7	14.2	9.6	9.2	10.6	9.5	7.7	7.7	7.4	6.8	6.7	..	..	..
Colombia	..	1.7	2.5	3.9	5.3	4.7	6.7	6.9	3.5	1.7	4.0	6.6	4.0	4.9	4.6	3.3	3.7	..	..	..
Czech Republic	..	3.0	1.6	3.6	4.8	6.5	7.1	5.5	2.5	-4.7	2.1	2.0	-0.7	-0.7	2.0	3.1	2.5	1.4	3.2	3.0
Denmark	2.7	0.8	0.5	0.4	2.6	2.4	3.8	0.8	-0.7	-5.1	1.6	1.2	-0.7	-0.5	1.1	1.9	2.3	1.6	2.0	2.4
Estonia	..	6.2	6.1	7.5	6.5	9.5	10.4	7.9	-5.3	-14.7	2.5	8.3	4.7	1.6	2.1	2.1	3.3	2.9	1.5	4.2
Finland	2.3	2.6	1.7	2.0	3.9	2.8	4.1	5.2	0.7	-8.3	3.0	2.6	-1.4	-1.3	-0.1	0.4	1.3	-0.2	1.0	1.3
France	2.1	1.9	1.1	0.8	2.6	1.6	2.6	2.3	0.1	-2.9	1.9	2.1	0.2	0.7	0.2	1.1	1.7	0.0	1.5	1.9
Germany	2.0	1.8	0.0	-0.7	0.7	0.9	3.9	3.4	0.8	-5.6	3.9	3.7	0.6	0.2	1.6	1.6	2.3	1.5	1.8	2.5
Greece	2.5	3.6	3.1	6.5	4.9	1.1	5.7	3.4	-0.4	-4.4	-5.3	-8.9	-6.6	-4.0	0.7	0.1	2.3	1.3	0.4	3.2
Hungary	..	3.8	4.5	3.8	4.7	4.4	4.0	0.5	0.7	-6.5	0.8	1.8	-1.8	1.7	3.6	3.0	2.2	3.3	2.7	2.0
Iceland	2.6	3.8	0.5	2.7	8.2	6.0	4.2	9.7	1.2	-5.1	-3.1	2.4	1.3	3.6	1.9	3.7	2.9	1.9	2.7	2.7
India	..	4.0	4.6	7.0	8.1	9.2	9.3	10.0	6.0	5.4	11.1	7.7	5.2	6.4	7.2	6.9	7.6	..	..	..
Indonesia	..	3.6	4.5	4.8	5.0	5.7	5.5	6.3	6.0	4.7	6.4	6.2	6.0	5.6	5.0	4.9	5.5	..	..	..
Ireland	7.2	5.3	5.9	3.0	4.6	5.7	5.5	4.9	-2.7	-6.4	-0.3	2.8	-0.3	0.2	4.8	3.5	3.3	4.1	4.6	2.6
Israel	6.0	0.1	-0.1	1.1	5.0	4.3	5.6	6.1	3.9	1.6	5.7	4.2	3.0	3.4	2.8	3.4	3.5	3.0	3.2	3.4
Italy	1.6	1.6	0.3	0.2	1.4	1.1	2.1	1.4	-1.1	-5.5	1.7	0.7	-2.8	-1.7	-0.4	0.6	1.5	-0.5	1.2	1.7
Japan	1.1	0.4	0.3	1.7	2.4	1.3	1.7	2.2	-1.0	-5.5	4.7	-0.5	1.7	1.6	-0.1	0.7	1.4	-0.8	1.9	1.3
Korea	6.9	4.5	7.4	2.9	4.9	3.9	5.2	5.5	2.8	0.7	6.5	3.7	2.3	2.9	3.3	3.0	3.6	2.7	3.7	3.5
Latvia	..	7.2	7.2	8.6	8.9	10.2	11.6	9.8	-3.2	-14.2	-2.9	5.0	4.8	4.2	2.4	2.4	3.6	..	..	..
Luxembourg	5.0	2.0	3.3	1.2	4.9	4.1	4.9	6.4	0.5	-5.4	5.1	2.6	-0.1	2.0	3.0	2.7	2.9	4.3	2.0	3.2
Mexico	3.3	-0.3	0.1	1.4	4.0	3.3	5.0	3.1	1.2	-4.5	5.1	4.0	3.8	1.7	2.1	2.9	3.5	2.6	3.2	3.4
Netherlands	3.2	1.7	0.0	0.3	1.6	2.4	3.9	4.2	2.0	-3.3	1.0	1.7	-1.6	-0.7	0.9	2.0	2.2	1.4	1.8	2.3
New Zealand	3.0	2.2	5.2	4.6	4.4	2.8	2.4	3.7	-0.8	0.5	2.0	1.4	2.9	2.5	3.1	3.4	3.0	3.7	3.1	3.0
Norway	3.7	2.1	1.4	0.9	4.0	2.6	2.4	2.9	0.4	-1.6	0.6	1.0	2.7	0.7	2.2	1.2	1.5	3.0	0.3	2.4
Poland	..	1.3	1.4	3.6	5.1	3.5	6.2	7.2	3.9	2.6	3.7	4.8	1.8	1.7	3.4	3.5	3.7	3.5	3.6	3.8
Portugal	2.9	1.9	0.8	-0.9	1.8	0.8	1.6	2.5	0.2	-3.0	1.9	-1.8	-4.0	-1.6	0.9	1.6	1.8	0.7	1.6	1.8
Russian Federation	..	5.1	4.7	7.3	7.2	6.4	8.2	8.5	5.2	-7.8	4.5	4.3	3.4	1.3	0.6	-3.1	0.8	..	..	..
Slovak Republic	..	3.3	4.7	5.4	5.2	6.5	8.3	10.7	5.4	-5.3	4.8	2.7	1.6	1.4	2.4	3.0	3.4	2.6	3.1	3.5
Slovenia	1.8	2.9	3.8	2.8	4.4	4.0	5.7	6.9	3.3	-7.8	1.2	0.6	-2.6	-1.0	2.6	2.1	1.9	2.2	1.9	2.5
South Africa	..	2.7	3.7	2.9	4.6	5.3	5.6	5.4	3.2	-1.5	3.0	3.2	2.2	2.2	1.5	1.9	2.2	..	..	..
Spain	2.8	4.0	2.9	3.2	3.2	3.7	4.2	3.8	1.1	-3.6	0.0	-0.6	-2.1	-1.2	1.4	2.9	2.8	2.0	3.1	2.8
Sweden	2.1	1.7	2.1	2.5	3.8	2.8	4.9	3.5	-0.7	-5.1	5.7	2.7	0.0	1.3	2.3	2.8	3.0	2.6	2.6	3.1
Switzerland	1.2	1.4	0.1	0.0	2.8	3.0	4.0	4.1	2.3	-2.1	3.0	1.8	1.1	1.9	2.0	0.8	1.7	2.0	0.2	2.3
Turkey	3.7	-5.7	6.2	5.3	9.4	8.4	6.9	4.7	0.7	-4.8	9.2	8.8	2.1	4.2	2.9	3.1	3.9	..	..	..
United Kingdom	2.4	2.7	2.5	4.3	2.5	2.8	3.0	2.6	-0.3	-4.3	1.9	1.6	0.7	1.7	2.8	2.4	2.3	3.0	2.4	2.1
United States	3.4	1.0	1.8	2.8	3.8	3.3	2.7	1.8	-0.3	-2.8	2.5	1.6	2.3	2.2	2.4	2.0	2.8	2.4	1.7	2.8
Euro area	2.2	2.1	0.9	0.6	2.0	1.7	3.3	3.0	0.4	-4.5	2.0	1.7	-0.8	-0.3	0.9	1.4	2.1	0.8	1.8	2.2
Total OECD	2.8	1.3	1.7	2.1	3.2	2.8	3.2	2.7	0.3	-3.4	3.0	1.9	1.3	1.4	1.8	1.9	2.5	1.8	2.1	2.6

Note: The adoption of national accounts systems has been proceeding at an uneven pace among OECD member countries, both with respect to variables and the time period covered. As a consequence, there are breaks in many national series. For further information, see table "National Accounts Reporting Systems, base years and latest data updates" at the beginning of the Statistical Annex.

Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933222538

Annex Table 2. **Nominal GDP**

Percentage change from previous year

	Average 1990-00	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	Fourth quarter 2014	Fourth quarter 2015	Fourth quarter 2016
Australia	5.2	6.3	7.2	6.2	7.7	7.9	7.9	9.1	9.1	1.7	8.0	7.1	3.3	3.3	3.1	1.9	4.9	1.6	3.0	5.4
Austria	4.5	3.1	2.8	2.0	4.4	4.9	5.5	5.9	3.2	-1.9	2.7	5.0	2.8	1.6	2.0	1.7	3.2	1.7	2.2	3.5
Belgium	4.2	3.0	3.5	2.8	5.7	4.3	5.2	5.4	2.9	-1.5	4.6	3.9	2.2	1.8	1.7	1.9	3.1	1.4	2.3	3.4
Brazil	..	9.5	13.3	15.3	13.9	10.9	11.0	12.8	14.3	7.1	16.8	12.6	7.7	9.4	7.1	6.2	7.1	..	..	..
Canada	4.7	3.3	4.1	5.3	6.5	6.5	5.4	5.3	5.1	-4.8	6.1	6.5	3.5	3.4	4.3	1.2	4.1	3.8	1.6	4.6
Chile	14.9	7.6	6.7	8.9	15.0	13.8	19.1	10.3	3.8	2.8	15.1	9.3	6.4	6.2	7.4	8.0	7.1	7.8	7.3	8.1
China	..	10.5	9.7	12.9	17.7	15.7	17.1	23.1	18.2	9.1	18.3	18.4	10.3	10.1	8.2	6.7	7.6	..	..	..
Colombia	..	8.3	8.6	11.0	13.0	10.5	12.9	12.3	11.4	5.1	8.0	13.8	7.2	6.9	6.5	6.0	7.0	..	..	..
Czech Republic	..	8.0	4.3	4.7	9.0	6.6	7.8	9.2	4.6	-2.2	0.7	1.7	0.7	0.9	4.4	4.3	4.1	3.3	4.5	4.7
Denmark	4.5	3.4	2.8	1.9	4.8	5.4	6.1	3.4	3.4	-4.6	4.9	1.9	1.8	1.1	1.7	3.2	3.6	2.8	3.0	4.1
Estonia	..	12.8	11.4	12.1	11.6	16.0	20.1	20.1	1.7	-14.4	4.0	11.5	7.5	6.2	4.2	3.2	5.3	4.5	2.6	6.5
Finland	4.1	6.0	2.7	2.2	4.6	3.7	5.0	8.1	3.8	-6.5	3.4	5.2	1.5	1.1	1.0	0.9	1.9	0.7	1.1	2.2
France	3.4	4.0	3.2	2.7	4.3	3.6	4.8	4.9	2.5	-2.8	3.0	3.1	1.4	1.5	0.7	2.1	2.5	0.9	2.4	2.8
Germany	3.8	3.1	1.4	0.5	1.8	1.5	4.2	5.1	1.6	-3.9	4.7	4.8	2.1	2.3	3.3	3.4	3.8	3.0	3.8	4.0
Greece	12.0	7.1	6.7	10.0	8.2	3.1	9.3	6.9	3.9	-1.8	-4.5	-8.3	-6.6	-6.2	-1.9	-1.0	2.2	-0.7	0.7	3.0
Hungary	..	15.7	13.3	9.3	9.5	6.8	8.2	5.9	5.4	-2.6	2.9	4.1	1.8	4.9	6.7	4.7	5.1	6.6	5.0	5.1
Iceland	6.3	12.8	6.1	3.2	11.0	9.7	13.4	14.5	12.7	2.4	2.2	5.1	4.5	5.7	6.0	9.8	6.3	9.2	6.1	5.5
India	..	7.6	7.9	11.0	13.9	14.0	15.8	16.4	15.7	10.0	21.7	17.2	13.2	13.6	11.7	11.6	13.2	..	..	..
Indonesia	..	18.5	10.7	10.5	14.0	20.8	20.4	18.3	25.3	11.0	14.2	14.1	10.0	10.6	10.7	10.4	10.3	..	..	..
Ireland	11.0	12.5	11.5	7.2	7.4	8.8	8.7	7.0	-5.0	-10.0	-1.9	3.7	1.0	1.2	6.1	5.8	5.2	7.2	5.5	5.0
Israel	16.4	1.7	4.2	0.6	5.1	5.5	7.0	7.0	5.8	5.8	7.3	6.2	7.3	5.8	3.8	6.4	4.6	4.9	5.2	4.8
Italy	5.5	4.6	3.6	3.4	4.0	3.0	4.0	3.8	1.4	-3.7	2.0	2.2	-1.5	-0.4	0.5	1.1	2.4	0.1	1.7	2.9
Japan	1.3	-0.8	-1.3	-0.1	1.0	0.0	0.6	1.2	-2.3	-6.0	2.4	-2.3	0.8	1.0	1.6	3.0	2.5	1.5	3.7	2.8
Korea	12.4	8.3	10.7	6.4	8.0	5.0	5.0	8.0	5.9	4.3	9.9	5.3	3.4	3.8	3.9	4.1	4.6	3.4	5.3	4.5
Latvia	..	9.6	12.7	14.0	16.3	22.5	25.5	32.0	8.3	-22.6	-3.8	11.7	8.6	5.3	3.6	3.5	6.1	..	..	..
Luxembourg	7.7	1.5	5.5	4.1	6.9	8.0	11.9	8.0	4.4	-3.9	9.1	7.8	3.3	3.4	4.6	4.5	4.3	6.3	2.9	5.0
Mexico	21.5	4.8	5.8	7.5	12.9	8.6	11.6	8.2	7.5	-1.3	9.8	9.5	7.4	3.2	5.8	6.1	6.5	6.2	6.4	6.6
Netherlands	5.7	6.2	3.7	2.5	2.7	4.0	6.1	6.1	4.4	-2.8	2.2	1.9	-0.4	0.4	1.9	2.3	3.6	2.5	2.7	3.7
New Zealand	4.4	6.7	5.9	6.1	7.9	5.3	4.8	8.1	2.9	1.3	5.0	4.3	2.5	5.4	5.6	2.6	4.6	1.9	3.8	4.6
Norway	7.2	3.8	-0.3	3.8	10.0	11.6	11.4	6.1	10.9	-6.7	6.6	7.8	6.2	3.5	2.6	0.7	4.1	0.9	1.9	4.4
Poland	..	5.0	3.6	4.4	9.6	6.2	8.2	11.4	7.6	6.6	5.5	8.1	4.0	2.9	3.8	3.6	5.1	2.7	4.8	5.3
Portugal	8.7	5.7	5.0	2.5	4.3	4.1	4.8	5.5	1.9	-1.9	2.6	-2.1	-4.4	0.6	2.2	2.1	2.1	1.1	2.3	2.3
Russian Federation	..	22.4	21.1	22.3	28.9	26.9	24.6	23.5	24.2	-6.0	19.3	20.9	11.1	6.5	7.9	7.4	7.9	..	..	..
Slovak Republic	..	8.6	8.9	11.1	11.3	9.2	11.4	11.9	8.4	-6.4	5.3	4.4	2.9	2.0	2.2	3.2	4.7	2.6	3.7	5.1
Slovenia	36.3	11.9	11.7	8.7	7.8	5.6	8.0	11.4	8.0	-4.7	0.1	1.8	-2.3	0.4	3.0	3.0	1.4	1.7	3.3	1.6
South Africa	..	10.5	16.4	8.9	11.4	11.0	12.2	14.7	12.3	5.9	9.6	10.1	7.9	8.3	7.4	7.1	7.9	..	..	..
Spain	7.0	8.2	7.1	7.2	7.2	8.0	8.3	7.2	3.3	-3.3	0.2	-0.5	-1.9	-0.6	0.9	4.1	3.6	1.4	4.9	3.3
Sweden	4.5	4.2	3.7	4.3	4.4	3.6	6.8	6.5	2.6	-2.8	6.8	3.9	1.0	2.4	3.6	4.3	4.7	3.8	4.1	4.9
Switzerland	2.5	2.5	-0.2	1.0	3.2	3.7	6.0	6.5	4.2	-1.7	3.3	2.0	1.0	1.7	2.0	0.2	2.1	2.0	-0.2	2.8
Turkey	77.8	44.1	45.9	29.8	22.9	16.1	16.9	11.2	12.7	0.2	15.4	18.1	9.2	10.6	11.6	10.4	10.6	..	..	..
United Kingdom	5.2	3.8	5.2	6.6	5.4	5.7	5.8	5.5	2.5	-2.4	5.1	3.8	2.3	3.5	4.6	2.8	3.5	4.4	2.6	3.6
United States	5.6	3.3	3.3	4.9	6.6	6.7	5.8	4.5	1.7	-2.0	3.8	3.7	4.2	3.7	3.9	3.1	4.6	3.7	3.1	4.7
Euro area	..	4.6	3.4	2.9	4.0	3.6	5.3	5.4	2.3	-3.5	2.7	2.7	0.4	1.0	1.7	2.6	3.2	1.7	3.0	3.4
Total OECD	7.4	4.5	4.2	4.5	5.9	5.3	5.8	5.2	2.6	-2.4	4.4	3.8	2.8	2.8	3.4	3.3	4.2	3.2	3.6	4.4

Note: The adoption of national accounts systems has been proceeding at an uneven pace among OECD member countries, both with respect to variables and the time period covered. As a consequence, there are breaks in many national series. For further information, see table "National Accounts Reporting Systems, base years and latest data updates" at the beginning of the Statistical Annex.

Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933222546

Annex Table 3. **Real private consumption expenditure**

Percentage change from previous year

	Average 1990-00	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	Fourth quarter 2014	Fourth quarter 2015	Fourth quarter 2016
Australia	3.4	3.1	4.2	3.9	5.7	3.2	3.8	5.6	1.9	0.8	3.3	3.1	2.5	1.7	2.5	2.7	3.0	2.8	2.6	3.1
Austria	2.1	1.3	0.7	1.7	2.1	2.5	2.2	1.0	0.6	0.8	1.3	1.0	0.6	-0.2	0.2	0.8	1.8	0.1	1.3	1.6
Belgium	1.7	1.2	0.4	0.6	1.5	1.3	1.5	1.8	1.8	0.2	2.8	0.6	0.8	0.3	0.9	1.5	1.3	1.8	1.3	1.4
Brazil	..	0.6	1.2	-0.7	3.9	4.3	5.4	6.3	6.4	4.2	6.4	4.8	3.9	2.9	0.9	0.6	1.2	..	..	..
Canada	2.6	2.4	3.7	3.0	3.0	3.6	4.1	4.3	2.9	0.4	3.4	2.3	1.9	2.5	2.7	2.1	2.3	2.6	2.1	2.2
Chile	..	2.7	2.8	4.5	8.4	8.5	7.8	7.6	5.2	-0.8	10.8	8.9	6.1	5.9	2.2	2.2	3.3	1.1	2.4	3.8
China	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Colombia	..	1.5	2.0	2.9	3.9	4.1	6.4	7.2	3.5	0.6	5.0	6.0	4.4	3.8	4.3	3.6	3.2	..	..	..
Czech Republic	..	2.8	2.9	4.8	3.4	3.3	3.9	4.1	2.8	-0.6	0.9	0.2	-1.7	0.4	1.7	2.7	2.4	2.0	2.3	2.5
Denmark	2.0	0.2	1.4	1.3	4.6	3.7	2.9	1.8	0.5	-3.4	0.8	0.2	0.4	0.0	0.5	1.9	2.2	2.0	1.6	2.5
Estonia	..	6.5	9.5	9.1	7.7	9.3	12.7	9.0	-4.9	-15.3	-1.6	2.5	5.1	3.8	4.6	4.3	4.3	5.8	3.7	4.4
Finland	1.4	2.9	2.6	4.2	3.6	3.2	4.1	3.5	2.1	-2.7	3.1	2.9	0.3	-0.6	-0.2	0.6	1.2	-0.4	1.2	1.2
France	1.9	2.5	2.0	1.5	1.9	2.5	2.4	2.4	0.4	0.3	1.8	0.4	-0.2	0.5	0.7	1.6	1.7	0.6	1.7	2.1
Germany	2.0	1.7	-0.8	0.1	0.5	0.5	1.6	0.0	0.4	0.2	0.5	2.3	0.6	0.9	1.2	2.3	2.0	2.2	2.2	1.9
Greece	2.6	4.2	4.9	3.9	4.3	4.6	2.9	3.4	2.7	-0.7	-6.9	-10.7	-7.9	-2.2	1.4	0.9	1.1	..	..	..
Hungary	..	4.5	8.1	8.3	1.9	2.8	1.5	1.1	-1.1	-6.7	-2.8	0.8	-1.9	-0.1	1.6	2.4	2.0	1.7	2.6	1.8
Iceland	3.4	-3.0	-0.8	6.7	7.4	10.7	2.5	7.0	-6.9	-9.9	-0.2	2.6	2.0	0.5	3.7	3.9	2.8	4.7	3.3	2.6
India	..	6.0	3.3	5.4	5.2	7.8	8.6	9.0	8.1	7.0	8.2	9.6	6.4	5.7	6.0	6.6	6.9	..	..	..
Indonesia	..	3.5	3.8	3.9	5.0	4.0	3.2	5.0	5.3	4.7	4.1	5.1	5.5	5.4	5.3	4.9	5.4	..	..	..
Ireland	5.8	4.5	3.5	2.7	3.7	7.1	6.6	6.6	-0.2	-5.9	0.4	-1.1	-1.4	-0.4	1.2	2.4	2.2	2.1	2.0	2.4
Israel	..	3.9	1.8	0.3	5.1	3.4	5.1	7.6	1.4	2.1	4.7	2.9	3.0	3.5	4.0	5.2	3.7	5.2	4.2	3.6
Italy	1.7	0.7	0.0	0.8	1.0	1.3	1.4	1.2	-1.1	-1.5	1.2	0.0	-4.0	-2.8	0.3	0.4	1.1	0.5	0.6	1.2
Japan	1.3	1.6	1.2	0.5	1.2	1.5	1.1	0.9	-0.9	-0.7	2.8	0.3	2.3	2.1	-1.3	0.3	2.0	-2.4	1.9	2.0
Korea	6.1	5.7	8.9	-0.5	0.3	4.4	4.6	5.1	1.4	0.2	4.4	2.9	1.9	1.9	1.8	2.3	2.8	1.4	2.6	2.8
Latvia	..	4.9	6.7	7.5	10.2	10.8	20.2	10.9	-8.0	-16.2	3.1	2.9	3.0	6.2	2.3	2.8	3.6	..	..	..
Luxembourg	3.4	2.7	4.4	1.1	0.3	3.3	3.8	2.6	0.0	0.8	2.0	1.2	1.9	1.5	2.7	2.0	2.8	2.6	2.0	3.0
Mexico	3.2	2.3	1.4	1.1	5.3	4.7	5.5	3.0	1.7	-6.3	5.7	4.8	4.7	2.5	2.0	2.7	3.1	2.7	3.0	3.1
Netherlands	3.3	2.1	1.1	-0.1	0.2	0.8	-0.6	2.1	1.0	-1.8	-0.1	0.2	-1.5	-1.5	0.1	1.5	1.6	0.8	1.4	1.6
New Zealand	2.7	2.1	4.2	6.3	6.1	4.9	2.6	3.6	0.4	-0.7	3.0	2.1	2.8	2.9	3.2	3.7	2.8	3.7	3.3	2.6
Norway	3.4	2.1	3.1	3.2	5.4	4.4	5.0	5.3	1.7	0.0	3.8	2.3	3.5	2.1	2.0	1.8	1.9	2.5	1.4	2.6
Poland	..	2.3	3.3	1.6	4.2	2.4	4.7	6.4	6.1	3.4	2.7	2.9	0.9	1.0	3.0	3.5	3.6	3.4	3.5	3.6
Portugal	3.2	0.9	1.3	-0.3	2.6	1.6	1.5	2.5	1.4	-2.3	2.4	-3.6	-5.5	-1.5	2.1	1.8	1.5	1.9	1.7	1.3
Russian Federation	..	9.3	8.3	7.4	11.9	11.7	12.0	14.2	10.4	-5.1	5.5	6.7	7.7	4.9	1.2	-4.7	0.2	..	..	..
Slovak Republic	..	5.0	6.1	2.9	5.0	5.8	5.9	7.5	6.0	-0.5	0.1	-0.7	-0.4	-0.7	2.2	2.6	2.6	2.6	2.8	2.5
Slovenia	2.7	2.4	2.5	3.4	3.0	2.2	1.2	6.4	2.4	0.9	1.0	-0.1	-3.0	-3.9	0.3	0.4	1.3	-0.8	1.4	1.5
South Africa	..	3.5	3.2	2.8	6.2	6.1	8.3	5.7	1.0	-1.8	4.5	4.9	3.4	2.9	1.4	1.7	2.1	..	..	..
Spain	2.5	3.7	3.0	2.4	4.0	4.0	3.8	3.3	-0.7	-3.6	0.3	-2.0	-2.9	-2.3	2.4	3.8	2.6	3.3	3.5	2.3
Sweden	1.6	0.8	2.6	2.4	2.6	2.8	2.8	3.9	0.2	0.4	3.8	1.9	0.9	2.0	2.4	2.5	2.7	2.5	2.5	2.7
Switzerland	1.3	2.1	0.3	0.4	1.8	1.5	1.5	2.3	1.5	1.3	1.6	0.8	2.8	2.2	1.0	1.6	1.5	1.0	1.4	1.8
Turkey	3.7	-6.6	4.7	10.2	11.0	7.9	4.6	5.5	-0.3	-2.3	6.7	7.7	-0.5	5.1	1.3	3.0	3.6	..	..	..
United Kingdom	3.2	3.8	4.0	3.9	3.6	3.0	2.1	2.6	-0.5	-3.1	0.4	0.1	1.1	1.7	2.5	2.5	2.3	3.0	2.3	2.1
United States	3.7	2.6	2.6	3.1	3.8	3.5	3.0	2.2	-0.3	-1.6	1.9	2.3	1.8	2.4	2.5	3.0	3.0	2.9	2.9	2.8
Euro area	2.1	2.0	0.9	1.0	1.6	1.9	2.1	1.7	0.2	-0.9	0.8	0.2	-1.3	-0.6	1.0	1.8	1.8	1.5	1.8	1.8
Total OECD	2.9	2.2	2.3	2.3	3.1	3.1	2.8	2.5	0.2	-1.4	2.1	1.7	1.1	1.6	1.7	2.4	2.6	1.9	2.4	2.5

Note: The adoption of national accounts systems has been proceeding at an uneven pace among OECD member countries, both with respect to variables and the time period covered. As a consequence, there are breaks in many national series. For further information, see table "National Accounts Reporting Systems, base years and latest data updates" at the beginning of the Statistical Annex.

Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933222551

Annex Table 4. **Real public consumption expenditure**

Percentage change from previous year

	Average 1990-00	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	Fourth quarter 2014	Fourth quarter 2015	Fourth quarter 2016
Australia	2.9	2.3	2.6	3.9	3.8	2.8	3.7	3.1	4.3	1.6	3.4	3.6	2.3	0.8	2.0	1.3	1.6	2.0	0.7	2.0
Austria	2.5	-0.3	1.3	1.3	1.1	2.3	3.0	1.6	3.7	2.5	0.4	0.3	0.3	0.4	1.0	1.0	-0.6	0.8	0.6	-0.4
Belgium	1.7	1.5	2.6	1.5	1.6	0.7	1.2	1.8	2.9	1.5	1.2	0.8	1.5	1.1	1.0	-0.3	-0.1	1.1	-1.0	0.2
Brazil	..	2.6	3.8	1.6	3.9	2.0	3.6	4.1	2.1	2.9	3.9	2.2	3.2	2.2	1.4	-1.5	-0.5	..	..	..
Canada	0.6	3.3	2.2	2.9	2.0	1.6	3.1	2.8	4.6	3.3	2.7	0.8	1.2	0.4	0.2	0.1	1.0	0.4	0.1	1.3
Chile	..	2.4	2.3	0.8	6.1	5.9	6.4	7.0	0.3	9.2	4.6	2.5	3.5	3.4	4.4	7.0	5.1	5.4	6.6	5.0
Colombia	..	2.2	-0.6	1.8	6.4	5.2	5.5	6.1	3.2	6.0	5.6	3.5	6.4	9.3	6.2	1.9	2.2	..	..	..
Czech Republic	..	3.3	8.2	6.0	-1.5	0.6	0.4	0.4	1.1	3.0	0.4	-2.9	-1.0	2.3	2.3	0.9	2.3	4.2	-1.4	1.9
Denmark	2.3	1.9	2.1	0.2	1.5	1.2	2.5	1.2	3.2	3.0	1.3	-1.4	-0.2	-0.5	1.4	0.9	0.6	1.0	1.0	0.4
Estonia	..	3.2	3.1	4.1	3.0	3.0	5.4	6.6	4.5	-3.2	-0.4	1.7	3.3	2.8	2.3	3.2	1.7	5.2	1.6	1.8
Finland	0.8	2.3	2.4	1.3	1.5	1.9	1.1	1.3	1.6	1.6	-0.1	-0.1	0.5	0.6	0.2	0.5	0.0	0.6	0.0	0.0
France	1.7	1.0	1.8	1.9	2.1	1.3	1.4	1.8	1.1	2.5	1.2	1.1	1.6	1.7	1.5	1.2	0.3	1.6	0.6	0.3
Germany	2.3	0.5	1.2	0.5	-0.8	0.5	1.0	1.5	3.4	3.0	1.3	0.7	1.2	0.7	1.2	2.2	1.8	1.7	2.2	1.7
Greece	1.8	4.0	2.1	5.8	4.1	4.6	5.5	4.8	-2.2	1.8	-4.4	-6.3	-6.7	-5.1	-0.8	-1.7	-0.9	..	..	..
Hungary	..	3.5	5.4	5.0	2.2	3.1	1.4	-6.6	3.1	1.4	-0.6	0.0	-1.3	3.2	2.4	2.0	0.3	3.3	0.8	0.2
Iceland	2.7	4.0	5.5	2.0	2.5	3.5	4.1	4.5	4.7	-1.7	-3.0	1.2	-1.7	0.7	1.8	0.7	1.2	2.1	0.4	1.4
India	..	5.5	-2.5	5.3	-1.5	12.0	3.8	5.4	14.3	11.3	7.9	5.8	3.6	8.3	6.9	4.2	9.7	..	..	..
Indonesia	..	7.6	13.0	10.0	4.0	6.6	9.6	3.9	10.4	11.2	4.0	5.5	4.5	6.9	2.0	2.9	3.9	..	..	..
Ireland	4.3	10.5	6.4	3.1	1.8	4.5	5.4	6.7	1.2	-2.6	-4.8	-2.3	-1.3	-0.1	0.3	-0.4	1.3	-2.4	0.0	2.1
Israel	..	3.5	5.0	-3.0	-1.7	1.9	3.5	2.4	2.3	2.9	2.9	2.7	3.6	3.5	4.2	3.1	1.9	5.5	1.5	1.9
Italy	0.3	4.2	1.2	1.3	1.0	0.6	-0.4	0.4	1.0	0.4	0.6	-1.8	-1.2	-0.3	-0.9	-0.5	-0.9	-0.3	-1.6	0.4
Japan	3.1	4.2	2.6	1.9	1.5	0.8	0.0	1.1	-0.1	2.3	1.9	1.2	1.7	1.9	0.3	0.9	0.1	0.6	1.1	-1.2
Korea	4.2	6.2	5.6	3.8	4.5	4.5	7.4	6.1	5.1	5.2	3.8	2.2	3.4	3.3	2.8	3.2	4.0	3.1	3.3	4.0
Latvia	..	5.5	3.5	4.4	3.6	2.7	6.5	3.3	2.4	-10.7	-8.1	3.1	0.4	2.9	3.4	3.0	2.8	..	..	..
Luxembourg	4.2	6.8	4.5	3.7	3.4	4.0	0.6	1.4	2.4	4.1	3.2	1.3	3.8	5.1	3.2	1.2	2.4	2.4	1.7	2.7
Mexico	1.8	-3.2	-1.0	-0.6	2.5	2.9	3.3	2.4	3.2	2.3	1.6	2.5	3.3	1.6	2.5	-0.3	-0.2	1.8	-0.7	-0.8
Netherlands	2.1	3.5	4.8	3.0	0.4	2.0	10.2	3.2	4.1	4.0	1.1	-0.2	-1.5	-0.2	-0.3	0.0	-0.3	-0.4	0.3	-0.1
New Zealand	1.2	4.3	1.7	3.5	5.0	7.1	4.8	4.2	4.5	0.6	0.8	2.5	-0.9	1.9	3.6	1.4	0.3	3.2	0.7	0.1
Norway	3.2	4.1	2.9	1.3	1.3	1.9	1.9	2.0	2.4	4.1	2.2	1.0	1.6	1.7	2.7	2.4	2.4	2.6	2.4	2.3
Poland	..	2.6	1.7	3.5	3.8	3.6	5.5	3.0	5.1	3.6	3.3	-2.3	0.2	2.1	2.8	2.9	2.5	3.2	2.6	2.5
Portugal	3.3	3.6	2.6	1.6	2.9	2.7	-0.2	0.6	0.4	2.6	-1.3	-3.8	-3.3	-2.4	-0.3	-0.5	0.2	-1.4	0.1	0.2
Russian Federation	..	-0.8	2.6	2.3	2.1	1.4	2.3	2.7	3.4	-0.6	-1.5	1.4	2.6	1.1	-0.1	0.0	0.5	..	..	..
Slovak Republic	..	5.5	3.5	5.8	-2.8	5.9	8.3	-0.5	5.6	6.9	1.7	-2.1	-2.0	2.4	4.4	3.2	1.8	4.1	2.6	1.5
Slovenia	2.7	2.8	3.2	2.7	2.7	2.7	3.1	1.9	4.9	2.4	0.1	-1.3	-1.5	-1.1	-0.5	-0.3	-0.2	1.1	-1.1	-0.2
South Africa	..	3.1	4.6	5.7	5.2	5.1	4.9	4.0	5.8	4.6	3.0	1.7	3.4	3.3	1.9	1.5	0.8	..	..	..
Spain	3.1	3.8	3.9	4.9	6.3	5.6	5.0	6.2	5.9	4.1	1.5	-0.3	-3.7	-2.9	0.1	-0.8	0.0	-0.5	0.1	0.0
Sweden	1.0	0.3	2.0	0.9	-0.8	0.2	1.8	0.9	1.2	2.1	1.0	0.9	1.5	0.8	2.0	1.8	1.7	2.5	1.5	1.9
Switzerland	1.0	2.3	1.6	2.4	0.8	1.1	0.1	0.1	-1.9	3.5	0.2	2.1	2.9	1.4	1.1	2.5	2.2	1.4	1.7	2.2
Turkey	4.7	-1.1	5.8	-2.6	6.0	2.5	8.4	6.5	1.7	7.8	2.0	4.7	6.1	6.5	4.6	2.7	4.2	..	..	..
United Kingdom	1.4	4.0	4.2	4.6	2.8	2.3	2.2	1.2	2.0	1.2	0.0	0.0	2.3	-0.3	1.7	1.3	-0.7	2.1	1.0	-1.5
United States	1.0	3.5	3.9	1.8	1.5	0.8	1.1	1.4	2.5	3.7	0.1	-2.7	-0.6	-1.3	0.4	0.5	0.5	1.1	0.6	0.5
Euro area	1.8	2.0	2.0	1.8	1.4	1.6	2.2	2.1	2.5	2.4	0.8	-0.2	-0.2	0.2	0.6	0.7	0.4	0.8	0.5	0.6
Total OECD	1.7	2.9	3.0	2.0	1.8	1.5	2.0	1.9	2.4	3.0	1.0	-0.5	0.5	0.3	1.0	0.9	0.7	1.2	0.9	0.6

Note: The adoption of national accounts systems has been proceeding at an uneven pace among OECD member countries, both with respect to variables and the time period covered. As a consequence, there are breaks in many national series. For further information, see table "National Accounts Reporting Systems, base years and latest data updates" at the beginning of the Statistical Annex.

Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933222564

Annex Table 5. **Real total gross fixed capital formation**

Percentage change from previous year

	Average 1990-00	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	Fourth quarter 2014	Fourth quarter 2015	Fourth quarter 2016
Australia	4.1	-3.3	14.6	8.8	7.2	9.0	4.7	9.2	7.8	-1.4	4.3	7.0	9.0	-2.2	-2.0	-1.3	0.7	-2.7	0.0	1.3
Austria	2.8	-1.3	-2.9	3.8	0.8	0.2	1.2	4.6	1.3	-7.3	-2.3	6.8	0.6	-1.4	0.4	-1.9	2.5	-2.0	0.8	3.4
Belgium	1.7	1.8	-3.7	0.2	8.3	6.5	3.5	6.3	2.9	-7.3	-0.1	4.1	0.0	-2.1	5.1	1.2	3.1	4.3	2.8	3.2
Brazil	..	1.1	-1.6	-3.8	8.4	2.3	6.0	11.9	12.7	-1.9	18.1	6.7	-0.6	6.0	-4.3	-3.7	0.9	..	..	..
Canada	2.7	4.8	1.0	5.2	8.4	9.2	6.3	3.2	1.6	-11.5	11.5	4.8	4.8	0.4	0.3	-1.5	0.9	1.5	-2.4	1.3
Chile	8.1	3.5	2.2	6.5	11.3	23.5	4.3	10.8	17.9	-12.1	11.6	15.0	11.6	2.1	-6.1	1.2	1.2	1.4	1.4	1.7
Colombia	..	9.7	11.1	11.5	11.1	13.2	18.1	14.4	9.9	-1.3	4.9	19.0	4.7	6.0	10.9	3.0	3.6	..	..	..
Czech Republic	..	5.5	2.0	1.8	3.5	6.6	6.3	13.5	2.2	-9.8	0.9	1.1	-2.8	-4.4	4.5	4.4	3.7	4.3	5.4	2.4
Denmark	4.2	-0.5	-0.7	0.0	4.2	4.8	15.1	0.7	-3.3	-14.3	-4.0	0.3	0.6	1.0	3.7	3.4	3.2	7.5	1.6	3.6
Estonia	..	12.3	23.9	17.8	5.5	15.3	22.9	10.3	-13.1	-36.7	-2.6	32.7	10.9	2.3	-2.8	-2.7	3.7	-7.8	2.0	4.6
Finland	0.6	1.8	-3.0	2.8	4.7	3.2	1.3	10.0	0.3	-12.5	1.1	4.1	-2.2	-5.3	-5.1	-0.5	2.9	-5.5	2.9	3.0
France	1.7	2.3	-0.9	1.9	3.1	2.9	4.0	5.5	0.7	-9.0	1.9	2.1	0.3	-0.4	-1.2	-0.6	1.8	-2.1	0.5	2.2
Germany	1.9	-2.1	-5.8	-1.4	-1.0	0.5	7.6	4.6	0.6	-9.9	4.6	7.5	0.0	-0.4	3.3	2.5	4.3	0.9	4.4	4.5
Greece	4.0	1.3	-1.0	15.5	5.4	-12.8	17.0	17.6	-6.5	-13.3	-20.8	-17.0	-28.5	-9.5	3.0	0.6	5.0	..	..	..
Hungary	..	2.6	7.8	1.2	7.5	3.5	0.8	4.3	1.1	-8.2	-9.5	-2.2	-4.2	5.2	11.7	3.7	1.5	6.3	3.3	0.8
Iceland	4.5	-3.1	-12.7	9.7	26.5	31.9	23.3	-11.2	-18.9	-47.7	-8.6	11.6	5.6	-1.0	13.7	13.4	14.5	14.2	15.6	14.0
India	..	3.0	8.2	10.7	18.4	16.9	13.9	17.4	9.1	-0.4	15.1	11.5	0.3	5.1	2.6	7.0	7.7	..	..	..
Indonesia	..	6.5	4.7	0.6	14.7	10.9	2.6	9.3	11.9	3.9	6.7	8.9	9.1	5.3	4.1	5.0	6.0	..	..	..
Ireland	7.8	5.3	5.5	5.2	10.6	14.6	3.9	2.4	-9.6	-20.6	-17.9	-3.1	4.3	-1.9	11.7	10.5	9.6	7.5	9.9	9.5
Israel	7.4	-3.1	-5.8	-5.5	1.9	3.5	6.5	10.5	5.5	-3.3	10.3	14.5	3.2	1.1	-2.9	0.7	5.4	-3.7	2.3	5.5
Italy	1.3	2.8	4.2	-0.2	1.7	2.0	3.4	1.3	-3.2	-10.0	-0.6	-1.7	-9.4	-5.8	-3.2	1.6	1.9	-3.0	2.9	2.0
Japan	-0.6	-2.1	-4.9	0.2	0.4	0.8	1.5	0.3	-4.1	-10.6	-0.2	1.4	3.4	3.2	2.6	-0.6	0.1	-1.6	1.0	0.5
Korea	5.4	1.5	6.9	4.8	2.9	2.0	3.6	5.0	-0.9	0.3	5.5	0.8	-0.5	3.3	3.1	4.0	4.4	0.7	7.5	4.5
Latvia	..	19.9	-3.5	10.4	28.9	20.5	15.1	22.5	-9.2	-33.3	-20.0	24.2	14.5	-5.2	1.3	1.1	4.3	..	..	..
Luxembourg	5.3	8.2	-3.4	2.9	7.8	-3.2	2.0	8.6	10.0	-12.4	-0.3	14.3	2.7	-4.4	5.5	6.8	1.1	18.1	2.4	-0.3
Mexico	5.9	-3.3	0.6	3.0	7.4	5.8	8.7	5.9	5.1	-9.3	1.2	7.8	4.8	-1.5	2.2	4.9	5.1	5.7	4.1	5.4
Netherlands	4.3	0.6	-4.3	-2.0	-0.7	3.0	7.2	6.6	4.7	-9.2	-5.7	5.6	-6.0	-3.9	3.5	7.0	4.0	4.5	3.8	4.6
New Zealand	4.0	-0.4	12.0	10.5	13.6	3.8	-1.5	7.7	-3.3	-11.8	0.6	5.7	7.9	8.6	8.6	7.5	6.1	7.5	8.3	4.7
Norway	3.8	-0.6	-0.4	0.4	10.0	12.0	9.1	11.7	0.9	-6.8	-6.6	7.4	7.6	6.8	0.6	-3.6	0.5	-3.9	-1.1	2.1
Poland	..	-8.6	-6.9	1.2	6.7	8.7	13.3	19.2	8.3	-1.9	-0.4	9.3	-1.5	0.9	9.5	6.4	6.0	9.4	6.0	6.0
Portugal	5.2	1.0	-3.4	-7.3	0.1	0.1	-0.8	3.1	0.4	-7.6	-0.9	-12.5	-16.6	-6.7	2.5	2.9	3.1	2.4	2.0	3.3
Russian Federation	..	10.9	3.1	13.9	12.0	10.2	17.9	21.1	9.7	-14.7	6.4	9.2	7.0	0.6	-2.1	-18.5	5.0	..	..	..
Slovak Republic	..	12.9	0.0	-3.2	4.7	16.5	9.1	8.9	1.6	-18.7	7.2	12.7	-9.3	-2.7	5.7	4.8	4.0	5.8	2.0	4.3
Slovenia	5.6	2.0	0.5	5.8	5.4	3.5	10.2	12.0	7.0	-22.0	-13.7	-4.6	-8.9	1.9	4.8	2.1	0.0	-0.6	6.3	-1.9
South Africa	..	2.8	3.5	10.2	12.9	11.0	12.1	13.8	12.8	-6.7	-3.9	5.7	3.6	7.6	-0.4	2.6	4.1	..	..	..
Spain	3.2	4.9	4.6	7.0	5.1	7.5	7.4	4.4	-3.9	-16.9	-4.9	-6.3	-8.1	-3.8	3.4	5.4	6.3	5.1	5.3	6.9
Sweden	0.5	2.7	-2.3	2.8	5.0	5.1	9.6	8.3	0.3	-13.3	5.5	5.8	0.3	-0.3	6.6	5.4	5.2	8.3	4.1	5.3
Switzerland	1.1	-2.0	0.2	-1.0	5.1	3.2	4.7	4.9	0.7	-7.5	4.4	4.3	2.4	1.7	1.5	0.9	0.9	1.0	0.5	1.5
Turkey	4.4	-30.0	14.7	14.2	28.4	17.4	13.3	3.1	-6.2	-19.0	30.5	18.0	-2.7	4.4	-1.3	2.6	5.4	..	..	..
United Kingdom	0.7	-1.3	2.5	3.1	3.2	1.6	3.3	5.3	-4.7	-14.4	5.9	2.3	0.7	3.4	7.8	4.7	6.2	5.1	6.4	6.2
United States	5.7	-0.5	-1.8	3.9	5.8	5.6	2.2	-1.2	-4.8	-13.1	1.1	3.7	5.3	2.7	3.9	3.0	5.4	4.4	2.5	5.9
Euro area	2.1	1.1	-1.2	1.2	2.2	2.7	5.6	4.8	-0.8	-11.1	-0.5	1.7	-3.5	-2.3	1.2	2.0	3.5	0.6	2.9	3.8
Total OECD	3.2	-0.7	-0.6	2.9	4.5	4.5	4.2	2.7	-2.0	-11.0	2.0	3.5	1.6	1.0	2.7	2.3	3.9	2.2	2.8	4.3

Note: The adoption of national accounts systems has been proceeding at an uneven pace among OECD member countries, both with respect to variables and the time period covered. As a consequence, there are breaks in many national series. For further information, see table "National Accounts Reporting Systems, base years and latest data updates" at the beginning of the Statistical Annex.

Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933222579

Annex Table 6. **Real gross private non-residential fixed capital formation**

Percentage change from previous year

	Average 1990-00	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	Fourth quarter 2014	Fourth quarter 2015	Fourth quarter 2016
Australia	3.9	-1.8	13.5	11.9	7.6	12.9	7.9	11.6	7.0	-2.2	0.4	12.5	14.9	-2.9	-5.5	-3.3	-0.6	-5.5	-2.3	0.2
Belgium	2.0	5.1	-4.2	-1.2	10.1	3.3	4.5	6.0	4.8	-8.2	-1.9	5.2	-0.3	-1.2	6.8	1.3	4.2	5.4	4.0	4.3
Canada	4.4	1.4	-5.3	6.3	9.2	11.3	9.0	2.6	3.9	-20.0	14.0	11.5	7.5	1.4	-0.1	-4.7	3.4	0.3	-4.6	4.9
Denmark	4.4	1.1	0.0	-3.6	0.2	1.7	17.7	2.0	2.5	-15.4	-5.4	-5.8	1.3	3.3	1.1	3.6	3.4	5.6	2.0	4.2
Finland	0.9	7.5	-4.7	0.3	3.2	3.6	0.3	18.2	5.3	-15.1	-7.1	4.9	-2.3	-8.6	-6.7	-1.6	3.5	-8.0	3.2	4.0
France	2.3	3.5	-2.8	0.9	2.7	2.4	5.3	8.0	3.8	-11.7	3.1	4.8	0.9	-0.3	2.2	0.7	2.7	0.7	1.3	3.2
Germany	1.9	-1.1	-6.3	-0.7	1.3	3.2	8.2	7.7	1.6	-15.1	5.4	7.5	-1.8	-1.1	4.0	3.4	4.9	2.1	5.5	5.1
Iceland	6.2	-9.1	-18.4	17.4	31.7	53.4	25.8	-21.8	-21.5	-50.5	-0.2	23.5	8.1	-6.8	15.1	16.4	18.1	19.6	18.2	18.0
Japan	-0.9	-0.4	-5.2	4.9	3.5	5.7	4.0	4.9	-2.6	-14.3	0.3	4.1	3.7	0.4	3.9	0.8	4.0	0.6	3.6	4.0
Korea	6.6	-1.1	7.1	2.2	3.2	2.0	6.4	7.6	0.9	-3.7	14.2	3.3	0.2	0.9	4.9	3.6	3.9	6.8	2.5	4.6
Netherlands	4.9	-1.2	-7.2	-2.6	-1.5	3.0	7.3	9.0	7.1	-10.8	-1.5	12.9	-5.0	-2.4	3.3	5.6	6.0	2.6	3.5	7.0
New Zealand	6.0	-0.7	-2.6	16.0	14.6	7.5	0.2	11.6	-0.6	-20.2	1.3	13.3	13.5	5.8	8.4	8.8	5.8	4.7	8.6	4.4
Norway	4.2	-3.2	-2.2	-3.4	10.7	16.7	10.9	15.5	2.2	-10.4	-8.9	6.2	9.4	7.1	-0.9	-6.8	-1.0	-5.0	-5.8	2.1
Sweden	2.3	1.2	-6.7	3.2	4.5	5.1	9.5	10.2	3.9	-15.3	3.3	7.1	3.0	-1.6	4.8	3.8	4.7	8.9	1.3	5.1
Switzerland	1.6	-2.0	0.3	-3.9	6.1	4.5	6.8	7.2	0.7	-10.6	4.2	5.1	3.2	2.4	2.5	0.7	0.9	1.5	0.4	1.7
United Kingdom	3.1	-5.3	-0.4	1.2	-0.4	10.5	-7.0	8.1	3.3	-14.4	3.7	6.0	4.2	5.3	7.5	4.6	6.4	3.7	7.0	6.3
United States	7.6	-2.4	-6.9	1.9	5.2	7.0	7.1	5.9	-0.7	-15.6	2.5	7.7	7.2	3.0	6.3	3.3	5.1	6.2	2.5	5.3

Note: The adoption of national accounts systems has been proceeding at an uneven pace among OECD member countries, both with respect to variables and the time period covered. As a consequence, there are breaks in many national series. For further information, see table "National Accounts Reporting Systems, base years and latest data updates" at the beginning of the Statistical Annex. National accounts data do not always have a sectoral breakdown of investment expenditures, and for some countries data are estimated by the OECD.

Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933222580

Annex Table 7. **Real gross residential fixed capital formation**

Percentage change from previous year

	Average 1990-00	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	Fourth quarter 2014	Fourth quarter 2015	Fourth quarter 2016
Australia	4.4	-10.7	23.7	5.2	5.7	-1.9	-3.1	2.2	2.4	-4.4	4.9	1.5	-6.2	0.6	7.9	5.5	4.2	8.1	5.7	4.0
Austria	3.2	-6.9	-4.9	-4.1	0.5	1.4	0.9	2.0	0.2	-1.4	1.0	2.6	-1.3	-0.3	0.6	0.1	1.7	-0.8	1.2	1.8
Belgium	-0.1	-4.0	-5.5	4.7	3.9	15.6	4.8	4.7	-2.2	-9.4	3.3	1.4	-0.5	-3.5	0.7	0.9	1.3	1.0	1.1	1.4
Canada	-0.3	11.1	14.3	3.5	8.3	5.0	2.4	2.6	-4.0	-6.3	8.0	1.5	5.8	-0.4	2.7	2.7	-1.8	4.8	0.2	-2.5
Denmark	4.2	-9.8	2.3	13.5	12.1	16.7	11.4	-5.5	-16.7	-20.4	-8.9	15.8	-8.2	-5.0	6.5	3.1	4.1	1.5	4.7	4.0
Finland	0.6	-10.2	-0.5	11.3	11.2	5.0	3.8	-0.3	-10.6	-13.9	24.1	5.3	-3.5	-2.7	-5.5	-0.3	2.9	-4.8	3.0	2.8
France	1.0	0.9	2.9	2.7	4.0	4.3	4.9	2.6	-4.0	-11.9	1.6	1.1	-2.0	-1.3	-5.0	-3.3	0.3	-5.1	-1.6	0.7
Germany	3.3	-5.6	-6.1	-1.9	-4.2	-4.1	6.8	-1.6	-4.0	-3.2	3.8	10.2	4.2	0.8	3.8	1.4	3.5	0.6	3.6	3.7
Greece	-0.9	-8.6	2.4	17.8	16.3	-7.3	14.3	14.6	-23.5	-18.9	-26.5	-14.7	-33.3	-27.7	-51.5	-18.3	0.3	..	..	..
Iceland	-0.7	12.3	12.4	3.7	14.2	11.9	16.5	13.2	-21.9	-55.7	-18.0	5.4	6.9	10.8	14.9	12.5	11.2	5.7	18.5	8.0
Ireland	9.2	5.1	3.7	13.4	10.8	16.8	3.8	-8.0	-16.0	-37.3	-32.9	-18.5	-20.3	5.3	-3.4	6.4	8.7	-5.0	8.2	9.0
Italy	0.4	1.5	3.0	3.9	2.5	6.2	5.2	1.0	-1.9	-9.3	-0.2	-6.5	-7.7	-6.8	-4.1	-0.4	0.1	-2.5	0.0	0.2
Japan	-2.3	-5.0	-3.4	-1.3	1.7	-0.9	0.6	-9.8	-6.6	-16.6	-4.5	5.1	3.2	8.8	-5.1	-2.0	8.3	-15.7	7.8	9.2
Korea	-0.4	14.8	14.1	12.0	3.1	2.1	-2.3	-3.5	-9.4	-2.5	-12.0	-8.0	-2.9	23.4	8.9	-1.2	5.7	1.5	6.3	4.8
Netherlands	2.6	2.6	-5.9	-3.1	4.7	5.9	5.9	5.2	0.5	-14.2	-14.8	-4.4	-8.2	-9.2	5.6	17.2	1.9	16.1	6.0	2.0
New Zealand	2.7	-11.8	20.8	20.3	3.7	-4.0	-2.1	3.1	-18.1	-14.2	2.1	-1.6	14.8	16.5	16.5	12.9	8.2	16.2	13.4	5.1
Norway	3.6	8.1	-0.7	1.8	16.3	9.7	4.0	2.7	-9.0	-8.1	-1.6	17.0	10.9	6.4	-1.6	-1.3	1.3	-5.3	1.7	1.6
Spain	5.0	6.3	5.9	7.2	4.8	6.0	6.0	0.9	-9.7	-20.6	-11.6	-12.8	-9.0	-7.6	-1.8	2.2	2.1	2.1	1.9	2.2
Sweden	-8.1	7.0	10.7	5.1	12.9	10.0	14.4	6.6	-13.3	-18.9	12.7	8.0	-11.7	2.2	20.2	16.4	10.0	20.4	13.7	9.0
Switzerland	-1.2	-4.1	-3.7	14.4	7.0	1.1	-1.6	-3.0	-4.2	1.8	3.5	2.2	1.5	-0.3	0.9	1.1	1.5	1.5	1.2	1.6
United Kingdom	-1.7	1.5	6.5	3.7	6.6	5.9	3.4	1.9	-24.0	-27.2	13.8	1.5	-3.6	6.0	8.9	5.2	7.5	6.0	7.3	7.5
United States	4.1	0.9	6.1	9.1	10.0	6.6	-7.6	-18.8	-24.0	-21.2	-2.5	0.5	13.5	11.9	1.6	5.5	11.0	2.5	7.0	12.9

Note: The adoption of national accounts systems has been proceeding at an uneven pace among OECD member countries, both with respect to variables and the time period covered. As a consequence, there are breaks in many national series. For further information, see table "National Accounts Reporting Systems, base years and latest data updates" at the beginning of the Statistical Annex.

Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933222595

Annex Table 8. **Real total domestic demand**

Percentage change from previous year

	Average 1990-00	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	urth quarter 2014	2015	2016
Australia	3.4	1.4	6.1	5.6	5.9	4.4	3.5	6.8	3.5	-0.3	3.8	4.7	4.1	0.0	1.2	1.4	2.1	1.0	1.8	2.5
Austria	2.3	0.3	-0.4	2.1	1.9	2.2	2.7	2.6	0.7	-1.5	0.7	2.7	0.4	-1.0	0.2	0.7	1.3	-1.0	1.5	1.5
Belgium	2.0	-0.2	-0.3	0.8	3.4	2.9	2.2	2.9	2.1	-2.7	2.0	2.1	-0.1	-0.9	0.9	1.1	1.4	2.0	0.9	1.6
Brazil	..	0.8	0.6	0.0	5.1	2.7	5.5	7.8	7.4	-0.1	11.1	4.9	1.8	3.5	0.1	-0.7	0.8	..	..	..
Canada	2.3	1.5	3.1	4.1	4.0	5.0	4.2	3.6	2.9	-2.8	5.4	2.4	2.2	1.9	1.4	1.1	1.7	1.4	0.7	1.8
Chile	..	2.9	3.0	4.7	8.2	11.5	8.0	7.4	8.3	-5.6	13.5	9.4	7.5	3.9	-0.5	4.8	3.1	0.1	5.7	3.5
China	..	8.9	8.6	10.5	9.5	7.9	9.4	11.5	8.1	16.8	7.4	10.0	8.3	8.3	7.9	7.2	7.0	..	..	..
Colombia	..	2.6	2.9	4.1	5.4	5.8	8.8	8.4	4.9	-0.1	5.8	9.0	4.9	5.2	6.7	3.3	3.1	..	..	..
Czech Republic	..	4.0	3.5	3.6	3.3	3.4	5.1	6.5	1.9	-5.4	1.7	0.1	-2.1	-0.8	2.2	3.2	2.1	1.9	3.4	2.4
Denmark	2.6	0.3	1.4	0.2	4.4	3.3	5.4	1.7	-0.3	-6.4	1.1	0.7	-0.3	-0.2	1.7	1.9	1.9	3.3	1.5	2.1
Estonia	..	8.3	12.1	11.1	6.6	7.4	17.4	9.2	-8.9	-20.8	0.8	13.3	5.5	1.2	4.9	2.9	3.6	5.0	2.7	3.9
Finland	1.2	1.9	1.4	3.3	3.6	4.1	2.4	4.8	1.0	-6.2	3.2	3.9	-1.1	-1.3	-0.8	0.3	1.2	-1.7	1.4	1.3
France	1.8	1.7	1.2	1.4	2.8	2.3	2.6	3.2	0.4	-2.5	2.0	2.0	-0.3	0.8	0.7	1.3	1.3	0.4	1.6	1.7
Germany	1.9	0.3	-2.1	0.3	-0.6	0.3	3.0	1.8	0.9	-3.1	2.9	3.1	-0.8	0.8	1.3	2.0	2.5	1.3	2.4	2.4
Greece	2.8	3.6	3.4	7.8	3.3	0.1	8.4	5.5	-0.4	-6.1	-7.1	-10.8	-9.6	-4.5	0.6	0.0	1.2	..	..	..
Hungary	..	1.9	6.4	5.7	4.9	1.5	1.7	-1.0	0.2	-9.2	-0.5	-0.2	-3.0	1.2	4.1	2.3	1.5	2.8	3.0	1.2
Iceland	3.6	-1.5	-1.9	6.1	9.9	13.9	8.3	1.0	-7.6	-16.7	-2.2	3.4	1.5	0.4	4.7	4.5	4.6	5.5	4.7	4.6
India	..	3.3	3.2	8.0	7.6	10.1	9.9	10.1	9.6	4.1	12.1	8.0	6.1	3.0	5.5	6.3	7.3	..	..	..
Indonesia	..	4.3	4.0	4.0	7.0	5.9	5.3	6.4	6.1	3.0	6.5	6.1	7.7	5.0	5.3	4.4	5.5	..	..	..
Ireland	6.1	5.0	5.0	4.1	4.0	9.3	6.5	4.3	-3.7	-9.6	-3.9	-0.5	-0.5	-0.2	3.9	3.4	3.6	7.0	2.1	4.0
Israel	..	2.2	0.2	-1.8	3.1	3.7	4.9	6.3	2.2	0.5	5.7	5.4	3.5	2.8	3.1	3.8	3.6	3.3	3.9	3.6
Italy	1.4	1.5	1.1	0.9	1.1	1.0	2.0	1.2	-1.3	-4.2	1.9	-0.5	-5.7	-2.5	-0.6	0.4	0.9	-1.1	1.0	1.2
Japan	1.0	1.2	-0.5	1.0	1.5	1.0	0.9	1.1	-1.3	-4.0	2.9	0.4	2.6	1.9	-0.1	0.5	1.2	-1.8	2.1	1.0
Korea	5.7	4.3	8.1	1.8	2.0	3.8	5.1	5.0	1.1	-2.7	8.3	3.0	0.7	1.4	3.0	3.5	3.5	1.9	3.7	3.5
Latvia	..	10.4	6.2	11.4	12.6	9.0	18.2	12.1	-8.4	-22.4	-3.0	10.0	2.3	3.2	2.0	2.9	3.6	..	..	..
Luxembourg	4.1	2.4	-0.2	4.4	2.7	3.6	1.6	5.1	1.7	-5.4	6.2	5.6	0.3	0.6	3.9	3.2	2.3	10.6	2.1	2.1
Mexico	3.7	0.2	1.2	1.3	5.7	4.1	6.5	3.1	3.0	-7.0	4.9	4.7	4.8	1.4	2.4	2.7	3.2	3.2	2.9	3.2
Netherlands	3.2	2.4	0.1	0.3	0.3	1.6	3.9	3.5	2.4	-2.5	0.0	0.8	-2.4	-1.9	0.5	1.1	1.6	1.0	0.7	1.8
New Zealand	2.7	1.9	5.8	6.5	7.8	4.8	1.1	5.0	0.6	-4.7	3.8	2.8	3.1	3.9	4.7	4.1	3.1	4.8	4.2	2.7
Norway	3.5	0.7	2.2	1.5	6.8	5.4	6.2	6.1	1.5	-3.2	3.0	2.7	3.5	3.6	1.9	1.2	1.4	-0.1	1.9	2.2
Poland	..	-1.3	0.9	2.5	6.2	2.5	7.2	9.5	5.0	-0.3	4.2	3.8	-0.3	0.2	4.6	4.1	3.9	5.1	3.8	3.9
Portugal	3.7	1.6	-0.2	-1.8	3.0	1.3	0.9	2.2	1.1	-3.6	1.9	-5.7	-7.3	-2.5	2.1	1.0	1.5	1.4	1.5	1.4
Russian Federation	..	8.8	4.4	8.0	10.2	9.2	11.3	13.8	9.8	-14.1	8.8	9.0	5.5	1.2	-1.0	-8.5	1.1	..	..	..
Slovak Republic	..	8.1	4.1	0.0	5.8	8.4	6.5	6.6	6.3	-7.0	4.4	1.0	-4.1	-0.1	2.9	3.0	2.8	2.5	2.9	2.7
Slovenia	3.8	1.3	2.8	4.5	4.9	1.9	4.7	9.0	3.1	-9.5	-0.9	-0.8	-5.7	-2.1	0.8	0.8	0.6	-1.6	2.2	0.4
South Africa	..	2.3	5.1	5.2	7.9	5.7	8.5	5.8	3.6	-1.4	3.7	4.9	3.9	1.4	0.6	1.8	2.2	..	..	..
Spain	2.8	3.9	3.5	3.9	4.8	5.1	5.1	4.1	-0.4	-6.0	-0.5	-2.7	-4.2	-2.7	2.3	3.1	2.9	2.8	3.2	2.8
Sweden	1.1	0.7	1.1	2.3	1.9	2.6	4.4	4.9	-0.1	-4.3	5.7	3.0	-0.2	1.2	3.5	3.0	3.0	3.8	2.6	3.1
Switzerland	0.9	2.0	0.2	0.8	-0.1	4.2	2.3	0.5	2.7	2.5	-0.5	4.0	-1.2	-0.7	1.8	-1.4	1.5	-1.2	1.6	1.8
Turkey	4.3	-12.1	9.3	8.7	11.6	9.2	6.9	5.7	-1.0	-6.7	12.1	8.9	-1.3	6.5	1.3	3.6	4.0	..	..	..
United Kingdom	2.6	3.4	3.2	4.3	3.1	2.5	2.6	2.8	-1.2	-4.8	2.7	0.4	1.5	1.8	3.4	2.8	2.4	2.4	3.2	2.1
United States	3.8	1.2	2.3	3.1	4.3	3.5	2.6	1.1	-1.3	-3.8	2.9	1.6	2.2	1.9	2.5	2.7	3.1	2.9	2.5	3.1
Euro area	2.0	1.5	0.4	1.4	1.7	1.9	3.2	2.7	0.3	-3.8	1.4	0.8	-2.3	-0.7	0.9	1.5	1.8	0.9	1.8	2.0
Total OECD	2.8	1.2	1.9	2.5	3.4	3.0	3.1	2.4	-0.2	-3.9	3.1	1.7	0.8	1.2	1.8	2.2	2.5	1.8	2.3	2.6

Note: The adoption of national accounts systems has been proceeding at an uneven pace among OECD member countries, both with respect to variables and the time period covered. As a consequence, there are breaks in many national series. For further information, see table "National Accounts Reporting Systems, base years and latest data updates" at the beginning of the Statistical Annex.

Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933222600

Annex Table 9. **Foreign balance contributions to changes in real GDP**

Percentage points

	Average 1991-2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	Fourth quarter[1] 2014	2015	2016
Australia	-0.3	1.6	-2.2	-2.6	-2.4	-1.3	-1.2	-2.2	-1.6	2.6	-2.1	-2.2	0.1	1.6	1.8	1.2	0.7	2.9	0.7	0.5
Austria	0.4	0.3	1.7	-1.2	0.6	0.6	1.0	1.1	0.7	-2.2	1.1	0.2	0.4	0.8	-0.2	-0.3	0.5	1.8	0.4	0.3
Belgium	0.3	1.0	1.8	0.1	0.3	-0.8	0.5	0.1	-1.2	-0.3	0.5	-0.5	0.1	1.0	0.2	0.5	0.5	4.6	0.6	0.3
Brazil	0.2	0.5	2.8	1.7	0.9	0.6	-1.4	-1.3	-2.0	-0.2	-2.6	-0.7	0.0	-0.7	0.0	-0.3	0.3	..	..	..
Canada	0.7	0.6	-0.2	-2.2	-0.8	-1.6	-1.4	-1.5	-1.8	-0.5	-2.1	-0.4	-0.4	0.2	1.1	0.4	0.5	-1.1	0.3	0.6
Chile	0.5	0.8	0.0	-0.7	-0.8	-4.1	-1.6	-1.1	-3.9	4.5	-6.7	-3.0	-1.6	0.6	2.5	0.4	0.7	-4.8	0.7	0.8
China	0.0	-0.4	0.7	-0.2	0.8	3.6	3.8	3.6	2.3	-5.7	3.6	0.3	0.1	0.0	0.0	0.1	0.1	..	..	..
Colombia	-0.7	-1.0	-0.4	-0.4	-0.4	-1.3	-2.3	-1.7	-1.3	1.3	-1.8	-1.9	-0.7	-0.3	-2.1	-0.2	0.3	..	..	..
Czech Republic	-0.9	-1.1	-2.0	0.0	1.4	3.2	2.0	-0.8	0.8	0.5	0.5	1.9	1.3	0.0	-0.1	0.2	0.6	1.6	-0.5	0.5
Denmark	0.1	0.6	-0.8	0.2	-1.5	-0.7	-1.3	-0.9	-0.4	1.2	0.5	0.5	-0.4	-0.3	-0.5	0.1	0.5	-0.1	0.5	0.3
Estonia	-1.1	-4.1	-7.0	-3.3	-0.7	0.7	-8.4	-1.6	5.0	8.1	2.8	0.5	-4.2	-0.7	0.0	-0.3	-0.2	1.3	-0.8	0.8
Finland	1.6	0.1	0.1	-1.7	0.7	-1.0	1.6	1.0	-0.2	-2.1	0.0	-1.5	-0.2	0.4	0.4	0.2	0.1	-0.2	0.1	0.0
France	0.3	0.2	0.0	-0.5	-0.2	-0.7	0.0	-0.9	-0.3	-0.3	-0.1	0.0	0.5	0.0	-0.5	-0.3	0.3	0.9	0.3	0.2
Germany	0.0	1.5	2.1	-1.0	1.3	0.6	1.1	1.6	-0.1	-2.6	1.2	0.7	1.4	-0.5	0.3	-0.3	0.0	-1.1	-0.1	0.3
Greece	-0.6	0.2	-0.6	-1.9	1.4	0.6	-2.9	-2.3	0.0	2.7	2.4	2.6	3.3	1.4	0.2	-0.5	1.1	..	..	..
Hungary	0.3	1.8	-2.0	-2.1	-0.3	2.7	2.2	1.5	0.7	2.6	1.3	2.0	1.4	0.4	-0.4	1.0	0.9	5.7	0.8	1.0
Iceland	-0.7	6.1	2.3	-3.2	-2.2	-8.6	-5.6	8.5	9.4	13.1	-1.0	-1.1	-0.2	3.7	-3.0	-1.5	-1.4	-1.1	-1.5	-1.8
India	-0.5	0.6	1.3	-1.0	0.4	-1.0	-0.7	-0.3	-3.8	1.0	-1.6	-0.7	-1.2	3.2	1.6	0.5	0.2	..	..	..
Indonesia	-0.2	-0.6	0.5	0.8	-1.8	-0.1	0.2	-0.1	-0.1	1.7	0.0	0.2	-1.5	0.6	-0.3	0.5	0.1	..	..	..
Ireland	2.2	2.6	2.8	1.4	0.6	-1.9	-0.7	1.4	1.1	3.3	3.2	5.7	-0.8	0.6	2.2	0.8	1.3	-14.3	3.2	-0.6
Israel	0.8	-2.0	-0.3	3.0	1.9	0.6	0.8	-0.2	1.7	1.1	0.3	-1.2	-0.5	0.6	-0.4	-0.3	0.0	3.8	0.1	0.0
Italy	0.3	0.2	-0.9	-0.7	0.3	0.1	0.1	0.2	0.2	-1.3	-0.2	1.2	2.9	0.8	0.3	0.3	0.7	1.5	0.8	0.3
Japan	0.1	-0.8	0.8	0.7	0.8	0.3	0.8	1.1	0.2	-1.5	1.8	-0.9	-0.9	-0.3	0.0	0.3	0.2	1.1	0.1	0.3
Korea	1.4	0.4	-0.4	1.2	3.0	0.3	0.2	0.5	1.7	3.2	-1.4	0.8	1.5	1.5	0.5	-0.3	0.4	-0.3	0.6	0.2
Latvia	-0.7	-3.7	0.6	-4.1	-5.3	0.0	-9.1	-5.0	7.1	11.5	0.2	-5.6	2.3	1.0	0.4	-0.5	-0.1	..	..	..
Luxembourg	2.1	0.2	3.6	-1.9	2.9	1.7	3.7	3.0	-0.7	-2.0	0.8	-1.1	-0.3	1.6	1.5	0.7	1.5	-1.6	1.1	2.2
Mexico	-0.8	-0.8	-0.1	-0.6	0.0	-0.9	-0.9	-0.6	-1.4	1.7	-0.2	-0.1	0.4	-0.3	0.2	0.6	0.3	-0.5	0.3	0.2
Netherlands	0.3	-0.5	-0.1	0.0	1.3	0.9	0.3	1.0	-0.1	-1.0	1.0	1.0	0.6	1.1	0.4	1.1	0.8	0.1	0.7	0.8
New Zealand	-0.1	0.4	-0.6	-1.8	-3.1	-2.0	1.2	-1.4	-1.3	5.4	-2.0	-1.1	-0.2	-1.5	-1.4	-0.7	-0.1	3.4	-0.4	0.4
Norway	0.2	1.5	-0.4	-0.4	-2.0	-2.0	-2.8	-2.2	-0.9	1.0	-2.1	-1.4	-0.3	-2.4	0.5	0.3	0.3	9.5	-0.1	0.2
Poland	-0.8	1.9	0.5	1.0	-1.3	1.0	-1.0	-2.4	-1.2	2.9	-0.5	0.9	2.1	1.4	-1.3	-0.6	-0.1	-1.5	-0.2	0.0
Portugal	-1.2	0.2	0.9	1.0	-1.4	-0.6	0.6	0.1	-1.1	0.9	-0.1	4.3	3.6	0.9	-1.1	0.6	0.3	3.2	0.3	0.4
Russian Federation	-0.1	-0.3	0.0	0.0	-0.3	-0.3	-0.7	-0.6	-0.7	1.3	-1.1	-0.5	-0.4	0.5	0.3	0.5	0.5	..	..	..
Slovak Republic	0.3	-5.0	0.3	5.4	-0.9	-2.1	1.5	3.8	-0.5	2.2	0.4	1.7	5.8	1.4	-0.2	0.2	0.7	0.1	0.7	1.0
Slovenia	-2.1	1.6	1.1	-1.7	-0.5	2.1	1.0	-2.0	0.2	1.9	2.1	1.4	2.9	1.0	1.9	1.9	1.4	5.8	1.1	2.6
South Africa	0.2	0.6	-1.1	-2.2	-2.6	-0.1	-2.4	-0.2	-0.3	-0.2	-0.6	-1.6	-1.7	0.7	0.9	0.1	0.0	..	..	..
Spain	0.0	-0.1	-0.7	-0.8	-1.7	-1.6	-1.2	-0.6	1.6	2.8	0.5	2.1	2.2	1.4	-0.8	-0.1	0.1	0.7	0.1	0.1
Sweden	1.0	1.0	1.0	0.4	2.1	0.4	0.8	-0.9	-0.6	-1.1	0.3	-0.1	0.3	0.2	-1.0	-0.1	0.1	0.3	0.1	0.1
Switzerland	0.4	-0.5	0.0	-0.7	3.0	-0.8	1.9	3.7	-0.1	-4.3	3.3	-1.8	2.1	2.6	0.5	1.9	0.4	11.6	0.4	0.8
Turkey	-0.3	6.5	-3.0	-3.8	-2.4	-1.3	-0.3	-1.3	1.7	2.8	-4.3	-1.2	4.0	-2.9	1.8	-0.8	-0.2	..	..	..
United Kingdom	-0.3	-0.8	-0.8	-0.1	-0.7	0.3	0.4	-0.3	0.9	0.7	-0.8	1.3	-0.8	0.0	-0.5	-0.4	-0.1	3.2	-0.1	-0.1
United States	-0.5	-0.2	-0.6	-0.4	-0.6	-0.3	-0.1	0.6	1.1	1.3	-0.4	0.0	0.0	0.2	-0.2	-0.8	-0.4	-1.0	-0.5	-0.4
Euro area	0.2	0.6	0.6	-0.7	0.4	-0.1	0.2	0.3	0.1	-0.7	0.6	0.9	1.4	0.4	0.0	0.0	0.3	0.1	0.3	0.3
Total OECD	-0.1	0.1	-0.2	-0.4	-0.1	-0.2	0.0	0.2	0.4	0.5	-0.2	0.2	0.5	0.2	0.0	-0.2	0.0	-0.3	0.0	0.0

Note: The adoption of national accounts systems has been proceeding at an uneven pace among OECD member countries, both with respect to variables and the time period covered. As a consequence, there are breaks in many national series. For further information, see table "National Accounts Reporting Systems, base years and latest data updates" at the beginning of the Statistical Annex.

1. Contributions to per cent change from the previous period, seasonally adjusted at annual rates.

Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933222618

Annex Table 10. **Output gaps**

Deviations of actual GDP from potential GDP as a per cent of potential GDP

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Australia	-1.2	0.1	0.4	0.3	0.1	0.9	0.7	1.4	1.4	0.7	1.8	1.0	-0.2	-0.9	-1.1	-0.4	-1.1	-1.0	-1.3	-1.0
Austria	-0.7	0.5	1.6	2.9	1.7	1.1	-0.3	0.3	0.4	2.1	3.8	3.3	-2.0	-1.5	0.3	0.2	-0.8	-1.5	-2.2	-1.9
Belgium	-0.4	-0.8	0.5	1.6	0.1	-0.4	-1.3	0.3	0.4	1.3	2.8	2.2	-1.6	-0.2	0.4	-0.5	-1.1	-1.2	-1.1	-0.7
Canada	-1.4	-0.7	0.8	2.5	1.0	0.9	0.1	0.7	1.4	1.6	1.4	0.5	-3.7	-2.1	-1.1	-1.2	-1.1	-0.5	-0.8	-0.3
Chile	3.5	1.8	-3.1	-2.1	-2.5	-3.6	-3.7	-1.0	0.8	2.0	2.8	1.4	-3.8	-2.3	-0.8	0.3	0.5	-1.4	-2.0	-2.0
Czech Republic	1.8	-1.4	-2.8	-1.2	-1.4	-3.4	-3.4	-2.3	0.3	3.8	6.2	6.1	-0.7	0.1	0.8	-1.1	-3.0	-2.6	-1.6	-1.7
Denmark	1.2	1.1	1.9	3.6	2.5	1.2	0.1	1.4	2.7	5.2	4.7	2.9	-3.0	-1.9	-1.1	-2.1	-3.1	-2.5	-1.3	0.1
Estonia	..	..	..	..	-2.2	-2.1	-0.9	0.1	4.7	10.9	15.2	5.7	-11.1	-9.5	-3.6	-1.4	-2.2	-2.5	-2.9	-2.4
Finland	-1.8	-0.2	0.4	2.0	0.9	-0.6	-1.5	-0.2	0.1	2.1	5.7	5.1	-3.9	-1.1	1.2	-0.5	-2.2	-2.8	-3.2	-3.0
France	-1.6	-0.3	0.7	2.3	1.9	1.0	0.1	1.0	1.1	2.2	3.0	1.7	-2.2	-1.3	-0.2	-1.0	-1.3	-2.3	-2.5	-2.3
Germany	-0.6	-0.5	-0.3	1.2	1.4	0.2	-1.4	-1.6	-1.7	0.8	2.7	1.9	-4.8	-2.2	0.0	-0.6	-1.4	-0.9	-0.4	0.8
Greece	-1.1	-0.4	-1.2	-1.0	-1.2	-1.6	1.4	3.5	2.6	7.0	9.6	8.7	4.6	0.5	-6.8	-11.3	-13.9	-12.6	-12.7	-11.5
Hungary	-1.6	-1.4	-2.2	-2.0	-1.7	-0.5	0.2	2.0	4.0	6.0	4.8	4.4	-2.6	-2.2	-0.8	-3.2	-2.6	-0.5	0.7	0.9
Iceland	-2.0	0.7	1.1	2.1	2.2	-0.5	-0.9	3.5	5.1	4.2	9.4	6.9	-0.8	-5.3	-4.3	-4.3	-2.2	-1.9	-0.2	0.4
Ireland	2.5	4.0	7.2	9.8	8.6	8.7	6.4	5.9	6.9	8.1	9.1	2.7	-5.8	-7.2	-5.4	-6.3	-6.8	-3.6	-1.9	-0.7
Israel	0.9	0.2	-0.6	4.0	0.4	-2.9	-5.4	-3.8	-3.0	-1.2	1.1	1.5	-0.2	1.7	1.8	0.8	0.4	-0.2	0.0	0.3
Italy	0.2	0.3	0.4	2.9	3.1	1.9	0.9	1.2	1.4	2.6	3.3	1.8	-3.9	-2.4	-1.7	-4.4	-5.8	-6.1	-5.6	-4.5
Japan	1.1	-2.2	-3.4	-2.2	-2.7	-3.1	-2.1	-0.4	0.3	1.4	2.9	1.2	-4.8	-0.7	-1.6	-0.3	0.8	0.1	0.3	1.1
Luxembourg	-3.4	-1.6	1.8	5.5	2.8	1.8	-0.9	0.2	0.9	2.7	6.4	4.0	-3.9	-1.1	-0.9	-3.5	-3.9	-3.4	-3.3	-3.2
Mexico	1.6	2.7	2.0	3.7	0.4	-1.9	-2.8	-1.1	-0.3	2.2	3.0	1.7	-4.8	-2.0	-0.4	0.7	-0.2	-0.8	-0.8	-0.4
Netherlands	-0.4	0.7	1.8	3.2	2.2	-0.1	-1.7	-1.9	-1.1	1.1	3.7	4.3	-0.2	0.0	1.0	-1.3	-2.7	-2.7	-1.8	-1.0
New Zealand	0.8	-1.7	-0.6	-0.1	-1.4	0.4	1.6	2.6	2.2	1.7	2.8	-0.4	-1.5	-1.2	-1.8	-1.1	-0.9	-0.5	0.1	0.2
Norway[1]	1.6	2.0	1.0	1.0	-0.2	-1.7	-3.6	-1.8	-0.2	1.6	4.2	2.9	-1.3	-1.7	-1.8	-0.1	-0.1	-0.2	-1.1	-1.2
Poland	0.7	0.2	0.0	-0.3	-3.3	-5.5	-5.3	-3.7	-3.9	-1.8	1.0	0.7	-0.5	-0.2	1.3	0.0	-1.1	-0.7	-0.3	0.1
Portugal	1.4	2.8	3.5	4.3	3.6	2.2	-0.4	0.1	-0.3	0.4	2.1	1.5	-1.9	-0.2	-2.1	-5.8	-7.1	-6.3	-5.0	-3.7
Slovak Republic	2.5	0.5	-4.7	-7.8	-8.8	-8.5	-7.2	-6.0	-3.5	0.6	7.1	8.7	-0.2	1.5	1.1	-0.1	-1.1	-1.6	-1.5	-1.0
Slovenia	..	..	..	-0.7	-1.4	-1.1	-1.7	-0.7	0.2	2.8	6.9	7.7	-2.1	-1.5	-1.1	-4.0	-5.2	-3.7	-2.9	-2.6
Spain	-1.2	-0.4	0.4	2.1	2.6	2.0	1.8	1.7	2.3	3.6	4.7	3.6	-1.4	-2.3	-3.5	-5.9	-7.3	-6.4	-4.1	-2.0
Sweden	-2.9	-1.8	-0.7	1.0	-0.3	-0.9	-1.0	0.4	0.8	3.4	4.7	1.9	-4.7	-0.8	0.0	-1.7	-2.3	-2.1	-1.6	-1.0
Switzerland	-1.5	-0.2	-0.3	1.7	1.2	-0.5	-2.2	-1.4	-0.5	1.2	3.0	3.0	-1.1	-0.1	-0.2	-0.9	-0.9	-1.0	-2.2	-2.6
Turkey	3.5	2.7	-3.9	-1.0	-9.3	-6.1	-3.7	1.6	5.5	7.5	7.2	3.1	-5.7	-1.4	2.2	-0.5	-1.0	-2.4	-3.5	-3.7
United Kingdom	-0.7	-0.2	-0.2	0.4	0.0	-0.4	1.1	1.1	1.7	2.8	3.5	1.7	-3.5	-2.4	-1.7	-2.2	-1.8	-0.8	-0.5	-0.5
United States	-0.1	1.1	2.5	3.4	1.3	0.4	0.7	2.1	3.0	3.2	2.7	0.1	-4.5	-3.8	-3.9	-3.4	-3.0	-2.5	-2.4	-1.6
Euro area	-0.7	-0.1	0.5	2.1	2.0	1.0	-0.1	0.2	0.4	2.2	3.6	2.6	-2.9	-1.7	-0.9	-2.3	-3.3	-3.2	-2.7	-1.7
Total OECD	0.0	0.0	0.5	1.8	0.5	-0.2	-0.3	0.8	1.5	2.5	3.1	1.4	-3.6	-2.2	-1.8	-2.1	-2.2	-2.0	-1.9	-1.2

Note: Potential output follows the methodology described in Johansson et al. (2013), "Long-term growth scenarios", *OECD Economics Department Working Papers,* no. 1000.

1. Mainland Norway.

Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933222628

Annex Table 11. **Compensation per employee in the total economy**

Percentage change from previous period

	Average 1987-1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Australia	4.7	2.9	3.4	3.5	4.7	3.7	3.5	5.2	3.6	4.5	6.3	4.0	1.0	5.3	5.7	3.2	0.9	2.0	1.6	2.5
Austria	3.8	2.7	2.0	2.4	1.5	2.1	1.7	2.1	2.1	3.1	3.0	3.3	1.6	1.1	2.0	2.7	2.1	1.8	0.9	1.1
Belgium	4.2	1.4	3.5	2.2	3.5	3.9	2.0	1.8	1.9	3.7	3.5	3.6	1.2	1.3	3.1	3.3	2.5	1.0	0.5	1.0
Canada	3.6	2.9	2.3	5.2	1.9	1.6	2.4	4.1	4.7	4.8	3.4	3.1	1.8	1.4	3.5	3.2	2.3	2.7	2.7	2.9
Czech Republic	..	8.5	6.2	7.5	8.4	7.8	7.7	7.9	3.9	5.9	6.2	4.1	-0.6	3.3	2.8	1.4	-0.6	3.0	2.5	3.9
Denmark	3.7	4.0	4.1	3.2	4.1	3.8	3.6	3.2	3.4	3.6	3.8	3.9	2.8	3.2	1.4	1.6	1.3	1.8	1.9	2.1
Finland	4.9	4.7	3.4	3.9	3.6	1.7	2.2	3.6	3.5	3.4	3.3	4.3	2.0	2.2	3.6	2.8	2.0	1.4	1.3	1.0
France	2.9	1.6	1.8	2.5	2.8	3.5	2.9	3.4	3.0	3.2	2.5	2.6	1.6	2.8	2.3	2.2	1.6	1.4	1.6	2.1
Germany	3.8	0.9	1.1	1.4	1.9	1.3	1.5	0.2	0.2	1.0	0.9	2.1	0.2	2.6	2.9	2.5	1.9	2.5	3.2	3.3
Greece	14.4	6.4	7.7	4.4	5.8	10.9	6.6	3.7	4.1	2.7	4.7	3.3	3.2	-2.6	-2.3	-2.0	-7.1	-1.6	-1.8	-0.7
Hungary	..	14.5	6.5	15.0	15.2	13.6	9.9	10.3	7.1	5.6	6.2	7.4	-1.4	0.7	3.4	1.8	1.5	3.2	3.4	3.9
Iceland	8.5	11.5	7.9	9.0	7.4	8.8	2.1	10.2	8.9	12.6	7.2	5.1	-3.6	5.5	7.9	6.2	3.4	2.6	7.5	5.8
Ireland	4.9	4.3	5.0	7.7	7.9	5.4	6.4	5.2	5.5	4.3	5.9	5.3	-1.0	-3.8	1.2	0.8	2.0	3.8	3.2	3.5
Israel	..	6.6	6.2	6.1	2.5	0.6	-2.0	0.3	1.9	5.6	2.5	2.9	-0.8	3.8	4.3	2.4	2.2	1.3	1.7	2.4
Italy	6.2	-1.3	2.1	2.5	2.9	2.4	3.0	3.2	2.8	2.3	2.1	2.9	0.5	2.3	1.1	-1.1	0.6	0.8	0.7	1.0
Japan	2.1	-0.9	-1.5	-0.2	-0.9	-2.1	-2.0	-1.4	-0.1	-0.9	-1.3	0.3	-3.8	-0.1	0.4	0.4	-0.1	0.8	1.5	2.8
Korea	12.8	3.7	3.3	3.9	7.2	6.3	7.2	4.8	5.8	3.7	4.6	3.9	2.2	3.8	3.7	3.2	2.2	2.3	1.4	2.5
Luxembourg	4.4	0.9	3.9	4.8	3.3	4.2	1.1	4.0	3.5	4.2	4.9	2.3	1.4	2.0	2.1	1.5	3.6	2.4	1.8	2.1
Mexico	..	20.7	20.5	15.9	10.8	5.5	6.7	4.4	5.9	4.6	5.8	5.4	2.8	-1.9	5.8	3.0	3.5	3.2	2.6	2.7
Netherlands	2.2	3.7	3.8	5.5	3.1	4.1	3.2	3.1	1.1	1.6	3.2	3.8	2.4	0.4	1.8	2.4	2.1	1.5	0.4	2.5
Norway	4.2	7.0	5.5	4.9	5.7	4.3	4.1	4.3	4.6	5.5	6.3	6.2	3.4	3.1	4.7	4.6	4.4	3.4	2.9	2.7
Poland	..	14.0	13.7	10.8	10.3	2.4	1.5	1.2	2.2	2.5	4.9	8.6	3.4	5.3	5.5	3.7	2.5	-0.2	3.4	4.5
Portugal	10.8	5.8	5.2	6.0	4.3	3.1	3.3	2.4	4.4	1.7	3.7	2.8	2.5	2.4	-2.5	-3.0	3.7	-1.9	0.0	0.7
Slovak Republic	..	9.9	6.6	13.2	5.6	8.9	7.8	8.1	9.1	7.9	8.7	6.6	2.6	5.5	2.0	2.6	2.6	3.4	2.3	3.5
Slovenia	..	8.6	8.2	10.5	11.6	8.2	7.9	7.6	6.2	5.4	6.1	7.0	2.3	3.6	1.7	-1.2	1.8	-0.2	0.1	0.9
Spain	6.7	1.8	2.0	2.8	3.8	3.5	2.8	2.3	2.9	3.3	4.6	6.7	4.5	0.2	0.8	-1.3	0.8	-0.3	-0.1	0.6
Sweden	6.5	-1.7	3.9	6.8	4.2	3.2	3.7	4.3	3.1	3.1	5.3	3.7	2.7	2.2	3.2	3.0	1.7	2.3	2.6	2.7
Switzerland	3.8	0.0	1.5	2.4	3.8	1.4	0.0	0.1	2.5	1.8	3.1	1.5	1.1	0.6	1.1	0.9	1.3	0.8	0.3	1.3
United Kingdom	5.9	6.9	4.9	5.7	5.6	2.8	4.9	4.5	3.7	5.8	5.4	1.0	1.9	3.4	1.0	2.0	1.9	1.7	2.7	3.3
United States	3.7	4.9	4.1	6.4	3.3	2.7	3.9	4.8	3.4	4.0	4.2	2.8	0.8	2.9	2.6	2.4	1.1	2.2	2.5	3.0
Euro area	4.9	1.7	2.3	2.9	3.0	3.0	2.7	2.3	2.3	2.5	2.7	3.4	1.5	1.9	1.8	1.1	1.4	1.4	1.5	2.0
Total OECD	5.5	4.8	4.5	5.3	3.9	2.7	3.2	3.2	3.1	3.1	3.4	3.1	0.8	1.9	2.6	1.9	1.4	1.8	2.1	2.7

Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933222636

Annex Table 12. **Labour productivity in the total economy**

Percentage change from previous period

	Average 1987-1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Australia	1.5	3.3	2.2	0.7	1.3	2.0	0.7	2.2	-0.1	0.2	1.4	-0.3	0.9	0.3	0.9	2.5	1.1	1.8	0.8	1.4
Austria	2.2	2.5	2.0	2.7	0.5	1.7	0.1	2.0	1.0	1.8	1.7	-0.6	-3.2	0.8	1.5	-0.2	-0.6	-0.5	0.2	0.8
Belgium	1.9	0.3	2.3	1.5	-0.5	1.8	1.0	2.4	0.5	1.5	1.3	-0.8	-2.4	1.8	0.2	-0.2	0.6	0.7	0.6	0.8
Canada	1.1	1.6	2.4	2.6	0.5	0.5	-0.5	1.4	1.9	0.9	-0.3	-0.2	-1.1	1.9	1.4	0.6	0.6	1.8	0.6	1.2
Chile	4.7	2.0	0.8	3.4	2.1	0.8	-0.1	4.1	2.3	4.1	2.4	0.3	-0.4	-2.0	0.6	3.5	2.1	0.3	2.2	2.8
Czech Republic	..	1.5	3.5	5.5	3.3	0.9	4.4	5.0	4.5	5.6	3.4	0.4	-2.9	3.2	2.3	-1.1	-1.1	1.6	2.0	1.9
Denmark	2.0	0.8	2.2	3.0	-0.1	0.4	1.3	3.2	1.0	1.6	-1.4	-1.8	-2.2	4.0	1.2	-0.4	-0.5	0.4	0.8	0.9
Estonia	..	8.9	4.3	11.6	5.5	6.2	5.2	6.8	7.1	5.3	7.7	-5.1	-5.1	7.8	1.6	2.9	0.4	1.3	1.5	3.2
Finland	3.1	3.5	1.9	3.4	1.1	0.6	1.9	3.3	1.2	2.2	3.0	-1.5	-6.0	3.7	1.3	-2.3	0.2	0.2	0.3	1.1
France	1.7	1.8	0.9	1.5	0.5	0.7	0.8	2.5	0.9	1.5	0.9	-0.4	-1.8	1.8	1.3	-0.1	0.7	-0.1	0.9	1.1
Germany	2.0	0.5	0.2	0.9	2.1	0.5	0.4	0.4	0.9	3.1	1.6	-0.5	-5.7	3.6	2.3	-0.5	-0.4	0.8	0.9	1.6
Greece	1.7	-0.2	3.0	3.9	3.2	0.7	5.1	2.4	0.2	3.9	2.0	-1.7	-3.8	-2.7	-2.1	1.3	-0.2	0.0	-1.2	-0.5
Hungary	..	2.6	0.4	3.2	4.0	4.6	3.7	5.7	4.7	3.6	0.4	2.8	-4.1	1.1	1.7	-1.9	0.7	0.4	0.5	1.3
Iceland	1.3	2.2	0.5	2.7	2.0	1.9	2.6	8.7	2.6	-0.8	5.0	0.2	1.1	-2.7	2.4	0.3	0.1	0.3	-0.4	1.5
Ireland	3.9	0.0	3.5	4.8	2.1	4.2	1.1	1.2	0.7	0.8	0.5	-2.0	1.6	3.9	4.7	0.3	-2.1	3.0	1.9	1.7
Israel	..	0.6	0.2	5.3	-1.4	-0.6	0.2	2.8	0.6	2.3	1.8	0.3	-0.5	2.6	1.2	-1.0	0.7	0.1	1.3	1.1
Italy	1.8	0.5	0.4	1.9	-0.3	-1.4	-1.2	0.8	0.6	0.1	0.1	-1.3	-3.9	2.3	0.4	-2.5	0.1	-0.4	0.1	0.5
Japan	1.9	-1.4	0.6	2.5	0.9	1.6	1.9	2.2	0.9	1.2	1.6	-0.8	-4.1	5.0	-0.3	2.1	0.9	-0.7	0.5	1.3
Korea	5.6	0.6	9.4	4.5	2.5	4.6	3.1	2.8	2.6	3.8	4.2	2.2	1.0	5.1	1.9	0.5	1.3	1.1	1.2	2.1
Luxembourg	2.0	1.9	3.3	2.7	-3.5	0.4	-0.6	2.5	1.3	1.0	1.9	-4.1	-6.3	3.3	-0.3	-2.5	0.0	0.7	0.5	0.6
Mexico	..	2.0	1.5	2.7	-0.6	-2.1	0.6	0.5	2.6	1.5	1.4	-1.1	-3.4	-2.8	3.4	-0.7	1.1	2.4	2.2	2.5
Netherlands	1.1	1.8	1.6	2.6	-0.2	-0.7	0.9	2.8	1.7	1.7	1.2	0.4	-2.5	1.7	0.9	-1.2	0.6	1.2	1.0	1.0
New Zealand	2.1	-1.8	1.3	4.2	-0.4	2.1	1.8	1.1	-1.4	0.1	2.6	-3.2	1.6	0.7	-0.1	3.1	-0.3	-0.3	0.6	1.5
Norway	2.8	0.0	1.1	2.6	1.7	1.0	2.1	3.3	1.3	-1.0	-1.1	-2.8	-1.2	1.1	-0.5	0.7	-0.5	1.1	0.9	1.0
Poland	..	3.7	8.7	6.2	3.6	4.6	4.8	3.9	1.3	2.9	2.7	0.1	2.3	3.2	4.2	1.6	1.8	1.7	2.2	2.9
Portugal	2.1	1.9	2.3	1.6	0.2	0.4	0.0	2.5	1.2	1.2	2.5	-0.2	-0.3	3.4	0.1	0.1	1.3	-0.5	1.0	1.1
Slovak Republic	..	4.5	2.4	3.2	2.7	4.6	4.3	5.5	4.8	6.1	8.4	2.2	-3.4	6.4	0.9	1.6	2.2	1.0	1.9	2.3
Slovenia	..	3.4	3.7	2.6	2.4	2.3	3.1	4.0	4.5	4.0	3.5	0.7	-6.1	3.5	2.3	-1.8	0.5	2.0	1.5	1.4
Spain	1.3	-0.1	-0.1	0.3	0.6	0.3	-0.1	-0.6	-0.5	0.0	0.5	0.9	2.9	1.8	2.0	1.7	1.4	0.1	0.1	0.0
Sweden	2.3	2.4	2.1	2.4	-0.4	2.0	3.1	4.6	2.5	3.2	1.2	-1.6	-2.8	4.7	0.6	-0.7	0.3	0.8	1.8	1.6
Switzerland	0.7	1.6	0.9	2.9	-0.2	-0.6	0.4	2.6	2.3	1.9	1.5	-0.1	-2.6	2.4	-0.6	-0.4	0.6	0.3	-0.6	0.5
Turkey	2.3	0.4	-4.5	9.0	-5.7	6.5	6.1	7.3	6.1	5.1	3.2	-1.1	-5.1	3.0	2.5	-1.0	1.3	-2.1	0.5	1.7
United Kingdom	1.7	2.5	1.7	2.6	1.8	1.6	3.3	1.3	1.7	2.0	1.7	-1.2	-2.8	1.7	1.1	-0.4	0.5	0.5	0.7	1.2
United States	1.3	2.1	2.6	2.4	1.1	3.0	2.8	2.7	1.7	0.9	0.9	0.4	1.5	3.2	0.6	0.7	0.8	0.5	0.0	1.7
Euro area	1.8	1.0	0.8	1.6	0.9	0.3	0.4	1.3	0.8	1.7	1.2	-0.4	-2.7	2.4	1.4	-0.4	0.3	0.3	0.6	1.0
Total OECD	1.9	1.3	1.9	2.7	0.8	1.7	1.9	2.3	1.7	1.7	1.4	-0.2	-1.4	2.5	1.2	0.3	0.7	0.5	0.7	1.5

Note: Labour productivity measured as GDP per person employed.

Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933222646

Annex Table 13. **Unemployment rates: commonly used definitions**

Per cent of labour force

	2014 Unemployment thousands	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	Fourth quarter 2014	2015	2016
Australia	747	6.7	6.4	5.9	5.4	5.0	4.8	4.4	4.2	5.6	5.2	5.1	5.2	5.7	6.1	6.0	5.8	6.2	6.0	5.7
Austria	247	3.6	4.0	4.3	5.5	5.7	5.3	4.9	4.2	5.4	4.9	4.6	4.9	5.4	5.7	5.8	5.7	5.7	5.9	5.5
Belgium	430	6.7	7.6	8.2	8.3	8.4	8.2	7.5	7.1	7.9	8.2	7.2	7.7	8.4	8.5	8.5	8.1	8.6	8.4	8.0
Canada	1 322	7.2	7.7	7.6	7.2	6.8	6.3	6.0	6.1	8.3	8.0	7.5	7.3	7.1	6.9	6.7	6.5	6.7	6.7	6.5
Chile	534	9.9	9.8	9.5	10.0	9.2	7.8	7.1	7.8	9.7	8.1	7.2	6.4	6.0	6.3	6.2	6.3	6.4	6.3	6.3
Czech Republic	323	8.2	7.3	7.8	8.3	7.9	7.1	5.3	4.4	6.7	7.3	6.7	7.0	6.9	6.1	5.7	5.5	5.8	5.7	5.4
Denmark	190	4.5	4.6	5.4	5.5	4.8	3.9	3.8	3.5	6.0	7.5	7.6	7.5	7.0	6.5	6.2	6.2	6.3	6.4	6.2
Estonia	49	13.0	11.1	10.5	10.1	8.0	5.9	4.6	5.6	13.5	16.6	12.3	10.0	8.6	7.3	6.5	6.1	6.6	6.3	5.9
Finland	233	9.1	9.1	9.0	8.8	8.4	7.7	6.8	6.4	8.3	8.4	7.8	7.7	8.2	8.7	8.8	8.7	9.1	8.7	8.8
France	2 813	7.4	7.5	8.1	8.5	8.5	8.5	7.7	7.1	8.8	8.9	8.8	9.4	9.9	9.8	10.1	10.0	10.0	10.1	10.0
Germany	2 094	7.8	8.6	9.7	10.3	11.0	10.0	8.6	7.4	7.7	7.0	5.9	5.4	5.2	5.0	4.7	4.5	4.9	4.6	4.4
Greece	1 274	10.8	10.4	9.8	10.6	10.0	9.0	8.4	7.8	9.6	12.7	17.9	24.4	27.5	26.5	25.7	24.7	..	..	..
Hungary	343	5.7	5.8	5.9	6.1	7.2	7.5	7.4	7.8	10.0	11.2	11.0	11.0	10.2	7.7	6.9	6.2	7.4	6.6	5.9
Iceland	9	2.2	3.2	3.3	3.1	2.6	2.9	2.3	3.0	7.2	7.6	7.1	6.0	5.4	4.9	3.9	4.1	4.8	3.9	4.1
Ireland	243	3.9	4.4	4.7	4.5	4.3	4.4	4.7	6.4	12.0	13.8	14.6	14.7	13.1	11.3	9.9	9.2	10.4	9.7	8.9
Israel	225	11.6	12.8	13.3	12.9	11.3	10.5	9.1	7.7	9.5	8.3	7.1	6.8	6.3	6.0	5.5	5.4	5.7	5.5	5.4
Italy	3 237	9.0	8.5	8.4	8.0	7.7	6.8	6.1	6.7	7.8	8.4	8.4	10.6	12.2	12.7	12.7	12.1	13.0	12.4	11.9
Japan	2 363	5.0	5.4	5.3	4.7	4.4	4.1	3.8	4.0	5.0	5.0	4.6	4.3	4.0	3.6	3.5	3.3	3.5	3.5	3.3
Korea	936	4.0	3.3	3.6	3.7	3.7	3.5	3.2	3.2	3.7	3.7	3.4	3.2	3.1	3.5	3.6	3.5	3.5	3.6	3.4
Luxembourg	18	2.2	2.5	3.3	3.7	4.1	4.2	4.2	4.2	5.5	5.8	5.7	6.1	6.9	7.1	7.1	7.0	7.1	7.1	7.0
Mexico[1]	2 509	2.5	2.9	3.0	3.7	3.5	3.5	3.6	3.9	5.4	5.3	5.2	4.9	4.9	4.8	4.7	4.6	4.4	4.6	4.5
Netherlands	660	3.0	3.6	4.8	5.7	5.9	5.0	4.2	3.7	4.4	5.0	5.0	5.8	7.3	7.4	6.9	6.5	7.2	6.7	6.3
New Zealand	141	5.5	5.3	4.8	4.0	3.8	3.8	3.7	4.1	6.1	6.6	6.5	6.9	6.2	5.8	5.6	5.3	5.8	5.5	5.1
Norway	95	3.5	3.8	4.0	4.2	4.4	3.4	2.5	2.6	3.1	3.5	3.2	3.1	3.4	3.5	4.1	4.2	3.6	4.2	4.1
Poland	1 567	18.3	20.0	19.7	19.0	17.8	13.9	9.6	7.1	8.2	9.6	9.6	10.1	10.3	9.0	7.8	7.4	8.3	7.7	7.2
Portugal	727	4.0	5.0	6.3	6.6	7.6	7.6	8.0	7.6	9.5	10.8	12.6	15.5	16.2	13.9	13.2	12.6	13.5	13.0	12.3
Slovak Republic	359	19.3	18.7	17.6	18.2	16.2	13.3	11.1	9.5	12.0	14.4	13.6	14.0	14.2	13.2	12.4	11.6	12.6	12.3	11.0
Slovenia	98	6.2	6.3	6.7	6.3	6.5	5.9	4.8	4.4	5.9	7.2	8.2	8.8	10.1	9.7	9.4	9.1	9.6	9.1	8.9
Spain	5 610	10.5	11.5	11.5	11.0	9.1	8.5	8.2	11.3	17.9	19.9	21.4	24.8	26.1	24.4	22.3	20.3	23.7	21.5	19.7
Sweden	411	5.8	6.0	6.6	7.4	7.7	7.1	6.1	6.2	8.3	8.6	7.8	8.0	8.0	7.9	7.7	7.6	7.8	7.7	7.5
Switzerland	215	1.6	2.4	3.7	4.3	4.3	3.9	3.6	3.3	4.3	4.5	4.0	4.1	4.3	4.4	4.5	4.6	4.2	4.7	4.5
Turkey	2 863	7.8	9.8	9.9	9.7	9.5	9.0	9.2	10.0	13.0	11.1	9.1	8.4	9.0	10.0	10.3	10.1	..	..	..
United Kingdom	2 027	5.1	5.2	5.0	4.8	4.8	5.4	5.3	5.7	7.6	7.9	8.1	8.0	7.6	6.2	5.4	5.1	5.7	5.2	5.0
United States	9 596	4.8	5.8	6.0	5.5	5.1	4.6	4.6	5.8	9.3	9.6	8.9	8.1	7.4	6.2	5.5	5.2	5.7	5.4	5.1
Euro area	18 094	8.0	8.4	8.9	9.1	9.0	8.3	7.5	7.5	9.5	10.0	10.1	11.3	11.9	11.5	11.1	10.5	11.4	10.8	10.3
Total OECD	44 509	6.2	6.8	6.9	6.8	6.6	6.0	5.6	5.9	8.1	8.3	7.9	7.9	7.9	7.3	6.9	6.6	7.1	6.8	6.5

Note: Labour market data are subject to differences in definitions across countries and to many breaks in series, though the latter are often of a minor nature.

1. Based on National Employment Survey.

Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933222654

Annex Table 14. **Harmonised unemployment rates**

Per cent of civilian labour force

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Australia	8.5	8.4	7.7	6.9	6.3	6.7	6.4	5.9	5.4	5.0	4.8	4.4	4.2	5.6	5.2	5.1	5.2	5.7	6.1
Austria	4.7	4.7	4.7	4.2	3.9	4.0	4.4	4.8	5.5	5.6	5.3	4.9	4.1	5.3	4.8	4.6	4.9	5.4	5.6
Belgium	9.5	9.2	9.3	8.5	6.9	6.6	7.5	8.2	8.4	8.4	8.3	7.5	7.0	7.9	8.3	7.2	7.6	8.5	8.5
Canada	9.6	9.1	8.3	7.6	6.8	7.2	7.7	7.6	7.2	6.8	6.3	6.1	6.1	8.4	8.1	7.5	7.3	7.1	6.9
Chile	6.3	6.1	6.4	10.1	9.7	9.9	9.8	9.5	10.0	9.2	7.8	7.1	7.8	9.7	8.2	7.1	6.4	5.9	6.4
Czech Republic	3.9	4.8	6.5	8.7	8.8	8.1	7.3	7.8	8.3	7.9	7.1	5.3	4.4	6.7	7.3	6.7	7.0	7.0	6.1
Denmark	6.3	5.2	4.9	5.2	4.3	4.5	4.6	5.4	5.5	4.8	3.9	3.8	3.5	6.0	7.5	7.6	7.5	7.0	6.5
Estonia	..	9.6	9.2	11.4	14.5	13.0	11.3	10.4	10.1	8.0	5.9	4.6	5.5	13.6	16.7	12.4	10.0	8.6	7.4
Finland	14.6	12.6	11.4	10.2	9.8	9.1	9.1	9.0	8.8	8.4	7.7	6.9	6.4	8.2	8.4	7.8	7.7	8.2	8.7
France	12.4	12.3	12.1	11.3	9.6	8.7	8.6	8.5	8.9	8.9	8.9	8.0	7.5	9.1	9.3	9.2	9.8	10.3	10.3
Germany	8.9	9.7	9.5	8.6	8.0	7.9	8.7	9.8	10.5	11.3	10.3	8.5	7.4	7.6	7.0	5.8	5.4	5.2	5.0
Greece	..	..	..	12.0	11.2	10.7	10.3	9.7	10.6	10.0	9.0	8.4	7.8	9.6	12.8	17.9	24.5	27.5	26.6
Hungary	9.9	9.1	8.7	6.9	6.3	5.6	5.6	5.7	6.1	7.2	7.5	7.4	7.8	10.0	11.2	11.1	11.0	10.1	7.7
Iceland	..	..	..	..	..	..	..	3.4	3.1	2.6	2.9	2.3	3.0	7.2	7.6	7.1	6.0	5.4	5.0
Ireland	11.7	9.9	7.6	5.6	4.2	3.9	4.5	4.6	4.5	4.4	4.5	4.7	6.4	12.0	13.9	14.7	14.7	13.1	11.3
Israel	6.7	7.7	8.5	8.9	8.8	9.3	10.3	10.7	10.4	9.0	8.4	7.3	6.1	7.5	6.6	5.6	6.9	6.2	5.9
Italy	11.2	11.2	11.3	10.9	10.1	9.0	8.5	8.4	8.0	7.7	6.8	6.1	6.7	7.8	8.4	8.4	10.6	12.1	12.7
Japan	3.4	3.4	4.1	4.7	4.7	5.0	5.4	5.3	4.7	4.4	4.1	3.8	4.0	5.1	5.1	4.6	4.4	4.0	3.6
Korea	2.1	2.6	7.0	6.6	4.4	4.0	3.3	3.6	3.7	3.7	3.5	3.3	3.2	3.7	3.7	3.4	3.2	3.1	3.5
Luxembourg	2.9	2.7	2.7	2.4	2.2	1.9	2.6	3.8	5.0	4.7	4.6	4.2	4.9	5.1	4.6	4.8	5.1	5.9	5.9
Mexico	5.5	3.7	3.2	2.5	2.5	2.8	3.0	3.4	3.9	3.6	3.6	3.7	4.0	5.5	5.4	5.2	5.0	4.9	4.8
Netherlands	7.7	6.5	5.1	4.2	3.7	3.1	3.7	4.8	5.7	5.9	5.0	4.2	3.7	4.4	5.0	5.0	5.8	7.2	7.4
New Zealand	6.3	6.8	7.7	7.0	6.2	5.5	5.3	4.8	4.0	3.8	3.9	3.7	4.2	6.1	6.6	6.5	6.9	6.2	5.8
Norway	4.8	3.9	3.1	3.0	3.2	3.4	3.7	4.2	4.3	4.5	3.4	2.5	2.6	3.2	3.6	3.3	3.2	3.5	3.5
Poland	..	10.9	10.2	13.4	16.1	18.3	20.0	19.8	19.1	17.9	14.0	9.6	7.0	8.1	9.7	9.7	10.1	10.3	9.0
Portugal	7.2	6.7	6.1	5.6	5.1	5.1	6.1	7.4	7.8	8.8	8.9	9.1	8.8	10.7	12.0	12.9	15.8	16.5	14.1
Slovak Republic	..	..	12.7	16.5	18.9	19.5	18.8	17.7	18.4	16.4	13.5	11.2	9.6	12.1	14.5	13.7	14.0	14.2	13.2
Slovenia	6.9	6.9	7.4	7.4	6.7	6.2	6.3	6.7	6.3	6.5	6.0	4.9	4.4	5.9	7.3	8.2	8.9	10.1	9.7
Spain	19.9	18.4	16.4	13.6	11.9	10.6	11.4	11.5	11.0	9.2	8.5	8.2	11.3	17.9	19.9	21.4	24.8	26.1	24.5
Sweden	9.6	9.9	8.2	6.7	5.6	5.8	6.0	6.6	7.4	7.6	7.0	6.1	6.2	8.3	8.6	7.8	8.0	8.0	7.9
Switzerland	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4.5	4.0	4.2	4.4	4.5
Turkey	..	..	..	..	..	..	..	..	..	9.2	8.8	8.8	9.7	12.6	10.7	8.8	8.2	8.7	10.0
United Kingdom	7.9	6.8	6.1	5.9	5.4	5.0	5.1	5.0	4.7	4.8	5.4	5.3	5.6	7.6	7.8	8.1	7.9	7.6	6.2
United States	5.4	5.0	4.5	4.2	4.0	4.7	5.8	6.0	5.5	5.1	4.6	4.6	5.8	9.3	9.6	9.0	8.1	7.4	6.2
Euro area	10.8	10.8	10.6	9.8	8.9	8.3	8.6	9.1	9.3	9.1	8.4	7.5	7.6	9.6	10.2	10.2	11.4	12.0	11.6
Total OECD	7.2	6.9	6.8	6.6	6.1	6.3	6.9	7.0	6.9	6.6	6.1	5.6	6.0	8.1	8.3	7.9	7.9	7.9	7.4

Note: In so far as possible, the data have been adjusted to ensure comparability over time and to conform to the guidelines of the International Labour Office. Annual figures are calculated by averaging the monthly and/or quarterly estimates (for both unemployed and the labour force). Further information is available from OECD.stat *(http://stats.oecd.org/index.aspx),* see the metadata relating to the harmonised unemployment rate.

Source: OECD, Main Economic Indicators.

StatLink http://dx.doi.org/10.1787/888933222667

Annex Table 15. **Labour force, employment and unemployment**

Millions

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Labour force																
Major seven countries	346.4	348.0	350.3	351.8	355.1	358.6	361.6	363.8	363.8	363.7	364.1	366.5	368.1	369.6	372.4	374.3
Total of smaller countries	198.3	201.6	203.3	207.4	210.5	213.7	216.9	220.4	223.3	226.3	229.4	232.7	235.0	238.0	240.5	242.8
Euro area	143.4	144.8	146.2	147.5	149.4	151.1	152.6	154.1	154.5	154.6	155.1	156.3	156.5	156.7	157.4	158.1
Total OECD	544.7	549.5	553.6	559.2	565.5	572.3	578.5	584.1	587.1	590.0	593.4	599.3	603.1	607.6	612.9	617.1
Employment																
Major seven countries	326.3	325.8	327.2	329.6	333.3	338.1	342.1	342.6	334.7	334.2	336.4	339.7	342.1	346.1	350.2	353.0
Total of smaller countries	184.5	186.6	187.9	191.4	195.1	199.7	203.9	206.8	204.8	206.9	210.0	212.1	213.5	217.0	220.2	223.3
Euro area	131.9	132.7	133.2	134.0	136.0	138.5	141.3	142.6	139.9	139.2	139.6	138.7	137.9	138.6	139.9	141.5
Total OECD	510.8	512.4	515.1	521.0	528.4	537.7	546.0	549.4	539.5	541.1	546.4	551.8	555.6	563.1	570.4	576.3
Unemployment																
Major seven countries	20.1	22.2	23.1	22.2	21.8	20.6	19.5	21.1	29.0	29.5	27.7	26.9	26.0	23.5	22.1	21.3
Total of smaller countries	13.8	14.9	15.4	15.9	15.4	14.0	12.9	13.6	18.5	19.4	19.4	20.6	21.5	21.1	20.3	19.6
Euro area	11.5	12.1	13.0	13.4	13.4	12.5	11.4	11.6	14.6	15.4	15.6	17.6	18.7	18.1	17.4	16.6
Total OECD	33.9	37.1	38.5	38.2	37.1	34.6	32.4	34.7	47.6	48.9	47.1	47.5	47.5	44.5	42.5	40.8

Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933222678

Annex Table 16. **GDP deflators**

Percentage change from previous year

	Average 1990-00	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	Fourth quarter 2014	Fourth quarter 2015	Fourth quarter 2016
Australia	1.7	3.6	3.1	3.1	3.6	4.5	5.1	4.3	6.4	0.1	5.6	4.4	-0.4	1.2	0.4	-0.4	1.9	-0.8	0.4	2.3
Austria	1.8	1.8	1.2	1.3	1.7	2.7	1.8	2.3	1.9	1.9	0.9	1.8	1.8	1.5	1.7	1.1	1.5	1.7	1.0	1.7
Belgium	1.9	2.0	1.9	1.9	2.2	2.3	2.5	2.3	1.9	1.1	2.0	2.2	2.1	1.5	0.6	0.6	1.3	0.4	0.7	1.5
Brazil	..	8.1	9.9	13.9	7.8	7.5	6.7	6.4	8.9	7.4	8.5	8.3	5.9	6.5	6.9	7.1	5.9	..	..	..
Canada	1.8	1.6	1.2	3.3	3.3	3.2	2.7	3.2	3.9	-2.1	2.6	3.4	1.5	1.4	1.8	-0.4	1.9	1.3	0.4	2.1
Chile	7.8	4.2	3.9	5.0	7.6	7.1	12.6	4.8	0.5	3.8	8.8	3.4	0.8	1.8	5.5	4.9	3.3	5.8	3.9	3.7
China	..	2.0	0.6	2.6	6.9	3.9	3.9	7.8	7.8	-0.1	7.0	8.1	2.4	2.2	0.8	-0.1	0.8	..	..	..
Colombia	..	6.5	6.0	6.8	7.3	5.6	5.8	5.0	7.6	3.4	3.9	6.7	3.0	1.9	1.8	2.6	3.2	..	..	..
Czech Republic	..	4.8	2.7	1.1	4.0	0.1	0.7	3.5	2.0	2.6	-1.4	-0.2	1.4	1.7	2.4	1.2	1.6	1.8	1.3	1.7
Denmark	1.8	2.5	2.3	1.5	2.1	2.9	2.2	2.5	4.1	0.5	3.2	0.8	2.5	1.5	0.6	1.3	1.3	1.3	1.0	1.7
Estonia	..	6.3	5.0	4.3	4.8	6.0	8.7	11.3	7.4	0.4	1.5	3.0	2.7	4.5	2.1	1.1	2.0	1.5	1.1	2.2
Finland	1.8	3.3	1.0	0.2	0.6	0.9	0.9	2.8	3.1	1.9	0.4	2.6	3.0	2.5	1.1	0.5	0.6	0.9	0.1	0.9
France	1.3	2.0	2.1	1.9	1.6	1.9	2.2	2.6	2.4	0.1	1.1	0.9	1.2	0.8	0.6	1.0	0.8	0.9	0.9	0.9
Germany	1.8	1.3	1.3	1.2	1.1	0.6	0.3	1.7	0.8	1.8	0.7	1.1	1.5	2.1	1.7	1.8	1.5	1.6	1.9	1.5
Greece	9.3	3.4	3.5	3.2	3.2	2.0	3.4	3.4	4.3	2.6	0.9	0.6	0.0	-2.3	-2.6	-1.1	-0.2	..	..	..
Hungary	..	11.5	8.4	5.3	4.6	2.3	4.0	5.4	4.6	4.1	2.1	2.2	3.6	3.2	3.0	1.7	2.8	3.1	2.2	3.0
Iceland	3.6	8.7	5.6	0.5	2.6	3.5	8.8	4.3	11.4	8.0	5.5	2.6	3.2	2.0	4.0	5.9	3.3	7.2	3.4	2.7
India	..	3.4	3.2	3.7	5.3	4.3	5.9	5.8	9.1	4.4	9.6	8.8	7.6	6.8	4.2	4.4	5.2	..	..	..
Indonesia	..	14.3	5.9	5.5	8.6	14.3	14.1	11.3	18.1	6.0	7.3	7.5	3.8	4.7	5.4	5.2	4.5	..	..	..
Ireland	3.6	6.8	5.4	4.0	2.6	2.9	3.0	2.0	-2.4	-3.9	-1.6	0.9	1.3	1.0	1.2	2.2	1.8	3.1	0.8	2.3
Israel	9.8	1.6	4.3	-0.4	0.1	1.1	1.3	0.8	1.7	4.2	1.4	1.9	4.2	2.3	1.0	2.9	1.1	1.9	1.9	1.3
Italy	3.8	3.0	3.4	3.2	2.5	1.9	1.9	2.4	2.5	2.0	0.3	1.5	1.4	1.4	0.8	0.5	0.9	0.6	0.4	1.2
Japan	0.1	-1.2	-1.6	-1.7	-1.4	-1.3	-1.1	-0.9	-1.3	-0.5	-2.2	-1.9	-0.9	-0.6	1.7	2.2	1.1	2.4	1.8	1.4
Korea	5.1	3.7	3.1	3.4	3.0	1.0	-0.1	2.4	3.0	3.5	3.2	1.6	1.0	0.9	0.6	1.1	1.0	0.7	1.6	0.9
Latvia	..	2.3	5.2	4.9	6.8	11.2	12.5	20.2	11.8	-9.8	-1.0	6.4	3.6	1.1	1.2	1.1	2.4	..	..	..
Luxembourg	2.5	-0.5	2.1	2.9	1.9	3.8	6.7	1.4	3.9	1.6	3.7	5.0	3.4	1.4	1.6	1.7	1.4	1.9	0.8	1.8
Mexico	17.6	5.1	5.6	6.0	8.6	5.1	6.3	4.9	6.3	3.3	4.5	5.3	3.6	1.5	3.6	3.1	3.0	3.5	3.1	3.1
Netherlands	2.4	4.4	3.7	2.2	1.1	1.6	2.1	1.9	2.3	0.5	1.2	0.1	1.3	1.1	1.1	0.3	1.4	1.1	0.8	1.3
New Zealand	1.4	4.4	0.7	1.4	3.4	2.4	2.4	4.3	3.8	0.8	3.0	2.9	-0.4	2.8	2.5	-0.8	1.5	-1.7	0.7	1.6
Norway	3.4	1.6	-1.7	2.9	5.8	8.8	8.8	3.1	10.4	-5.2	6.0	6.8	3.4	2.7	0.4	-0.5	2.5	-2.1	1.6	2.0
Poland	..	3.7	2.2	0.8	4.3	2.6	1.8	3.9	3.6	3.9	1.8	3.2	2.2	1.1	0.3	0.1	1.4	-0.7	1.1	1.5
Portugal	5.6	3.7	4.2	3.4	2.4	3.3	3.2	3.0	1.7	1.1	0.6	-0.3	-0.4	2.2	1.2	0.5	0.4	0.5	0.7	0.6
Russian Federation	..	16.5	15.6	14.0	20.3	19.3	15.2	13.8	18.0	2.0	14.2	15.9	7.4	5.0	7.2	10.8	7.1	..	..	..
Slovak Republic	..	5.1	4.0	5.4	5.8	2.5	2.9	1.1	2.8	-1.2	0.5	1.6	1.3	0.5	-0.2	0.2	1.3	0.0	0.6	1.5
Slovenia	33.8	8.7	7.6	5.7	3.3	1.6	2.2	4.2	4.5	3.4	-1.1	1.2	0.3	1.4	0.4	0.8	-0.5	-0.5	1.3	-0.8
South Africa	..	7.6	12.2	5.8	6.5	5.4	6.3	8.8	8.8	7.5	6.4	6.7	5.5	6.0	5.8	5.1	5.6	..	..	..
Spain	4.1	4.1	4.1	3.9	3.9	4.1	4.0	3.3	2.1	0.3	0.2	0.1	0.2	0.7	-0.5	1.1	0.8	-0.6	1.7	0.5
Sweden	2.3	2.4	1.6	1.7	0.6	0.8	1.8	2.8	3.4	2.4	1.1	1.2	1.0	1.2	1.3	1.5	1.6	1.2	1.5	1.8
Switzerland	1.3	1.0	-0.3	0.9	0.4	0.6	2.0	2.3	1.9	0.4	0.3	0.2	-0.1	-0.2	0.0	-0.6	0.4	0.0	-0.5	0.4
Turkey	71.5	52.9	37.4	23.3	12.4	7.1	9.3	6.2	12.0	5.3	5.7	8.6	6.9	6.2	8.5	7.0	6.4	..	..	..
United Kingdom	2.8	1.1	2.7	2.2	2.9	2.8	2.7	2.9	2.9	2.0	3.2	2.1	1.7	1.8	1.7	0.4	1.2	1.4	0.2	1.5
United States	2.1	2.3	1.5	2.0	2.7	3.2	3.1	2.7	2.0	0.8	1.2	2.1	1.8	1.5	1.5	1.1	1.8	1.3	1.4	1.8
Euro area	2.6	2.5	2.5	2.2	1.9	1.9	1.9	2.4	1.9	1.1	0.7	1.0	1.2	1.3	0.9	1.1	1.1	0.9	1.2	1.2
Total OECD	4.5	3.2	2.5	2.3	2.6	2.4	2.5	2.5	2.4	1.1	1.4	1.8	1.5	1.4	1.6	1.3	1.7	1.5	1.5	1.8

Note: The adoption of national accounts systems has been proceeding at an uneven pace among OECD member countries, both with respect to variables and the time period covered. As a consequence, there are breaks in many national series. For further information, see table "National Accounts Reporting Systems, base years and latest data updates" at the beginning of the Statistical Annex.

Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933222685

Annex Table 17. **Private consumption deflators**

Percentage change from previous year

	Average 1990-00	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	Fourth quarter 2014	Fourth quarter 2015	Fourth quarter 2016
Australia	2.1	3.4	2.8	2.3	1.5	2.2	3.6	3.2	3.2	2.6	2.2	2.6	2.5	2.6	2.3	1.5	2.3	1.6	1.9	2.4
Austria	2.0	2.4	1.0	1.5	1.8	2.5	2.1	2.5	2.1	0.5	1.7	3.3	2.4	2.2	1.7	0.9	1.6	1.4	1.0	1.6
Belgium	2.1	2.0	1.2	1.5	2.2	2.7	3.1	3.0	3.2	-0.5	1.7	3.1	2.2	1.2	0.7	0.2	1.3	0.2	0.7	1.4
Brazil	..	8.1	8.2	15.9	6.8	6.7	5.3	5.2	7.1	6.7	6.6	7.5	6.1	7.0	6.8	8.1	6.3	..	..	..
Canada	1.9	2.0	1.9	1.7	1.6	1.7	1.3	1.6	1.6	0.2	1.3	2.1	1.3	1.3	1.9	1.1	1.8	1.8	1.3	1.9
Chile	..	4.5	2.9	2.7	0.7	4.1	3.2	3.9	7.5	1.3	3.1	3.8	2.7	2.5	5.6	4.7	3.5	6.4	3.8	3.4
Colombia	..	8.3	5.8	6.3	5.8	4.4	4.6	4.3	5.8	3.9	2.4	4.7	2.7	2.1	2.9	4.0	3.4	..	..	..
Czech Republic	..	3.5	1.4	0.1	3.1	1.1	1.8	3.0	4.7	0.9	0.5	1.6	2.5	1.0	-0.3	-0.1	1.2	-0.3	0.1	1.5
Denmark	1.9	2.3	1.9	1.2	1.2	1.7	2.2	1.7	2.9	1.3	2.5	2.4	2.6	1.0	0.7	1.0	1.3	0.7	1.1	1.4
Estonia	..	6.3	3.7	2.1	4.1	4.4	6.1	7.7	8.3	-0.2	3.5	5.2	3.4	3.1	0.7	-0.1	1.6	0.0	0.4	1.8
Finland	2.2	2.6	1.6	1.0	0.3	1.0	1.3	1.9	3.4	1.8	1.4	3.2	2.8	2.5	1.5	0.6	0.9	1.3	0.4	1.2
France	1.3	2.0	0.9	1.7	2.1	1.8	2.2	2.1	2.8	-1.4	1.1	1.8	1.4	0.8	0.0	0.0	0.8	-0.1	0.3	1.0
Germany	1.8	1.7	1.3	1.8	1.0	1.6	1.1	1.6	1.7	-0.4	2.0	1.9	1.5	1.2	0.9	0.4	1.5	0.7	0.8	1.7
Greece	9.2	2.9	2.3	3.0	2.9	2.8	3.3	3.5	4.2	1.0	3.6	2.5	0.8	-1.6	-2.2	-0.6	0.1	..	..	..
Hungary	..	9.5	5.8	4.2	5.5	3.6	3.5	6.6	5.5	4.0	3.7	3.7	6.3	2.6	0.8	0.1	2.8	-0.4	1.7	2.9
Iceland	3.0	8.1	4.9	1.0	3.2	2.8	8.0	4.6	13.4	10.6	2.1	3.6	5.6	3.4	2.7	1.4	2.8	2.2	1.6	2.8
India	..	3.0	3.1	3.3	3.0	3.1	5.5	5.3	6.2	5.9	8.3	7.8	9.2	8.7	6.3	4.7	4.4	..	..	..
Indonesia	..	17.2	14.1	7.2	6.4	12.1	13.6	14.2	13.4	6.0	7.9	7.1	6.1	6.5	5.1	3.8	4.4	..	..	..
Ireland	2.6	4.6	5.3	4.0	1.7	1.6	2.5	3.0	1.7	-6.5	-2.1	2.3	1.2	1.4	1.6	0.7	1.7	1.1	1.0	1.8
Israel	..	0.8	4.3	0.3	0.4	1.6	2.7	1.0	5.7	1.6	3.3	3.2	2.1	2.1	0.4	-0.3	1.0	-0.6	0.1	1.1
Italy	4.2	2.6	2.9	2.9	2.4	2.1	2.6	2.3	3.1	-0.4	1.4	2.9	2.7	1.1	0.2	0.0	0.9	0.1	0.3	1.1
Japan	0.5	-1.0	-1.4	-1.0	-0.8	-0.6	-0.3	-0.7	0.2	-2.5	-1.7	-0.8	-0.9	-0.3	2.0	0.2	1.1	2.0	-0.1	1.4
Korea	6.8	4.4	3.1	3.3	3.2	2.2	1.5	2.0	4.5	2.6	2.5	3.7	2.2	1.0	1.1	0.8	1.9	0.8	1.5	1.9
Latvia	..	2.3	5.6	5.1	7.0	9.7	10.1	11.8	13.2	-4.1	-2.7	6.0	3.4	0.4	0.6	0.5	2.4	..	..	..
Luxembourg	2.7	1.9	1.2	1.8	2.1	3.0	2.6	2.2	2.2	0.6	1.0	2.5	1.9	0.3	0.0	0.5	1.4	0.2	0.8	1.5
Mexico	18.9	5.3	4.1	-0.6	6.0	4.8	3.5	5.0	6.3	5.5	4.4	3.5	3.9	2.7	3.6	3.1	2.9	3.8	3.0	3.0
Netherlands	2.4	3.2	3.3	1.9	1.8	1.3	2.5	2.2	2.2	-1.1	1.0	2.1	1.4	1.9	1.3	0.2	1.4	0.7	1.0	1.2
New Zealand	1.5	2.2	2.0	0.5	1.3	1.9	3.0	1.5	3.5	2.5	1.3	2.9	0.7	0.5	0.8	0.2	1.3	0.7	0.4	1.4
Norway	2.3	2.2	1.4	2.8	1.2	1.1	1.8	1.3	3.5	2.5	2.1	1.1	1.1	2.8	2.3	2.3	2.3	2.1	2.3	2.4
Poland	..	3.8	3.3	0.5	3.4	2.3	1.5	2.4	3.8	2.7	2.6	4.8	3.2	0.8	-0.3	-1.1	1.1	-1.5	0.0	1.3
Portugal	5.2	3.8	3.5	3.6	2.3	3.8	3.5	3.4	2.8	-1.9	1.8	1.7	1.8	1.0	0.7	0.1	0.7	0.4	0.1	1.1
Russian Federation	..	19.7	15.6	12.6	14.7	12.5	8.6	8.2	12.7	10.7	6.6	7.8	5.8	6.4	8.3	16.3	7.0	..	..	..
Slovak Republic	..	5.6	2.9	6.6	7.2	2.7	4.9	2.6	4.5	0.1	1.0	3.9	3.4	1.3	-0.1	0.1	1.4	0.5	0.1	1.7
Slovenia	33.8	7.5	7.5	5.2	3.0	2.2	2.4	4.1	5.6	0.9	1.4	1.7	1.4	0.6	0.3	-0.9	-0.1	0.0	-0.9	0.1
South Africa	..	6.4	9.0	5.5	7.1	4.8	3.3	6.8	8.9	7.0	4.6	5.6	6.3	5.5	5.8	4.6	5.7	..	..	..
Spain	4.1	3.5	2.8	3.2	3.6	3.4	3.6	3.3	3.6	-0.9	2.0	2.7	2.4	0.9	-0.1	0.5	0.7	-0.3	0.6	0.8
Sweden	2.9	2.1	1.5	1.6	0.8	1.1	1.2	1.4	3.1	2.2	1.5	1.7	0.5	0.7	0.8	0.7	1.4	0.8	0.8	1.7
Switzerland	1.7	0.6	-0.3	0.8	0.7	1.1	1.3	1.3	1.9	-0.5	0.5	0.0	-0.9	-0.4	-0.1	-0.7	0.2	-0.1	-0.7	0.3
Turkey	72.7	49.7	38.5	23.4	10.8	8.3	9.8	6.6	10.8	4.9	8.5	8.9	8.1	6.2	7.0	7.5	6.5	..	..	..
United Kingdom	3.0	0.5	0.9	1.4	2.2	2.4	2.6	2.8	3.9	1.6	4.4	3.4	2.1	1.9	1.6	0.3	1.3	1.3	0.0	1.6
United States	2.1	1.9	1.3	2.0	2.4	2.9	2.7	2.5	3.1	-0.1	1.7	2.5	1.8	1.2	1.3	0.3	1.6	1.1	0.6	1.7
Euro area	2.7	2.4	1.9	2.2	2.0	2.1	2.2	2.3	2.7	-0.7	1.6	2.3	1.9	1.1	0.5	0.2	1.1	0.3	0.5	1.2
Total OECD	4.9	3.1	2.2	2.0	2.3	2.4	2.4	2.3	3.2	0.3	1.9	2.5	1.9	1.3	1.5	0.7	1.7	1.3	0.9	1.8

Note: The adoption of national accounts systems has been proceeding at an uneven pace among OECD member countries, both with respect to variables and the time period covered. As a consequence, there are breaks in many national series. For further information, see table "National Accounts Reporting Systems, base years and latest data updates" at the beginning of the Statistical Annex.

Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933222696

Annex Table 18. **Consumer price indices**

Percentage change from previous year

	Average 1990-00	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	Fourth quarter 2014	Fourth quarter 2015	Fourth quarter 2016
Australia		4.4	3.0	2.7	2.3	2.6	3.6	2.3	4.4	1.7	2.9	3.3	1.7	2.4	2.5	1.6	2.4	1.6	2.0	2.5
Austria		2.3	1.7	1.3	2.0	2.1	1.7	2.2	3.2	0.4	1.7	3.6	2.6	2.1	1.5	0.6	1.6	1.2	0.7	1.6
Belgium		2.4	1.6	1.5	1.9	2.5	2.3	1.8	4.5	0.0	2.3	3.4	2.6	1.2	0.5	0.0	1.3	0.0	0.6	1.4
Brazil		6.8	8.5	14.7	6.6	6.9	4.2	3.6	5.7	4.9	5.0	6.6	5.4	6.2	6.3	8.3	5.2	..	..	..
Canada		2.5	2.3	2.7	1.8	2.2	2.0	2.1	2.4	0.3	1.8	2.9	1.5	1.0	1.9	1.0	2.0	1.9	1.4	2.0
Chile		3.6	2.5	2.8	1.1	3.1	3.4	4.4	8.7	0.4	1.4	3.3	3.0	1.8	4.7	3.3	2.6	5.5	2.4	2.5
China		0.3	-0.7	1.1	3.8	1.8	1.6	4.8	5.9	-0.7	3.2	5.5	2.6	2.6	2.1	1.6	2.0	..	..	..
Colombia		8.0	6.4	7.1	5.9	5.1	4.3	5.5	7.0	4.2	2.3	3.4	3.2	2.0	2.9	4.2	3.2	..	..	..
Czech Republic		4.7	1.8	0.1	2.8	1.9	2.6	3.0	6.3	1.0	1.5	1.9	3.3	1.4	0.4	0.2	1.6	0.4	0.3	1.9
Denmark		2.4	2.4	2.1	1.2	1.8	1.9	1.7	3.4	1.3	2.3	2.8	2.4	0.8	0.6	0.5	1.2	0.4	0.7	1.3
Estonia		5.6	3.6	1.4	3.0	4.1	4.4	6.7	10.6	0.2	2.7	5.1	4.2	3.2	0.5	0.1	1.8	0.2	0.6	2.0
Finland		2.7	2.0	1.3	0.1	0.8	1.3	1.6	3.9	1.6	1.7	3.3	3.2	2.2	1.2	0.2	0.7	0.9	0.3	0.4
France		1.8	1.9	2.2	2.3	1.9	1.9	1.6	3.2	0.1	1.7	2.3	2.2	1.0	0.6	0.1	1.1	0.3	0.5	1.1
Germany		1.9	1.4	1.0	1.8	1.9	1.8	2.3	2.8	0.2	1.2	2.5	2.1	1.6	0.8	0.2	1.8	0.4	0.7	2.0
Greece		3.7	3.9	3.4	3.0	3.5	3.3	3.0	4.2	1.3	4.7	3.1	1.0	-0.9	-1.4	-1.4	0.3	..	..	..
Hungary		9.1	5.3	4.7	6.7	3.6	3.9	8.0	6.0	4.2	4.9	3.9	5.7	1.7	-0.2	-0.2	2.7	-0.7	1.0	2.9
Iceland[1]		6.4	5.2	2.1	3.2	4.0	6.7	5.1	12.7	12.0	5.4	4.0	5.2	3.9	2.0	1.6	3.8	1.3	2.5	3.7
India		3.8	5.2	4.3	3.8	3.7	6.1	6.0	8.6	9.7	10.3	9.6	9.7	10.1	7.2	5.6	5.4	..	..	..
Indonesia		11.5	11.9	6.8	6.1	10.5	13.1	6.4	10.2	4.4	5.1	5.4	4.3	6.4	6.4	6.2	5.0	..	..	..
Ireland		4.0	4.7	4.0	2.3	2.2	2.7	2.9	3.1	-1.7	-1.6	1.2	1.9	0.5	0.3	0.1	1.7	0.1	0.8	1.8
Israel		1.1	5.7	0.7	-0.4	1.3	2.1	0.5	4.6	3.3	2.7	3.5	1.7	1.6	0.5	-0.3	1.0	-0.2	0.0	1.1
Italy		2.3	2.6	2.8	2.3	2.2	2.2	2.0	3.5	0.8	1.6	2.9	3.3	1.3	0.2	0.2	1.3	0.1	0.5	1.5
Japan		-0.8	-0.9	-0.3	0.0	-0.6	0.2	0.1	1.4	-1.4	-0.7	-0.3	0.0	0.4	2.7	0.7	1.1	2.5	0.3	1.4
Korea		4.1	2.8	3.5	3.6	2.8	2.2	2.5	4.7	2.8	2.9	4.0	2.2	1.3	1.3	0.8	1.8	1.0	1.3	1.8
Latvia		2.5	2.0	2.9	6.2	6.9	6.6	10.1	15.3	3.3	-1.2	4.2	2.3	0.0	0.7	0.5	2.4	..	..	..
Luxembourg		2.4	2.1	2.5	3.2	3.8	3.0	2.7	4.1	0.0	2.8	3.7	2.9	1.7	0.7	0.1	1.5	-0.1	1.0	1.5
Mexico		6.4	5.0	4.5	4.7	4.0	3.6	4.0	5.1	5.3	4.2	3.4	4.1	3.8	4.0	3.5	3.1	4.2	3.1	3.2
Netherlands		5.1	3.9	2.2	1.4	1.5	1.7	1.6	2.2	1.0	0.9	2.5	2.8	2.6	0.3	0.1	1.4	0.2	0.8	1.2
New Zealand		2.6	2.7	1.8	2.3	3.0	3.4	2.4	4.0	2.1	2.3	4.0	1.1	1.1	1.2	0.4	1.7	0.8	0.8	1.8
Norway		3.0	1.3	2.5	0.5	1.5	2.3	0.7	3.8	2.2	2.4	1.3	0.7	2.1	2.0	2.1	2.2	2.0	2.2	2.0
Poland		5.4	1.9	0.7	3.4	2.2	1.3	2.4	4.2	3.8	2.6	4.2	3.6	1.0	0.1	-0.5	1.3	-0.6	0.2	1.5
Portugal		4.4	3.7	3.3	2.5	2.1	3.0	2.4	2.7	-0.9	1.4	3.6	2.8	0.4	-0.2	0.1	0.7	0.0	0.1	0.9
Russian Federation		21.5	15.8	13.7	10.9	12.7	9.7	9.0	14.1	11.7	6.9	8.4	5.1	6.8	7.8	16.3	7.0	..	..	..
Slovak Republic		7.2	3.5	8.4	7.5	2.8	4.3	1.9	3.9	0.9	0.7	4.1	3.7	1.5	-0.1	-0.2	1.4	-0.1	0.2	1.7
Slovenia		8.6	7.5	5.7	3.7	2.5	2.5	3.8	5.5	0.9	2.1	2.1	2.8	1.9	0.4	-0.4	0.7	0.0	-0.2	0.8
South Africa		5.7	9.2	5.9	1.4	3.4	4.6	7.1	11.0	7.1	4.3	5.0	5.7	5.8	6.1	4.8	5.7	..	..	..
Spain		2.8	3.6	3.1	3.1	3.4	3.6	2.8	4.1	-0.2	2.0	3.1	2.4	1.5	-0.2	-0.6	0.7	-0.6	0.0	0.8
Sweden[2]		2.4	2.2	1.9	0.4	0.5	1.4	2.2	3.4	-0.5	1.2	3.0	0.9	0.0	-0.2	0.2	1.4	-0.2	0.7	1.7
Switzerland		1.0	0.6	0.6	0.8	1.2	1.1	0.7	2.4	-0.5	0.7	0.2	-0.7	-0.2	0.0	-0.8	-0.1	-0.2	-0.8	0.0
Turkey		54.4	45.0	21.6	8.6	8.2	9.6	8.8	10.4	6.3	8.6	6.5	8.9	7.5	8.9	7.5	6.7	..	..	..
United Kingdom		1.2	1.3	1.4	1.3	2.0	2.3	2.3	3.6	2.2	3.3	4.5	2.8	2.6	1.5	0.0	1.7	0.9	0.3	2.0
United States		2.8	1.6	2.3	2.7	3.4	3.2	2.9	3.8	-0.3	1.6	3.1	2.1	1.5	1.6	0.0	1.8	1.2	0.5	1.9
Euro area		2.4	2.3	2.1	2.2	2.2	2.2	2.1	3.3	0.3	1.6	2.7	2.5	1.3	0.4	0.0	1.3	0.1	0.5	1.4

Note: For the euro area countries, the euro area aggregate and the United Kingdom: harmonised index of consumer prices (HICP).

1. Excluding rent, but including imputed rent.
2. The consumer price index includes mortgage interest costs.

Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933222705

Annex Table 19. **Oil and other primary commodity markets**

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Estimates and assumptions 2015	2016
Oil market conditions[1]										Million barrels per day								
Demand																		
OECD	48.5	48.6	48.6	48.6	49.4	50.2	50.5	50.2	50.1	48.4	46.4	47.0	46.5	46.0	46.1	45.6	45.7	..
of which: North America	24.1	24.3	24.3	24.4	24.9	25.7	25.9	25.7	25.8	24.5	23.7	24.1	24.0	23.6	24.1	24.0	24.2	..
Europe	15.4	15.3	15.5	15.4	15.5	15.6	15.7	15.7	15.6	15.5	14.7	14.7	14.3	13.8	13.7	13.5	13.5	..
Pacific	9.0	8.9	8.8	8.8	9.0	8.9	8.9	8.8	8.7	8.4	8.0	8.2	8.2	8.6	8.3	8.1	8.0	..
Non-OECD	27.9	28.6	29.3	30.0	30.9	33.1	34.1	35.4	36.9	37.9	39.1	41.3	42.4	44.2	45.8	46.9	47.9	..
Total	76.5	77.2	77.9	78.7	80.2	83.3	84.7	85.6	87.0	86.3	85.5	88.3	88.9	90.2	91.9	92.5	93.6	..
Supply																		
OECD	21.5	21.9	21.7	21.8	21.5	21.1	20.2	19.8	19.5	18.8	18.8	18.9	19.0	19.9	20.9	22.6	23.3	..
OPEC total	29.2	30.8	30.3	28.8	30.8	33.3	34.8	35.1	35.0	36.2	34.2	34.7	35.8	37.5	36.7	36.7	..	..
Former USSR	7.5	8.0	8.6	9.5	10.5	11.4	11.8	12.3	12.8	12.8	13.3	13.5	13.6	13.7	13.9	13.9	13.8	..
Other non-OECD	16.6	16.7	16.9	17.3	17.5	17.7	18.0	18.3	18.5	19.0	19.4	20.2	20.3	19.9	19.9	20.2		..
Total	74.8	77.3	77.5	77.4	80.3	83.5	84.8	85.5	85.7	86.8	85.7	87.4	88.6	90.9	91.4	93.5	..	..
Trade																		
OECD net imports	26.3	26.8	27.2	26.6	28.2	29.3	30.6	30.7	30.4	29.9	27.6	28.2	27.2	26.3	25.0	23.4	22.4	..
Former USSR net exports	3.8	4.2	4.9	5.8	6.6	7.6	8.0	8.3	8.7	8.6	9.2	9.4	9.2	9.2	9.1	9.0	9.1	..
Other non-OECD net exports	22.6	22.6	22.3	20.8	21.5	21.7	22.6	22.4	21.7	21.3	18.4	18.8	18.1	17.1	15.9	14.3	13.3	..
Prices[2]										fob, $ per bl								
Brent crude oil price[3]	17.9	28.4	24.5	25.0	28.8	38.3	54.4	65.2	72.5	97.0	61.5	79.5	111.2	111.6	108.7	101.4	85.0	85.0
Prices of other primary commodities[2]										$ indices, 2010 = 100								
Food and tropical beverages	48	45	42	47	51	57	56	62	78	105	90	100	129	123	109	106	98	98
Agricultural raw materials	59	62	54	52	63	70	71	79	94	90	74	100	111	92	94	94	90	90
Minerals, ores and metals	36	41	37	36	40	54	63	92	102	102	71	100	116	98	94	88	85	85
Total[4]	44	47	42	42	48	58	63	81	94	100	77	100	118	103	98	94	89	89

1. Based on data published in various issues of International Energy Agency, *Oil Market Report.*
2. Indices through 2014 are based on data compiled by the International Energy Agency for oil and by the Hamburg Institute of International Economics (HWWI) for the prices of other primary commodities; OECD estimates and assumptions for 2015 and 2016.
3. North Sea Dated, London close, midpoint.
4. OECD calculations. The total price index for non-energy primary commodities is a weighted average of the individual HWWI non-oil commodity price indices with the weights based on the commodity's

StatLink http://dx.doi.org/10.1787/888933222714

Annex Table 20. **Employment and labour force**

Percentage change from previous period

	Employment									Labour force								
	Average 1990-99	Average 2000-09	2010	2011	2012	2013	2014	2015	2016	Average 1990-99	Average 2000-09	2010	2011	2012	2013	2014	2015	2016
Australia	1.1	2.1	2.0	1.7	1.2	1.0	0.9	1.5	1.5	1.1	2.1	1.6	1.6	1.3	1.4	1.3	1.4	1.3
Austria	0.9	0.5	0.9	0.9	0.8	0.5	0.2	0.4	1.0	0.9	1.0	0.3	0.6	1.1	1.0	0.5	0.6	0.8
Belgium	0.4	1.0	0.7	1.4	0.3	-0.3	0.4	0.6	1.0	0.7	1.0	1.1	0.2	0.8	0.5	0.5	0.6	0.6
Canada	1.1	1.9	1.4	1.5	1.3	1.4	0.6	0.9	1.1	1.0	1.6	1.1	0.9	1.1	1.1	0.4	0.7	0.9
Chile	2.0	1.9	7.9	5.1	1.9	2.1	1.5	0.8	0.9	2.3	2.2	6.0	4.0	1.2	1.6	1.9	0.7	1.0
Czech Republic	..	0.0	-1.0	-0.2	0.3	1.0	0.7	1.1	0.5	..	0.3	-0.4	-0.8	0.6	0.9	-0.2	0.7	0.4
Denmark	0.1	0.5	-2.3	-0.1	-0.5	0.0	1.0	1.4	1.4	-0.1	0.4	-0.8	0.0	-0.6	-0.6	0.5	1.1	1.4
Estonia	..	0.1	-4.4	6.3	1.9	1.0	0.6	0.5	0.1	..	0.0	-0.9	1.2	-0.6	-0.6	-0.8	-0.5	-0.3
Finland	-0.7	1.4	-0.4	1.1	0.4	-1.0	-0.4	0.1	0.2	0.0	0.4	-0.3	0.4	0.3	-0.5	0.1	0.3	0.1
France	0.2	0.9	0.2	0.2	0.0	0.0	0.1	0.2	0.6	0.5	0.8	0.4	0.1	0.7	0.5	0.1	0.5	0.5
Germany	0.0	0.2	0.8	2.5	1.0	0.9	0.9	0.9	0.7	0.3	0.4	0.0	1.3	0.5	0.8	0.6	0.5	0.4
Greece	0.9	1.5	-3.6	-7.6	-8.9	-4.9	0.7	1.2	2.8	1.5	1.0	-0.2	-1.8	-0.9	-1.0	-0.7	0.2	1.3
Hungary	..	0.5	-0.4	0.7	1.8	1.7	5.4	2.3	0.9	..	0.2	0.8	0.5	1.8	0.8	2.6	1.4	0.2
Iceland	1.3	1.5	-0.3	0.0	1.0	3.4	1.6	4.1	1.3	1.2	1.4	0.0	-0.5	-0.1	2.8	1.1	2.9	1.5
Ireland	3.7	3.9	-4.1	-1.8	-0.6	2.3	1.8	1.6	1.6	2.8	2.6	-2.0	-0.9	-0.6	0.4	-0.2	0.1	0.8
Israel	..	2.6	3.5	3.0	3.2	2.7	3.0	2.1	2.4	..	2.5	2.2	1.7	2.9	2.1	2.7	1.6	2.3
Italy	-0.4	0.7	-0.7	0.2	-0.1	-1.5	0.3	0.5	1.0	-0.1	0.3	-0.1	0.3	2.4	0.2	0.9	0.5	0.3
Japan	0.4	-0.2	-0.3	-0.1	-0.3	0.7	0.6	0.3	0.1	0.7	-0.2	-0.3	-0.6	-0.6	0.3	0.2	0.1	0.0
Korea	1.3	1.3	1.4	1.7	1.8	1.6	2.1	1.8	1.5	1.8	1.1	1.4	1.4	1.6	1.5	2.6	1.9	1.4
Luxembourg	1.1	1.8	1.6	2.7	2.4	1.9	2.1	2.2	2.4	1.3	2.0	2.0	2.5	2.9	2.7	2.4	2.2	2.2
Mexico	..	2.0	1.1	2.2	3.3	1.1	0.4	0.8	1.0	..	1.8	1.1	2.1	3.0	1.1	0.3	0.7	0.8
Netherlands	1.9	1.4	-1.0	0.0	0.6	-0.8	-0.6	1.2	1.1	1.6	1.1	-0.3	0.0	1.5	0.8	-0.4	0.6	0.7
New Zealand	1.6	2.2	0.4	1.4	0.3	1.5	3.5	2.9	1.5	1.5	2.0	0.9	1.4	0.7	0.8	3.0	2.7	1.1
Norway	1.2	1.1	0.1	1.4	2.0	0.6	1.0	0.5	0.5	1.0	1.1	0.5	1.1	1.9	0.9	1.0	1.1	0.7
Poland	..	-0.2	0.6	0.6	0.2	-0.1	1.9	1.4	0.8	..	0.0	2.2	0.6	0.7	0.1	0.4	0.1	0.4
Portugal	0.8	0.7	-1.4	-3.2	-4.1	-2.6	1.6	0.5	0.7	0.8	0.5	0.1	-1.2	-0.8	-1.8	-1.1	-0.2	-0.1
Slovak Republic	..	0.6	-2.1	0.0	0.5	0.0	1.4	1.2	1.1	..	0.4	0.6	-1.0	0.9	0.3	0.2	0.4	0.1
Slovenia	..	1.1	-1.5	-3.1	-1.3	-1.9	1.2	0.5	0.4	..	0.8	0.0	-2.1	-0.6	-0.6	0.7	0.2	0.1
Spain	1.4	3.7	-2.0	-1.6	-4.3	-2.8	1.2	2.9	2.8	1.4	3.1	0.4	0.3	0.0	-1.1	-1.0	0.1	0.3
Sweden	-1.1	0.8	0.5	2.3	0.6	1.1	1.4	1.0	1.4	-0.4	0.8	0.8	1.4	0.8	1.1	1.3	0.7	1.3
Switzerland	0.3	0.7	0.4	2.2	1.2	1.1	1.5	1.4	1.2	0.6	1.3	0.6	1.7	1.3	1.3	1.7	1.5	1.3
Turkey	1.9	0.8	6.0	6.1	3.1	2.9	5.1	2.6	2.2	1.9	1.8	3.7	3.8	2.3	3.6	6.1	2.9	2.1
United Kingdom	0.1	1.0	0.2	0.5	1.1	1.2	2.3	1.7	1.1	0.0	0.9	0.5	0.8	0.9	0.8	0.7	0.8	0.8
United States	1.3	1.1	-0.6	0.6	1.8	1.0	1.6	1.9	1.0	1.1	0.9	-0.2	-0.2	0.9	0.3	0.3	1.2	0.7
Euro area	0.4	1.1	-0.5	0.2	-0.6	-0.6	0.6	0.9	1.1	0.6	0.9	0.1	0.3	0.7	0.2	0.1	0.4	0.4
Total OECD	0.1	1.0	0.3	1.0	1.0	0.7	1.3	1.3	1.0	0.1	0.9	0.5	0.6	1.0	0.6	0.7	0.9	0.7

Source: OECD Economic Outlook 97 database.

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Annex Table 21. **Potential GDP and productive capital stock**

Percentage change from previous period

	Potential GDP									Productive capital stock[1]								
	Average 1990-99	Average 2000-09	2010	2011	2012	2013	2014	2015	2016	Average 1990-99	Average 2000-09	2010	2011	2012	2013	2014	2015	2016
Australia	3.3	3.2	3.0	2.9	2.9	2.7	2.6	2.6	2.6	2.5	4.0	4.6	5.5	5.2	4.7	3.9	3.4	3.1
Austria	2.4	2.1	1.3	1.3	1.2	1.1	1.2	1.2	1.4	2.8	2.3	1.2	1.5	1.5	1.2	1.2	0.9	1.0
Belgium	2.3	1.9	1.0	1.0	1.0	0.9	1.1	1.2	1.4	2.9	2.3	1.5	1.6	1.4	1.1	1.4	1.4	1.5
Brazil	2.8	3.2	3.9	3.6	2.9	2.1	1.6	1.3	1.5	2.8	2.7	4.9	5.1	4.6	4.7	3.9	3.4	3.2
Canada	2.7	2.6	1.7	1.9	2.0	1.9	1.8	1.8	1.8	2.4	2.8	2.5	2.7	2.8	2.6	2.3	1.9	1.9
China	10.5	10.2	9.9	9.4	8.6	8.1	7.5	7.2	7.0	10.2	10.6	11.7	10.9	10.3	10.6	10.7	10.6	10.3
Colombia	..	5.0	3.9	4.5	4.7	4.6	4.4	4.4	4.4	..	4.7	6.0	7.4	7.1	6.8	7.4	7.0	6.7
Czech Republic	2.8	3.3	1.4	1.3	1.1	1.2	1.6	2.0	2.5	2.3	3.1	2.5	2.5	2.1	1.7	1.9	2.1	2.2
Denmark	2.1	1.5	0.4	0.4	0.4	0.5	0.6	0.7	0.9	2.8	2.1	0.7	0.3	0.4	0.4	0.5	0.6	0.7
Estonia	..	4.5	0.6	1.6	2.3	2.4	2.4	2.5	2.8	6.7	8.4	2.7	4.8	5.3	4.9	4.2	3.7	3.7
Finland	2.4	2.6	0.1	0.2	0.3	0.4	0.5	0.8	1.1	1.4	2.0	1.0	1.1	0.9	0.4	0.1	0.1	0.2
France	2.1	1.8	0.9	1.0	1.0	1.1	1.2	1.3	1.5	2.2	2.1	1.4	1.4	1.3	1.2	1.1	1.0	1.0
Germany	2.0	1.4	1.2	1.3	1.2	1.1	1.1	1.1	1.1	2.0	0.9	0.4	0.6	0.4	0.2	0.3	0.4	0.6
Greece	2.6	2.4	-1.4	-1.8	-1.8	-1.2	-0.7	0.2	0.9	1.4	2.9	1.4	0.3	-0.8	-0.9	-0.3	-0.1	0.1
Hungary	4.0	2.6	0.3	0.4	0.6	1.0	1.5	1.7	2.0	3.6	3.8	2.3	2.3	1.9	2.3	3.0	3.0	2.9
Iceland	2.4	3.8	1.5	1.3	1.4	1.4	1.6	1.9	2.2	2.8	4.8	-0.1	0.4	0.7	0.5	1.1	1.7	2.4
India	6.3	7.1	7.7	7.8	7.4	7.1	7.0	7.0	7.1	6.5	8.3	10.4	10.6	9.2	8.7	8.0	7.9	7.8
Indonesia	4.5	4.1	5.5	5.7	5.9	5.9	5.8	5.8	5.8	4.9	3.8	5.6	5.9	6.2	6.1	5.9	5.8	5.8
Ireland	6.1	5.0	1.3	0.8	0.7	0.8	1.2	1.8	2.1	3.8	6.1	2.6	2.3	2.6	2.0	3.1	3.7	4.2
Israel	4.8	3.6	3.7	4.1	4.0	3.7	3.4	3.2	3.1	7.0	3.8	3.9	4.8	4.4	4.2	3.6	3.3	3.5
Italy	1.5	1.0	0.0	0.1	-0.1	-0.2	-0.1	0.1	0.3	2.0	1.9	0.6	0.5	0.0	-0.3	-0.5	-0.4	-0.2
Japan	1.9	0.7	0.4	0.4	0.5	0.5	0.6	0.6	0.6	3.9	1.1	0.0	0.0	0.0	0.0	0.2	0.1	0.0
Latvia	6.1	5.5	0.0	0.6	1.9	2.3	2.4	2.7	3.0	5.5	9.8	2.9	4.4	5.2	4.2	4.0	3.8	3.8
Luxembourg	4.5	3.7	2.1	2.4	2.6	2.4	2.4	2.6	2.8	4.3	3.5	1.3	2.7	2.7	1.7	1.9	2.4	2.3
Mexico	3.5	2.5	2.1	2.4	2.6	2.6	2.7	2.9	3.1	4.3	4.6	3.8	4.2	4.3	3.8	3.7	3.8	3.9
Netherlands	3.0	2.0	0.8	0.8	0.7	0.7	0.9	1.1	1.4	3.6	2.5	1.6	1.9	1.4	1.1	1.1	1.3	1.5
New Zealand	2.9	3.1	1.7	2.0	2.2	2.3	2.6	2.8	2.9	2.1	3.6	2.4	2.7	2.7	2.8	3.1	3.3	3.4
Norway	2.8	3.1	2.2	2.0	2.1	2.2	2.3	2.3	2.3	2.4	3.5	2.8	2.7	3.0	2.9	2.9	2.8	2.9
Poland	5.0	4.0	3.4	3.2	3.1	2.8	3.0	3.1	3.2	5.6	4.1	3.3	3.9	3.3	3.1	3.7	3.9	4.1
Portugal	3.0	1.6	0.2	0.0	-0.3	-0.2	0.1	0.2	0.4	5.3	4.4	2.9	1.8	0.7	0.4	0.5	0.6	0.8
Russian Federation	..	5.2	2.9	2.7	2.6	2.4	2.3	1.9	1.8	2.2	5.6	6.2	6.5	6.6	5.9	5.2	3.2	3.3
Slovak Republic	5.3	4.1	3.0	3.2	2.8	2.4	2.9	2.8	2.9	5.4	3.7	2.9	3.7	2.6	2.2	2.5	2.7	2.8
Slovenia	..	3.0	0.6	0.2	0.2	0.3	1.0	1.3	1.6	4.0	4.5	1.9	1.6	1.0	1.1	1.3	1.4	1.3
South Africa	..	3.0	3.0	2.8	2.6	2.5	2.5	2.7	2.9	..	2.3	2.5	2.6	2.7	3.0	2.7	2.6	2.7
Spain	2.8	3.1	0.9	0.6	0.4	0.3	0.4	0.5	0.6	4.4	4.6	2.8	2.3	1.6	1.3	1.5	1.7	2.1
Sweden	2.2	2.5	1.5	1.8	1.8	1.9	2.0	2.2	2.4	2.0	2.2	1.6	1.8	1.7	1.5	1.6	1.7	1.8
Switzerland	1.4	2.0	1.8	1.9	1.9	1.9	2.0	2.0	2.1	2.9	2.2	1.6	1.6	1.6	1.5	1.5	1.4	1.3
United Kingdom	2.5	2.4	0.8	0.9	1.1	1.3	1.8	2.1	2.4	3.3	3.4	2.3	2.3	2.3	2.3	2.6	2.7	2.9
United States	3.1	2.6	1.7	1.7	1.8	1.8	1.8	1.9	2.0	2.9	2.4	1.1	1.2	1.3	1.2	1.3	1.4	1.5
Euro area	2.1	1.8	0.8	0.8	0.7	0.7	0.8	0.9	1.1	..	..	..	..	..	..	..	..	..
Total OECD	2.7	2.3	1.5	1.6	1.6	1.6	1.7	1.8	1.9	..	..	..	..	..	..	..	..	..

Note: For methodological details see Sources & Methods of the *OECD Economic Outlook (http://www.oecd.org/eco/sources-and-methods.htm).*

1. Total economy less housing.

Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933222732

Annex Table 22. **Structural unemployment and unit labour costs**

	Structural unemployment rate[1]									Unit labour costs[2]								
	Average 1990-99	Average 2000-09	2010	2011	2012	2013	2014	2015	2016	Average 1990-99	Average 2000-09	2010	2011	2012	2013	2014	2015	2016
	Per cent									*Percentage change*								
Australia	7.7	5.6	5.3	5.2	5.3	5.5	5.7	5.8	5.9	1.3	3.3	5.0	5.3	1.5	0.2	0.2	1.0	1.3
Austria	3.9	4.3	4.4	4.4	4.4	4.5	4.5	4.5	4.5	1.6	1.7	0.2	0.7	3.2	2.8	2.2	0.7	0.0
Belgium	8.2	8.0	8.0	7.9	7.9	8.0	8.0	8.0	8.1	2.0	2.4	-0.5	2.9	3.4	1.7	0.2	-0.1	0.2
Canada	9.1	7.0	6.7	6.6	6.5	6.5	6.5	6.5	6.5	0.9	2.7	-0.1	2.4	2.7	1.6	1.1	1.9	1.7
Czech Republic	6.0	7.3	6.6	6.5	6.4	6.4	6.3	6.3	6.3	7.2	2.8	-0.8	0.3	2.7	0.7	1.2	0.1	2.0
Denmark	6.4	5.5	6.0	6.1	6.2	6.2	6.3	6.3	6.3	1.4	3.4	-0.8	0.2	1.9	1.8	1.5	0.5	0.3
Estonia	..	10.1	9.5	9.1	8.7	8.3	8.3	8.3	8.3	4.9	7.3	-5.1	-1.0	3.1	6.5	6.5	4.3	2.5
Finland	10.7	8.6	8.0	7.9	7.8	7.6	7.5	7.4	7.4	0.3	2.5	-1.3	2.2	5.1	2.0	0.6	0.6	0.3
France	9.1	8.4	8.7	8.9	9.1	9.2	9.3	9.2	9.1	1.3	2.2	0.8	0.7	2.0	0.6	1.5	0.7	1.0
Germany	7.3	8.1	6.7	6.2	5.9	5.7	5.6	5.5	5.4	1.8	0.6	-1.0	0.6	3.2	2.6	2.1	2.4	1.4
Greece	9.7	11.2	14.1	15.2	16.1	16.4	16.9	17.3	17.5	9.9	4.8	1.4	-0.5	-3.3	-6.9	0.3	1.0	0.0
Hungary	8.1	7.4	10.2	10.4	10.4	10.1	9.8	9.7	9.6	12.2	5.9	0.0	1.8	3.7	1.8	3.0	2.8	2.6
Iceland	3.3	3.8	4.2	4.2	4.2	4.2	4.2	4.2	4.2	5.0	4.5	7.5	5.5	6.0	3.5	3.4	4.5	3.7
Ireland	11.7	8.2	10.0	10.5	10.7	10.8	10.8	10.9	10.9	2.0	3.9	-6.7	-2.7	0.4	3.1	0.7	1.6	2.1
Israel	9.4	10.5	8.4	7.5	6.8	6.4	6.2	6.0	5.9	6.9	0.9	1.1	3.1	2.6	1.6	1.3	0.4	1.4
Italy	9.3	8.4	8.0	8.1	8.4	8.8	9.0	9.1	9.2	2.6	3.5	-0.5	0.8	1.6	0.6	1.3	0.6	-0.1
Japan	2.9	4.1	4.1	4.1	4.1	4.2	4.1	4.1	4.1	0.9	-1.4	-4.4	1.0	-1.4	-0.8	1.6	1.2	1.6
Korea	3.2	3.6	3.5	3.4	3.3	3.3	3.4	3.5	3.5	4.9	3.2	0.5	2.6	2.7	2.1	2.0	0.9	0.7
Luxembourg	..	..	..	..	..	..	..	..	..	2.3	4.2	-1.2	2.4	4.1	3.5	1.7	0.8	1.3
Mexico	3.4	3.7	4.7	4.8	4.8	4.8	4.8	4.7	4.7	19.5	5.9	0.3	3.1	3.9	2.7	2.0	1.3	0.9
Netherlands	6.6	4.9	5.2	5.4	5.6	5.8	6.0	6.0	6.1	1.9	2.2	-1.4	0.7	3.3	1.0	0.1	-1.3	0.7
New Zealand	7.6	5.1	6.0	6.1	6.2	6.1	6.0	5.7	5.4	0.8	3.8	1.5	2.4	1.2	1.7	2.4	1.7	1.5
Norway	4.3	3.4	3.3	3.2	3.3	3.3	3.3	3.3	3.3	2.2	4.7	2.2	5.4	4.0	5.0	2.4	2.2	2.0
Poland	12.2	12.3	9.2	8.9	8.7	8.6	8.5	8.4	8.3	16.3	1.9	1.9	1.3	2.8	1.2	-1.4	1.1	1.7
Portugal	6.0	7.8	10.4	11.1	11.6	11.9	12.0	12.0	12.0	6.1	2.8	-0.4	-2.0	-3.9	2.6	-0.5	-0.7	-0.2
Slovak Republic	12.1	12.4	13.2	13.1	13.1	13.2	12.5	12.0	11.5	6.1	2.4	-1.0	1.8	1.5	0.6	3.2	1.0	0.8
Slovenia	6.7	6.1	6.1	6.7	7.2	7.8	7.8	7.8	7.8	4.8	4.9	-0.4	-1.0	0.3	-0.3	-2.4	-1.0	-0.5
Spain	15.0	13.9	16.8	17.5	18.0	18.3	18.5	18.6	18.7	4.4	3.9	-1.4	-1.2	-3.6	-1.1	0.0	-0.8	-1.2
Sweden	7.0	6.9	7.5	7.4	7.4	7.4	7.5	7.5	7.5	1.0	2.5	-2.4	3.0	4.0	1.5	1.6	1.2	1.0
Switzerland	2.7	3.6	3.9	3.9	4.0	4.0	4.0	4.0	4.0	1.4	1.5	-1.7	1.8	1.5	0.7	-0.1	0.4	0.4
United Kingdom	8.0	5.8	6.4	6.5	6.5	6.6	6.3	6.0	5.6	2.9	2.7	1.2	-0.3	1.9	1.4	0.4	2.3	2.0
United States	5.7	5.7	5.6	5.6	5.5	5.5	5.4	5.4	5.4	2.1	1.6	-0.3	2.2	1.7	0.5	1.8	2.6	1.3
Euro area	8.9	8.9	9.2	9.3	9.5	9.6	9.6	9.6	9.6	2.6	2.4	-0.6	0.4	1.3	1.0	1.2	0.8	0.5
Total OECD	6.4	6.5	6.6	6.6	6.6	6.7	6.6	6.6	6.6	4.1	2.1	-0.5	1.6	1.7	1.0	1.5	1.6	1.2

Note: For more information about sources and definitions, see Sources & Methods of the *OECD Economic Outlook (http://www.oecd.org/eco/sources-and-methods.htm).*

1. Corresponds to "NAIRU".

2. Total economy.

Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933222748

Annex Table 23. **Household saving rates**

Per cent of disposable household income

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Net saving																				
Australia	4.7	1.7	1.4	1.2	3.7	0.7	0.3	1.2	2.1	1.2	3.4	6.7	10.0	9.7	11.0	10.4	10.4	9.4	8.8	8.1
Austria	10.4	10.4	11.7	10.5	8.8	8.9	9.2	9.2	10.7	11.3	12.1	11.9	11.3	9.4	7.8	9.0	7.3	7.5	7.7	8.7
Belgium	13.1	12.6	12.5	11.7	13.0	12.2	11.7	10.3	9.9	10.6	10.8	11.2	12.8	10.1	8.5	7.5	6.9	6.2	5.6	5.1
Canada	3.3	3.5	3.3	3.4	3.5	2.4	1.8	2.3	1.6	3.5	3.0	4.0	5.3	4.3	4.4	5.2	5.2	4.0	4.4	4.3
Czech Republic	6.9	5.4	4.9	6.0	6.2	6.3	5.7	4.9	6.1	7.8	7.0	6.3	8.5	7.6	6.0	6.2	4.3	4.5	4.8	4.9
Denmark	-4.9	-3.4	-7.2	-6.0	0.0	1.2	1.8	-2.2	-4.6	-1.7	-3.1	-4.2	0.8	2.1	0.9	0.0	-0.4	-6.3	-0.9	0.7
Estonia	-4.9	-6.8	-7.6	-4.1	-5.8	-10.8	-10.7	-11.5	-11.1	-11.4	-6.7	1.6	7.1	3.3	5.2	3.0	3.8	7.2	8.9	8.0
Finland	3.5	2.0	4.6	2.5	1.8	1.9	2.6	3.5	2.0	0.1	-0.1	0.2	4.4	3.6	1.9	1.2	2.7	1.8	1.9	1.7
Germany	10.1	9.9	9.4	8.9	9.6	9.6	10.3	10.0	10.0	10.0	10.2	10.5	10.0	9.9	9.6	9.4	9.1	9.4	9.3	9.0
Hungary	12.8	12.0	8.1	6.1	6.7	5.3	3.0	6.2	7.2	7.9	4.2	3.5	5.5	6.1	6.8	4.8	5.4	7.2	8.7	7.8
Ireland	..	..	..	..	..	0.8	1.2	1.9	2.6	0.1	-0.1	6.9	12.3	9.6	7.6	7.8	7.7	7.7	8.2	9.0
Italy	13.6	9.9	8.7	7.3	8.8	9.5	9.0	9.5	8.9	8.3	7.9	7.6	6.8	4.0	3.5	2.0	3.8	3.4	3.4	3.0
Japan	8.0	9.4	8.1	6.8	3.7	3.1	2.5	2.1	1.4	1.1	0.9	0.4	2.4	2.0	2.7	1.2	-0.2	0.3	1.6	1.3
Korea	15.6	22.9	15.8	9.2	5.5	1.1	4.8	8.2	6.7	5.5	3.5	3.8	4.8	4.7	3.9	3.9	5.6	7.0	7.0	6.9
Luxembourg	..	..	..	..	..	..	..	..	..	..	..	9.5	12.1	13.0	13.6	13.7	17.0	18.3	19.7	19.8
Netherlands	12.7	10.6	8.6	6.9	9.2	9.0	8.3	7.7	6.7	5.0	5.2	5.4	8.7	5.1	6.0	6.5	7.8	8.3	8.5	8.0
New Zealand	0.1	-1.7	3.0	-2.5	-1.4	-7.0	-4.6	-4.0	-6.4	-3.8	-1.5	-1.3	0.9	2.7	1.5	2.3	2.2	3.0	3.0	3.0
Norway	3.0	5.7	4.7	4.3	3.1	8.2	8.8	6.9	9.6	-0.5	0.9	3.8	7.1	5.9	8.0	8.4	8.5	9.3	9.2	9.2
Poland	11.7	12.1	10.5	10.0	11.9	8.3	7.7	5.5	5.9	6.5	4.6	-0.3	6.9	6.1	-0.2	2.6	1.9	0.4	1.0	1.0
Slovak Republic	9.1	7.5	6.0	5.8	3.7	3.2	0.9	0.2	1.0	0.0	1.8	1.0	2.3	4.6	3.3	1.9	3.1	5.6	5.6	5.5
Spain	8.6	7.4	5.9	6.4	6.2	6.0	7.4	5.8	4.1	2.3	0.0	2.6	9.5	4.6	6.0	3.5	4.9	4.7	3.3	4.7
Sweden	2.2	1.7	1.9	4.0	8.0	7.8	6.6	5.8	5.4	6.9	9.4	12.7	12.2	10.9	12.6	15.2	15.6	16.0	16.3	16.6
Switzerland	13.8	13.9	14.6	15.3	15.5	15.3	14.8	13.7	14.0	15.8	17.4	16.7	17.1	17.0	17.8	17.5	18.1	17.8	16.9	16.6
United States	5.7	6.2	4.4	4.2	4.3	5.0	4.8	4.6	2.5	3.3	3.0	4.9	6.1	5.6	6.0	7.2	4.9	4.8	5.1	4.5
Gross saving																				
France	15.6	15.1	14.7	14.5	15.0	16.0	15.3	15.5	14.2	14.3	14.8	14.7	15.9	15.5	15.3	14.9	14.7	15.6	15.5	15.1
Portugal	10.0	10.4	11.4	10.5	11.0	10.9	10.0	10.0	9.2	8.0	7.0	6.8	10.4	9.2	7.5	8.3	9.2	7.4	7.6	8.6
United Kingdom	12.6	11.0	8.4	9.8	10.7	9.9	9.2	7.7	7.0	6.5	7.1	5.6	9.3	11.0	8.6	8.0	6.4	6.0	7.5	7.5

Note: The adoption of new national account systems has been proceeding at an uneven pace among OECD member countries, both with respect to variables and the time period covered. As a consequence, there are breaks in many national series. See table "National Accounts Reporting Systems, base years and latest data updates" at the beginning of the Statistical Annex. Most countries report household saving on a net basis (i.e. gross saving minus consumption of fixed capital by households and unincorporated businesses). In most countries "household" refers to the household sector plus non-profit institutions servicing households (in some cases referred to as personal saving).

Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933222755

Annex Table 24. **Gross national saving**

Per cent of nominal GDP

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Australia	20.7	21.0	21.9	21.7	20.8	21.5	20.9	21.9	21.1	21.6	21.0	21.9	21.8	22.5	24.6	22.7	24.2	25.3	24.5	..
Austria	23.9	24.0	23.8	24.1	24.4	24.5	24.8	24.4	26.1	25.6	26.0	25.4	26.7	28.1	28.6	24.7	25.5	26.2	26.6	25.0
Belgium	26.4	26.3	25.4	26.8	26.8	27.5	27.8	26.6	26.6	26.5	27.1	26.9	27.5	28.6	26.9	22.4	25.5	24.5	24.1	21.2
Canada	17.1	19.0	19.5	20.2	19.7	21.1	23.9	22.7	21.8	22.0	23.8	24.6	24.7	24.4	24.2	18.4	19.4	21.0	21.1	21.3
Chile	..	..	23.6	23.1	21.9	21.1	20.9	21.1	21.3	20.8	22.9	23.6	25.3	24.8	22.4	22.3	24.0	22.5	21.9	20.6
Czech Republic	29.4	30.5	29.8	27.0	28.7	27.1	27.8	27.6	25.5	24.7	25.4	26.5	26.3	27.4	26.2	22.6	22.0	22.4	24.1	22.8
Denmark	21.0	22.4	22.5	23.6	23.0	23.8	24.6	25.6	25.0	25.0	25.4	26.4	27.6	26.8	26.8	22.2	24.1	25.2	24.6	26.0
Estonia	..	..	..	..	..	..	24.1	23.8	22.7	22.7	22.5	24.6	24.2	23.9	22.3	23.1	23.3	26.2	26.9	27.2
Finland	19.7	23.5	22.9	26.0	27.2	28.7	30.7	31.3	30.2	27.3	28.8	28.0	28.4	29.6	27.8	23.2	23.1	22.0	20.6	19.1
France	20.8	21.1	20.8	22.1	23.2	24.0	23.8	23.6	22.4	21.9	22.3	22.0	22.6	23.0	22.7	19.7	20.2	21.0	20.2	20.0
Germany	22.5	22.6	22.0	22.2	22.5	22.0	22.1	21.9	21.8	21.2	23.6	23.5	25.6	27.7	26.7	24.2	25.4	26.8	26.4	25.9
Greece	12.2	12.6	12.7	12.5	12.6	12.6	12.5	12.8	12.0	13.6	13.4	12.4	12.6	10.7	8.2	5.0	5.5	5.4	9.6	9.5
Hungary	..	20.2	21.8	22.6	22.5	19.7	20.4	20.7	18.9	16.4	17.6	16.9	18.3	17.0	17.8	19.5	20.9	21.2	20.9	24.0
Ireland	18.9	21.4	21.9	23.9	25.3	24.3	24.5	23.2	22.3	24.5	25.4	25.8	26.5	23.4	18.4	14.8	17.1	16.8	18.3	21.0
Israel	20.6	20.1	20.2	21.2	21.6	21.4	20.6	20.2	18.9	19.2	20.7	23.1	24.1	23.6	20.9	21.3	21.2	21.9	21.6	21.9
Italy	20.0	21.7	21.9	21.9	21.1	20.8	20.4	20.8	20.9	20.2	20.6	20.2	20.3	20.8	18.9	17.5	17.1	17.4	17.4	18.2
Japan	29.9	29.1	29.1	29.3	28.6	27.3	27.4	25.6	24.7	24.9	25.6	25.8	26.4	27.5	25.9	22.2	23.3	22.4	22.0	21.8
Korea	38.3	38.7	37.8	38.0	40.9	38.6	36.9	35.1	34.2	35.4	37.2	35.4	34.4	34.2	34.0	33.5	34.8	34.7	34.4	..
Mexico	16.2	21.1	24.7	26.5	22.5	22.7	22.7	19.7	20.4	21.1	23.1	22.3	23.8	23.5	22.8	22.0	22.2	22.5	20.9	..
Netherlands	27.4	28.5	28.2	29.2	27.0	28.7	29.4	26.9	26.0	26.9	28.3	27.1	29.2	29.4	26.8	26.3	27.9	27.6	28.2	26.8
New Zealand	19.2	19.5	18.1	18.9	17.8	18.1	19.7	21.7	20.8	21.3	20.1	17.6	17.0	18.1	15.6	18.5	17.5	17.5	17.7	20.0
Portugal	18.7	20.9	19.8	20.2	20.6	20.2	17.8	17.9	17.2	16.2	15.4	13.4	12.5	13.0	11.0	10.7	10.7	13.0	13.7	15.4
Slovak Republic	..	28.8	26.6	27.0	25.8	25.3	25.0	24.3	23.3	19.5	20.8	21.3	20.8	23.1	22.2	17.9	19.4	21.3	21.3	21.5
Slovenia	..	23.4	23.6	24.8	25.1	24.4	24.6	25.3	25.5	25.1	25.7	26.4	28.5	28.9	27.4	23.0	22.3	22.6	22.0	24.3
Spain	19.5	21.6	21.4	22.2	22.3	22.5	22.5	22.4	23.1	23.9	23.1	22.5	22.3	21.7	20.4	20.3	19.7	18.7	19.8	20.4
Sweden	21.6	24.8	24.3	24.7	25.6	26.2	27.4	27.8	27.1	28.2	28.3	29.1	31.4	33.6	33.1	27.6	29.4	29.7	28.9	29.0
Switzerland	31.4	31.9	31.3	33.2	34.0	34.6	36.7	34.0	31.4	35.5	35.3	38.4	39.4	34.7	28.0	34.4	39.2	35.1	34.9	..
United Kingdom	17.2	17.4	17.2	17.9	18.5	16.8	17.5	17.2	17.0	17.0	16.5	17.0	16.3	16.4	14.3	12.2	13.7	14.7	12.8	12.5
United States	17.8	18.7	19.5	20.7	21.3	20.7	20.6	19.5	18.1	17.3	17.5	17.8	19.1	17.3	15.4	14.4	15.1	15.7	17.5	18.1

Note: Based on SNA93, SNA08, ESA95 or ESA10.

Source: National accounts of OECD countries database.

StatLink http://dx.doi.org/10.1787/888933222761

Annex Table 25. **General government total outlays**

Per cent of nominal GDP

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Australia	34.2	33.9	34.3	34.6	34.9	34.2	33.4	34.0	33.8	33.6	33.7	34.4	37.2	36.7	35.6	36.1	35.6	36.0	36.1	35.7
Austria	51.9	51.9	51.8	50.3	51.0	50.7	51.0	53.5	51.0	50.1	49.1	49.8	54.1	52.9	50.8	50.9	50.9	52.2	52.2	51.2
Belgium	51.1	50.3	49.7	48.7	48.8	49.0	50.2	48.4	50.9	47.7	47.6	49.4	53.2	52.3	53.4	54.8	54.5	54.4	53.4	52.1
Canada	43.5	43.5	41.8	40.5	41.2	40.4	40.2	39.0	38.4	38.6	38.6	39.2	43.7	43.3	41.7	41.1	40.7	39.4	39.5	39.1
Czech Republic	41.5	41.8	41.1	40.3	42.5	44.3	48.5	42.2	41.9	40.8	39.9	40.2	43.6	43.0	42.5	43.8	41.9	42.0	42.0	41.4
Denmark	55.9	55.4	54.5	52.7	52.8	53.2	53.6	53.0	51.2	49.8	49.6	50.5	56.8	57.1	56.8	58.8	57.1	57.2	57.5	56.9
Estonia	37.7	39.7	40.5	36.4	35.1	36.1	35.2	34.3	34.0	33.6	34.3	39.7	46.0	40.5	38.0	39.8	38.8	38.8	39.2	38.3
Finland	56.1	52.4	51.0	48.0	47.3	48.5	49.4	49.3	49.3	48.3	46.8	48.3	54.8	54.8	54.4	56.1	57.8	58.7	59.3	59.1
France	53.9	52.3	52.1	51.1	51.2	52.3	52.8	52.6	52.9	52.5	52.2	53.0	56.8	56.5	56.0	56.8	57.0	57.5	56.9	56.0
Germany	47.9	47.7	47.7	44.7	46.8	47.2	47.7	46.4	46.2	44.6	42.7	43.5	47.5	47.3	44.6	44.2	44.3	43.8	43.7	43.2
Greece	43.3	42.4	42.4	45.6	44.3	44.3	44.1	44.6	43.9	44.9	46.9	50.6	54.0	52.0	54.0	54.3	60.1	49.5	49.4	49.0
Hungary	49.4	50.6	48.6	47.1	47.0	50.7	49.0	48.8	49.8	51.5	49.9	48.8	50.6	49.5	49.7	48.5	49.4	49.8	49.4	48.3
Iceland	39.6	40.3	41.1	40.7	41.4	42.9	44.2	42.4	41.0	40.5	40.3	55.2	48.1	48.8	45.3	45.3	43.9	43.5	41.8	41.3
Ireland	36.6	34.7	34.0	31.1	32.7	33.2	33.2	33.3	33.5	34.1	35.9	42.0	47.6	66.2	46.3	42.3	40.7	39.0	36.9	35.9
Israel	..	51.8	50.4	48.0	50.0	51.3	50.2	46.9	45.9	44.7	42.7	42.2	42.1	41.3	41.0	41.4	41.3	41.2	40.3	39.8
Italy	49.6	48.3	47.4	45.4	47.5	46.8	47.2	46.9	47.1	47.6	46.8	47.8	51.2	49.9	49.1	50.8	51.0	51.1	50.6	49.6
Japan	35.3	41.4	38.2	38.7	38.0	38.2	37.8	36.6	36.4	36.0	35.8	36.9	41.9	40.7	41.8	41.8	42.3	42.3	41.6	40.7
Korea	23.6	26.7	25.8	24.7	26.4	26.1	32.6	29.6	29.5	30.1	29.7	32.0	34.9	31.0	32.3	32.7	31.8	31.5	32.1	32.1
Luxembourg	39.2	39.6	37.7	36.4	37.2	40.6	42.3	42.8	42.5	39.6	38.2	39.4	45.1	44.0	42.3	43.5	43.6	43.8	44.1	43.8
Netherlands	45.6	44.2	43.7	41.7	43.2	44.0	44.8	44.0	42.7	43.5	42.8	43.8	48.2	48.3	47.0	47.5	46.8	46.6	45.7	44.3
New Zealand	40.9	39.8	39.4	37.5	37.2	36.4	37.0	36.6	37.6	39.0	38.8	41.1	42.2	47.8	44.7	43.5	42.4	39.4	39.4	39.0
Norway	46.3	48.5	47.1	42.0	43.8	46.7	47.9	45.0	42.1	40.8	41.4	40.2	46.1	45.0	43.8	42.9	44.0	45.7	47.6	48.0
Poland	..	..	..	..	..	..	..	..	..	..	..	..	..	45.9	43.9	42.9	42.2	41.9	41.7	41.1
Portugal	42.4	42.7	42.6	42.6	44.1	43.7	45.3	46.1	46.7	45.2	44.5	45.3	50.2	51.8	50.0	48.5	50.1	49.0	47.8	47.7
Slovak Republic	48.2	45.4	47.7	51.8	44.3	44.8	39.6	37.5	39.3	38.5	36.1	36.7	43.8	42.0	40.6	40.2	41.0	41.8	41.5	41.0
Slovenia	44.2	45.0	45.8	46.1	47.0	45.8	45.8	45.3	44.9	44.2	42.2	44.0	48.5	49.3	50.0	48.6	59.9	49.8	47.6	46.9
Spain	41.6	41.0	39.9	39.1	38.5	38.6	38.3	38.7	38.3	38.3	38.9	41.1	45.8	45.6	45.4	47.3	44.3	43.6	41.9	40.6
Sweden	59.2	57.2	56.6	53.6	53.0	54.2	54.3	52.9	52.8	51.4	49.6	50.4	53.1	52.1	51.5	52.5	53.2	52.9	52.2	51.8
Switzerland	34.5	34.5	33.8	34.2	33.8	36.3	35.7	34.9	34.0	32.2	31.0	31.2	33.1	32.9	32.9	33.2	33.5	33.4	33.7	33.5
United Kingdom	38.8	38.2	38.1	33.6	39.4	40.3	41.1	41.8	42.5	42.7	42.6	46.2	49.4	48.3	46.5	46.7	45.1	44.0	43.1	41.8
United States[1]	35.5	34.6	34.2	33.9	35.1	36.2	36.8	36.5	36.5	36.4	37.1	39.2	43.1	42.8	41.7	40.2	38.9	38.3	37.7	37.2
Euro area	48.8	47.9	47.5	45.6	46.7	46.9	47.3	46.8	46.7	46.0	45.3	46.6	50.7	50.5	49.1	49.6	49.5	49.2	48.5	47.7
Total OECD	40.1	40.4	39.5	38.5	39.7	40.3	40.0	39.3	39.3	39.0	39.0	40.8	44.4	43.9	42.9	42.6	41.9	41.4	40.9	40.2

Note: Data refer to the general government sector, which is a consolidation of accounts for the central, state and local governments plus social security.

1. These data include outlays net of operating surpluses of public enterprises.

Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933222775

Annex Table 26. **General government total tax and non-tax receipts**

Per cent of nominal GDP

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Australia	35.1	36.4	36.9	36.1	34.9	35.8	36.1	35.7	35.9	36.1	35.5	33.9	33.1	32.0	32.1	33.4	34.2	33.8	34.2	34.2
Austria	49.6	49.2	49.2	48.2	50.4	49.3	49.3	48.8	48.5	47.6	47.8	48.4	48.8	48.4	48.2	48.7	49.6	49.8	50.0	49.1
Belgium	48.8	49.3	49.1	48.6	48.9	49.1	48.4	48.2	48.3	47.9	47.6	48.4	47.7	48.4	49.3	50.7	51.5	51.1	50.9	50.5
Canada	43.8	43.7	43.6	43.4	41.9	40.4	40.3	40.0	40.1	40.4	40.1	38.9	39.1	38.3	38.0	38.0	38.0	37.7	37.9	38.0
Czech Republic	38.0	37.1	37.7	36.8	37.1	38.0	42.1	39.5	38.7	38.5	39.2	38.1	38.1	38.6	39.8	39.9	40.8	40.1	40.1	40.1
Denmark	54.7	55.0	55.4	54.6	54.0	53.2	53.5	55.1	56.2	54.8	54.6	53.7	54.0	54.3	54.8	55.1	56.0	58.5	55.8	54.3
Estonia	40.2	39.0	37.2	36.3	35.3	36.6	37.0	36.7	35.1	36.5	36.8	37.1	43.8	40.7	39.2	39.6	38.6	39.4	39.6	38.8
Finland	54.9	54.0	52.6	54.9	52.3	52.6	51.8	51.5	51.9	52.3	51.9	52.4	52.2	52.1	53.3	54.0	55.2	55.5	56.1	56.1
France	50.3	49.9	50.5	49.8	49.7	49.2	48.9	49.1	49.8	50.1	49.7	49.8	49.6	49.7	50.9	52.0	52.9	53.5	53.1	52.8
Germany	45.1	45.3	46.2	45.7	43.8	43.3	43.6	42.8	42.9	43.0	43.0	43.5	44.4	43.2	43.8	44.3	44.4	44.5	44.2	44.3
Greece	37.4	38.6	39.3	41.8	39.8	39.4	38.3	37.2	38.4	38.7	40.2	40.7	38.7	41.0	43.8	45.7	47.8	45.9	46.0	46.2
Hungary	43.8	43.1	43.5	44.1	43.0	41.9	41.9	42.4	41.9	42.2	44.9	45.2	46.0	45.0	44.2	46.2	47.0	47.3	47.1	46.0
Iceland	39.6	39.9	42.2	42.3	40.8	40.4	41.4	42.5	45.7	46.7	45.4	42.2	38.7	39.3	40.0	41.6	42.0	43.3	42.0	41.8
Ireland	37.9	36.7	36.5	36.0	33.7	32.9	33.9	34.7	34.8	36.9	36.2	35.0	33.6	33.6	33.5	34.2	34.9	34.9	34.4	34.0
Israel	..	44.9	44.8	44.7	44.5	44.4	43.0	41.9	41.8	42.9	42.1	39.5	36.5	37.3	37.7	36.4	37.2	37.4	37.1	37.3
Italy	46.6	45.3	45.6	44.1	44.1	43.7	43.8	43.3	42.9	44.0	45.2	45.1	45.9	45.6	45.6	47.8	48.0	48.1	48.1	47.6
Japan	31.5	31.1	31.0	31.2	32.0	30.5	30.1	30.6	31.6	34.7	33.7	35.1	33.1	32.4	33.0	33.1	33.9	34.6	34.7	34.9
Korea	26.3	27.3	27.5	29.1	29.4	29.6	30.6	29.9	31.0	32.4	33.9	34.3	33.6	32.0	33.3	33.7	33.1	33.2	33.1	33.1
Luxembourg	42.7	43.0	41.1	42.1	43.1	42.9	42.9	41.7	42.7	41.0	42.4	42.7	44.6	43.5	42.7	43.7	44.4	44.4	44.2	44.2
Netherlands	44.3	43.3	44.0	43.6	42.8	41.9	41.7	42.2	42.4	43.6	42.9	44.0	42.7	43.2	42.7	43.5	44.5	44.3	43.9	43.1
New Zealand	41.8	39.7	39.2	39.2	38.6	39.8	40.5	40.5	42.2	44.2	43.2	41.5	39.3	41.1	41.2	41.9	42.7	40.8	41.3	41.3
Norway	53.8	51.7	53.0	57.1	57.0	55.8	55.1	55.9	56.9	58.8	58.6	58.9	56.4	56.0	57.3	56.8	55.4	54.8	54.0	54.3
Poland	..	..	..	..	..	..	..	..	..	..	..	..	..	38.2	39.0	39.2	38.2	38.7	39.0	38.8
Portugal	38.7	38.3	39.5	39.4	39.3	40.4	40.9	39.9	40.5	40.9	41.5	41.6	40.4	40.6	42.6	42.9	45.2	44.5	44.9	45.0
Slovak Republic	42.1	40.1	40.4	39.7	37.9	36.7	36.9	35.2	36.4	34.9	34.1	34.3	35.9	34.5	36.4	36.0	38.4	38.9	38.8	38.7
Slovenia	41.9	42.7	42.8	42.5	43.1	43.4	43.2	43.1	43.4	42.9	42.1	42.1	42.3	43.7	43.3	44.6	45.0	45.0	44.7	44.4
Spain	37.7	38.1	38.6	38.1	37.9	38.2	37.9	38.6	39.5	40.5	40.9	36.7	34.8	36.2	36.0	37.0	37.5	37.8	37.5	37.6
Sweden	57.6	58.1	57.4	56.8	54.4	52.7	53.0	53.2	54.6	53.5	53.0	52.3	52.4	52.1	51.4	51.6	51.9	51.0	51.0	51.3
Switzerland	31.7	32.6	32.9	33.7	33.0	33.6	33.2	32.7	32.8	32.5	31.9	33.2	33.9	33.3	33.7	33.5	33.6	33.6	33.9	33.7
United Kingdom	36.7	38.0	38.9	39.1	39.7	38.0	37.5	38.3	39.0	39.8	39.6	41.2	38.5	38.6	38.9	38.4	39.6	38.6	39.1	39.3
United States[1]	33.9	34.2	34.2	34.6	33.7	31.4	30.8	31.0	32.3	33.3	33.4	32.0	30.3	30.7	30.9	31.2	33.2	33.3	33.7	33.7
Euro area	45.9	45.5	46.1	45.4	44.7	44.2	44.2	43.9	44.1	44.6	44.7	44.5	44.5	44.4	44.9	46.0	46.6	46.7	46.5	46.2
Total OECD	38.0	38.1	38.3	38.4	37.9	36.6	35.7	35.7	36.5	37.4	37.5	37.2	36.1	36.0	36.4	36.8	37.7	37.8	37.9	37.8

Note: Data refer to the general government sector, which is a consolidation of accounts for central, state and local governments plus social security.

1. Excludes the operating surpluses of public enterprises.

Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933222784

Annex Table 27. **General government financial balances**

Surplus (+) or deficit (-) as a per cent of nominal GDP

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Australia	0.9	2.5	2.6	1.5	0.0	1.6	2.7	1.7	2.2	2.5	1.9	-0.4	-4.1	-4.7	-3.4	-2.6	-1.4	-2.2	-1.9	-1.5
Austria	-2.4	-2.7	-2.6	-2.0	-0.6	-1.3	-1.8	-4.8	-2.5	-2.5	-1.3	-1.5	-5.3	-4.5	-2.6	-2.2	-1.3	-2.4	-2.3	-2.1
Belgium	-2.3	-1.0	-0.6	-0.1	0.2	0.1	-1.8	-0.2	-2.6	0.2	0.0	-1.1	-5.5	-4.0	-4.1	-4.1	-2.9	-3.2	-2.5	-1.6
Brazil	..	..	-5.2	-3.3	-3.3	-4.4	-5.2	-2.9	-3.5	-3.6	-2.7	-2.0	-3.2	-2.4	-2.5	-2.3	-3.1	-6.2	-4.9	-4.1
Canada	0.2	0.2	1.8	2.9	0.8	0.0	0.1	1.0	1.7	1.8	1.5	-0.3	-4.5	-4.9	-3.7	-3.1	-2.7	-1.6	-1.6	-1.1
China	-0.9	-1.5	-2.3	-2.8	-2.4	-2.4	-2.0	-1.0	-0.9	-0.1	1.6	1.0	-0.5	0.1	0.5	0.0	-0.2	-0.3	-1.2	-1.5
Czech Republic	-3.5	-4.6	-3.5	-3.5	-5.3	-6.3	-6.4	-2.7	-3.1	-2.3	-0.7	-2.1	-5.5	-4.4	-2.7	-3.9	-1.2	-2.0	-1.9	-1.3
Denmark	-1.2	-0.4	0.9	1.9	1.1	0.0	-0.1	2.1	5.0	5.0	5.0	3.2	-2.8	-2.7	-2.1	-3.7	-1.1	1.2	-1.7	-2.6
Estonia	2.5	-0.7	-3.3	0.0	0.1	0.4	1.8	2.4	1.1	2.9	2.5	-2.7	-2.2	0.2	1.2	-0.2	-0.2	0.6	0.4	0.6
Finland	-1.2	1.6	1.7	6.9	5.0	4.1	2.4	2.2	2.6	3.9	5.1	4.2	-2.5	-2.6	-1.0	-2.1	-2.5	-3.2	-3.2	-3.0
France	-3.6	-2.4	-1.6	-1.3	-1.4	-3.1	-3.9	-3.5	-3.2	-2.3	-2.5	-3.2	-7.2	-6.8	-5.1	-4.8	-4.1	-4.0	-3.8	-3.2
Germany	-2.8	-2.4	-1.5	1.0	-3.1	-3.9	-4.1	-3.7	-3.3	-1.5	0.3	0.0	-3.0	-4.1	-0.9	0.1	0.1	0.6	0.5	1.1
Greece	-5.9	-3.8	-3.1	-3.8	-4.5	-4.9	-5.8	-7.5	-5.5	-6.1	-6.7	-9.9	-15.3	-11.1	-10.2	-8.7	-12.3	-3.6	-3.4	-2.8
Hungary	-5.5	-7.4	-5.1	-3.0	-4.0	-8.8	-7.1	-6.4	-7.9	-9.3	-5.0	-3.6	-4.6	-4.5	-5.5	-2.3	-2.4	-2.5	-2.3	-2.2
Iceland	0.0	-0.4	1.1	1.6	-0.7	-2.5	-2.7	0.0	4.7	6.2	5.1	-12.9	-9.4	-9.5	-5.3	-3.7	-2.0	-0.2	0.2	0.5
India	-6.9	-8.6	-9.7	-8.7	-10.2	-9.2	-9.4	-7.3	-7.1	-5.4	-4.3	-6.9	-10.3	-6.3	-8.4	-7.2	-7.8	-6.2	-5.9	-5.8
Indonesia	0.5	-1.4	-0.2	-1.1	-2.2	-1.2	-1.6	-0.9	-0.5	-0.8	-1.2	-0.1	-1.5	-0.7	-1.1	-1.8	-2.1	-2.2	-2.1	-2.0
Ireland	1.3	2.0	2.4	4.9	1.0	-0.3	0.8	1.4	1.3	2.8	0.3	-7.0	-13.9	-32.6	-12.8	-8.1	-5.8	-4.1	-2.5	-1.9
Israel	..	-6.9	-5.6	-3.3	-5.5	-6.9	-7.1	-5.1	-4.1	-1.7	-0.6	-2.7	-5.6	-4.0	-3.3	-5.0	-4.1	-3.7	-3.2	-2.5
Italy	-3.0	-3.0	-1.8	-1.3	-3.4	-3.1	-3.4	-3.6	-4.2	-3.6	-1.5	-2.7	-5.3	-4.2	-3.5	-3.0	-2.9	-3.0	-2.6	-2.0
Japan	-3.8	-10.3	-7.1	-7.5	-6.0	-7.7	-7.7	-5.9	-4.8	-1.3	-2.1	-1.9	-8.8	-8.3	-8.8	-8.7	-8.5	-7.7	-6.8	-5.8
Korea	2.7	0.6	1.6	4.4	3.0	3.5	-2.0	0.2	1.6	2.3	4.2	2.3	-1.3	1.0	1.0	1.0	1.3	1.6	1.0	1.0
Latvia	1.4	0.0	-3.8	-2.8	-2.0	-2.2	-1.6	-1.0	-0.4	-0.6	-0.6	-4.0	-9.0	-8.1	-3.3	-0.8	-0.7	-1.4	-1.4	-1.2
Luxembourg	3.6	3.4	3.4	5.7	6.0	2.3	0.5	-1.1	0.2	1.4	4.2	3.3	-0.5	-0.5	0.4	0.1	0.9	0.6	0.1	0.4
Netherlands	-1.3	-0.9	0.3	1.9	-0.4	-2.1	-3.1	-1.8	-0.3	0.2	0.2	0.2	-5.5	-5.1	-4.4	-4.0	-2.3	-2.3	-1.8	-1.1
New Zealand	0.9	0.0	-0.2	1.7	1.4	3.4	3.5	3.9	4.6	5.1	4.4	0.4	-2.9	-6.8	-3.5	-1.6	0.3	1.4	1.9	2.3
Norway	7.5	3.3	5.9	15.1	13.2	9.1	7.2	10.9	14.8	18.0	17.1	18.7	10.3	11.0	13.4	13.8	11.3	9.1	6.4	6.3
Poland	..	..	..	..	..	..	..	..	..	..	..	..	..	-7.6	-4.9	-3.7	-4.0	-3.2	-2.7	-2.4
Portugal	-3.7	-4.4	-3.0	-3.2	-4.8	-3.3	-4.4	-6.2	-6.2	-4.3	-3.0	-3.8	-9.8	-11.2	-7.4	-5.6	-4.8	-4.5	-2.9	-2.8
Russian Federation	..	..	..	..	..	-0.7	1.7	6.0	6.0	8.3	5.6	7.3	-4.0	-1.2	3.8	2.0	0.6	0.4	-3.7	-1.2
Slovak Republic	-6.2	-5.2	-7.3	-12.1	-6.4	-8.1	-2.7	-2.3	-2.9	-3.6	-1.9	-2.4	-7.9	-7.5	-4.1	-4.2	-2.6	-2.9	-2.7	-2.3
Slovenia	-2.3	-2.3	-3.0	-3.6	-3.9	-2.4	-2.6	-2.2	-1.5	-1.3	-0.1	-1.8	-6.1	-5.6	-6.6	-4.0	-14.9	-4.9	-2.9	-2.5
South Africa	-7.0	-5.3	-3.7	-4.1	-2.5	-3.3	-4.5	-4.6	-2.4	-1.7	-0.7	-1.7	-3.9	-3.1	-3.0	-3.2	-3.3	-4.1	-4.2	-3.9
Spain	-3.9	-2.9	-1.3	-1.0	-0.5	-0.4	-0.4	0.0	1.2	2.2	2.0	-4.4	-11.0	-9.4	-9.4	-10.3	-6.8	-5.8	-4.4	-3.0
Sweden	-1.6	0.9	0.8	3.2	1.4	-1.5	-1.3	0.3	1.8	2.2	3.3	2.0	-0.7	0.0	-0.1	-0.9	-1.4	-1.9	-1.2	-0.5
Switzerland	-2.9	-1.9	-0.9	-0.4	-0.8	-2.7	-2.4	-2.2	-1.2	0.3	0.9	2.0	0.8	0.3	0.8	0.3	0.1	0.2	0.2	0.3
United Kingdom	-2.1	-0.2	0.8	5.5	0.3	-2.2	-3.6	-3.5	-3.5	-2.9	-3.0	-5.0	-11.0	-9.6	-7.6	-8.3	-5.5	-5.3	-4.0	-2.5
United States	-1.6	-0.4	0.0	0.8	-1.4	-4.8	-5.9	-5.5	-4.2	-3.1	-3.7	-7.2	-12.8	-12.2	-10.7	-9.0	-5.7	-5.0	-4.0	-3.6
Euro area	-3.0	-2.4	-1.4	-0.2	-2.0	-2.7	-3.1	-2.9	-2.5	-1.5	-0.6	-2.1	-6.2	-6.1	-4.1	-3.6	-2.9	-2.4	-2.1	-1.4
Total OECD	-2.2	-2.3	-1.2	-0.1	-1.8	-3.6	-4.3	-3.6	-2.8	-1.6	-1.5	-3.5	-8.4	-7.9	-6.6	-5.8	-4.2	-3.7	-3.1	-2.5
General government financial balances excluding social security																				
United States	-2.7	-1.6	-1.4	-0.7	-2.9	-6.3	-7.3	-6.7	-5.5	-4.5	-5.0	-8.4	-13.7	-12.6	-11.2	-9.3	-5.9	-5.1	-4.2	-3.8
Japan	-5.5	-11.7	-8.2	-8.1	-6.3	-7.6	-7.8	-6.4	-5.0	-1.3	-2.0	-1.3	-7.7	-7.2	-7.9	-7.9	-7.8	-7.0	-6.2	-5.1

Note: Financial balances include one-off factors, such as those resulting from the sale of mobile telephone licenses. As data are on a national accounts basis, the government financial balances may differ from the numbers reported to the European Commission under the Excessive Deficit Procedure for some EU countries. For more details, see Sources & Methods of the *OECD Economic Outlook (http://www.oecd.org/eco/sources-and-methods.htm)*.

Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933222794

Annex Table 28. **General government cyclically-adjusted balances**

Surplus (+) or deficit (-) as a per cent of potential GDP

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Australia	1.3	2.7	2.6	1.4	0.0	1.4	2.4	1.3	1.7	2.2	1.3	-0.9	-4.0	-4.5	-3.1	-2.5	-1.1	-1.8	-1.5	-1.2
Austria	-2.0	-2.7	-3.3	-3.3	-1.7	-2.0	-1.8	-4.6	-2.4	-3.0	-2.6	-3.0	-4.8	-3.6	-2.4	-2.2	-0.9	-1.6	-1.1	-1.0
Belgium	-1.9	-0.4	-0.7	-1.1	-0.2	0.1	-1.1	-0.2	-2.7	-0.3	-1.3	-2.3	-4.7	-3.8	-4.5	-4.0	-2.3	-2.5	-1.8	-1.2
Canada	0.9	0.5	1.5	2.1	0.3	-0.2	0.0	0.8	1.3	1.2	0.9	-0.6	-3.2	-3.9	-3.2	-2.6	-2.3	-1.4	-1.4	-1.0
Czech Republic	..	-4.1	-2.4	-3.0	-4.8	-5.0	-5.0	-1.8	-3.2	-3.6	-2.9	-4.3	-5.3	-4.4	-3.0	-3.5	-0.1	-1.1	-1.4	-0.8
Denmark	-1.8	-1.2	-0.1	0.1	-0.4	-1.0	-0.4	1.6	3.8	2.6	2.4	1.0	-2.1	-1.3	-1.1	-2.4	0.5	2.7	-0.8	-2.4
Estonia	..	..	..	..	..	1.1	2.1	2.4	-0.2	0.0	-1.7	-4.6	1.7	3.3	2.3	0.2	0.5	1.4	1.3	1.3
Finland	-0.3	1.8	1.4	6.1	4.6	4.2	3.0	2.4	2.6	3.2	3.2	2.3	-1.1	-2.1	-1.5	-1.9	-1.5	-1.7	-1.6	-1.4
France	-2.7	-2.0	-1.7	-2.2	-2.5	-3.8	-4.1	-3.8	-3.7	-3.2	-4.0	-4.4	-6.5	-6.0	-4.9	-4.4	-3.3	-2.8	-2.3	-1.8
Germany	-2.2	-1.9	-1.3	0.6	-3.7	-4.0	-3.4	-2.8	-2.2	-1.5	-0.5	-0.8	-1.3	-2.9	-0.8	0.2	0.5	0.9	0.5	0.6
Greece	-5.5	-3.6	-2.6	-3.3	-4.0	-4.2	-6.4	-9.0	-6.6	-9.1	-11.0	-14.2	-17.8	-11.3	-6.8	-2.7	-4.5	2.5	2.7	2.6
Hungary	-4.8	-6.8	-4.2	-2.1	-3.3	-8.5	-7.2	-7.2	-9.5	-12.0	-7.4	-5.7	-3.9	-3.5	-5.0	-1.1	-1.4	-2.3	-2.6	-2.8
Iceland	0.8	-0.4	0.7	1.0	-1.5	-2.5	-2.4	-0.8	3.1	4.5	2.4	-16.5	-9.7	-7.6	-3.4	-1.9	-0.9	0.5	0.4	0.4
Ireland	0.8	0.6	-0.1	1.6	-2.4	-3.6	-1.8	-1.0	-1.4	-0.3	-3.4	-8.8	-11.6	-27.7	-9.9	-5.3	-2.9	-2.4	-1.7	-1.7
Israel	..	-6.9	-5.3	-4.7	-5.8	-5.8	-4.9	-3.5	-2.9	-1.2	-0.9	-3.3	-5.5	-4.5	-4.0	-5.3	-4.3	-3.7	-3.2	-2.6
Italy	-3.0	-3.1	-1.9	-2.4	-4.9	-4.2	-4.0	-4.1	-4.9	-4.9	-3.3	-3.9	-3.8	-2.7	-2.5	-0.8	0.3	0.5	0.8	0.8
Japan	-4.1	-9.6	-6.0	-6.6	-5.1	-6.6	-6.8	-5.7	-4.8	-1.6	-2.9	-2.3	-7.3	-7.8	-8.2	-8.5	-8.7	-7.8	-7.0	-6.3
Korea	2.3	2.1	2.6	4.6	3.2	3.3	-2.0	0.2	1.5	2.1	3.7	1.9	-1.1	0.8	0.7	1.0	1.5	1.9	1.4	1.4
Luxembourg	5.2	4.3	3.1	4.0	4.5	1.3	0.6	-1.0	-0.1	0.5	2.1	1.4	0.5	0.3	0.8	1.4	2.6	2.3	1.8	2.0
Netherlands	-0.9	-1.1	-0.4	0.6	-1.9	-2.8	-2.6	-0.9	0.5	0.2	-0.9	-1.7	-6.3	-5.1	-4.7	-3.8	-1.2	-0.9	-0.8	-0.5
New Zealand	0.6	0.7	0.0	1.7	1.7	3.2	3.0	3.1	3.8	4.5	3.3	0.4	-2.3	-6.2	-2.8	-1.1	0.6	1.5	1.9	2.2
Norway[1]	-0.7	-1.7	-0.4	1.2	0.7	-1.1	-2.3	-0.9	-0.2	1.0	2.3	1.2	-0.6	0.1	0.5	0.4	-0.2	-0.4	-0.9	-1.1
Poland	..	..	..	..	..	..	..	..	..	..	..	..	..	-7.6	-5.3	-3.7	-3.6	-3.0	-2.6	-2.4
Portugal	-4.2	-5.6	-4.6	-5.2	-6.6	-4.4	-4.4	-6.3	-6.1	-4.5	-3.9	-4.5	-9.0	-11.0	-6.3	-3.0	-1.4	-1.5	-0.6	-1.1
Slovenia	..	..	..	..	-3.3	-2.0	-1.9	-1.9	-1.5	-2.4	-2.7	-5.0	-5.3	-4.9	-6.0	-2.2	-12.0	-3.2	-1.6	-1.4
Spain	-3.2	-2.6	-1.5	-1.9	-1.8	-1.5	-1.3	-1.0	-0.2	0.2	-0.6	-6.5	-10.6	-8.1	-7.6	-7.3	-3.1	-2.4	-2.1	-1.8
Sweden	0.3	2.0	1.2	2.8	1.4	-1.2	-0.9	0.2	1.5	0.7	1.2	1.1	1.5	0.5	-0.1	-0.1	-0.2	-0.9	-0.5	0.0
Switzerland	-2.1	-1.7	-1.0	-1.3	-1.7	-2.8	-1.7	-1.6	-0.9	0.1	0.1	1.2	1.0	0.5	0.8	0.5	0.4	0.5	0.9	1.1
United Kingdom	-1.9	-0.1	0.8	5.4	0.2	-2.2	-4.0	-4.0	-4.2	-4.0	-4.5	-6.0	-9.6	-8.3	-6.6	-7.2	-4.6	-4.9	-3.8	-2.4
United States	-1.6	-0.8	-0.8	-0.3	-2.0	-4.9	-6.1	-6.1	-5.2	-4.2	-4.7	-7.3	-11.1	-10.4	-9.0	-7.5	-4.5	-4.0	-3.2	-3.0
Euro area	-2.4	-2.1	-1.5	-1.0	-3.0	-3.3	-3.1	-2.9	-2.7	-2.3	-2.2	-3.5	-5.3	-5.1	-3.6	-2.6	-1.3	-0.8	-0.6	-0.5
Total OECD	-2.0	-2.2	-1.4	-0.8	-2.3	-3.8	-4.5	-4.1	-3.5	-2.7	-2.9	-4.5	-7.5	-7.1	-6.0	-5.1	-3.4	-3.0	-2.5	-2.2

Note: For more details on the methodology used for estimating the cyclical component of government balances, see Sources & Methods of the *OECD Economic Outlook (http://www.oecd.org/eco/sources-and-methods.htm)*.

1. As a percentage of mainland potential GDP. The financial balances shown are adjusted to exclude net revenues from petroleum activities.

Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933222803

Annex Table 29. **General government underlying balances**

Surplus (+) or deficit (-) as a per cent of potential GDP

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Australia	1.2	2.5	2.3	1.2	0.0	1.4	2.3	1.4	1.8	2.3	1.6	-0.7	-3.6	-3.9	-3.0	-2.4	-1.4	-2.0	-1.7	-1.4
Austria	-2.1	-2.4	-3.3	-3.6	-1.3	-2.0	-1.9	-1.0	-2.6	-3.2	-2.8	-3.3	-4.4	-3.6	-2.5	-2.0	-1.3	-0.4	-0.7	-0.9
Belgium	-1.8	-0.3	-0.8	-1.0	-0.3	-0.2	-0.8	-0.7	-0.6	-0.6	-1.2	-2.2	-4.1	-3.6	-3.6	-2.9	-2.1	-2.2	-1.5	-0.9
Canada	0.6	0.3	1.5	2.0	0.1	-0.3	0.0	0.9	1.4	1.3	0.9	-0.6	-3.1	-3.9	-3.0	-2.4	-2.1	-1.3	-1.3	-0.9
Czech Republic	..	-3.4	-3.0	-4.7	-4.0	-3.7	-6.9	-2.4	-2.9	-4.1	-3.2	-4.3	-6.0	-4.9	-3.2	-0.1	-0.2	-1.1	-1.2	-0.6
Denmark	-1.9	-1.1	0.0	0.2	-0.8	-1.0	-0.3	1.5	3.7	2.5	2.3	1.4	-2.1	-1.4	-1.1	-1.3	0.1	1.1	-1.3	-2.1
Estonia	..	..	..	..	..	1.1	2.0	2.1	-0.2	-0.6	-1.5	-3.5	-1.1	-0.2	0.1	1.1	0.3	1.9	1.6	1.5
Finland	-0.4	1.7	1.8	6.1	4.6	4.2	2.9	2.3	2.6	3.1	3.2	2.2	-1.0	-2.0	-1.4	-1.9	-1.6	-1.6	-1.3	-1.2
France	-2.7	-2.0	-1.5	-2.3	-2.5	-3.8	-4.2	-4.0	-3.8	-3.2	-4.0	-4.3	-6.3	-6.0	-4.9	-4.4	-3.3	-2.8	-2.3	-1.8
Germany	-2.4	-1.9	-1.3	-1.6	-3.2	-3.5	-3.0	-2.6	-2.1	-1.5	-0.7	-0.7	-1.3	-2.0	-1.0	-0.1	0.2	0.4	0.1	0.1
Greece	-5.3	-3.6	-1.3	-2.2	-3.0	-3.1	-6.6	-8.8	-7.8	-10.7	-12.2	-14.3	-17.2	-11.7	-7.4	-1.2	3.5	1.3	1.5	1.4
Hungary	-4.9	-5.3	-4.9	-2.2	-3.1	-7.0	-7.2	-7.7	-9.7	-11.7	-6.6	-5.0	-3.8	-3.6	-3.9	-1.2	-1.6	-2.8	-3.1	-2.8
Iceland	0.9	-0.6	0.6	0.9	-1.3	-2.6	-2.4	-0.9	2.9	4.2	1.9	-3.6	-9.6	-4.6	-2.8	-1.7	-1.2	-0.5	-0.2	-0.2
Ireland	0.4	0.2	1.1	1.4	-2.3	-3.9	-2.0	-0.9	-1.4	-0.8	-3.8	-8.3	-8.9	-7.4	-6.3	-5.4	-3.8	-2.9	-2.4	-2.4
Israel	..	-7.2	-5.3	-4.8	-5.8	-5.7	-5.1	-3.4	-2.8	-1.1	-0.8	-3.1	-5.2	-4.5	-4.2	-5.3	-4.3	-3.9	-3.4	-2.8
Italy	-3.5	-3.3	-1.9	-3.6	-4.5	-3.9	-4.9	-4.6	-4.8	-3.8	-3.1	-4.0	-4.2	-3.1	-3.3	-0.8	-0.2	0.4	0.8	0.8
Japan	-4.8	-5.1	-6.3	-6.3	-5.6	-6.6	-6.4	-6.5	-4.7	-3.1	-3.0	-3.2	-7.3	-7.9	-7.8	-8.0	-8.1	-7.2	-6.6	-5.7
Korea	2.7	2.8	3.2	5.1	3.8	4.0	3.5	2.1	3.0	3.5	3.8	1.7	-0.4	0.5	0.7	0.6	0.5	0.5	0.0	-0.1
Luxembourg	5.2	4.1	2.9	3.9	2.9	1.5	0.7	-0.7	0.0	0.9	2.0	1.1	0.6	0.4	0.8	1.5	2.8	2.1	1.8	2.0
Netherlands	-0.7	-1.0	-0.5	0.0	-1.4	-2.6	-2.4	-1.0	0.1	-0.3	-1.3	-1.9	-5.8	-4.7	-4.8	-3.8	-1.7	-1.3	-1.2	-1.0
New Zealand	0.7	0.7	0.1	1.8	1.8	3.2	3.0	3.0	3.7	4.5	3.2	0.6	-2.2	-2.1	-1.2	-0.3	1.1	1.5	1.9	2.2
Norway[1]	-0.9	-1.9	-0.4	1.6	0.7	-1.0	-2.3	-1.0	-0.2	1.0	2.3	1.4	-0.5	0.1	0.5	0.4	-0.2	-0.5	-0.9	-1.1
Poland	..	..	..	..	..	..	..	..	..	..	..	..	..	-7.9	-6.2	-4.2	-3.8	-3.3	-3.0	-2.7
Portugal	-4.7	-5.0	-4.4	-5.3	-6.6	-5.2	-4.8	-6.0	-6.1	-4.3	-3.8	-4.8	-8.7	-8.6	-6.3	-4.4	-1.9	-0.9	-0.6	-1.1
Slovenia	..	..	..	..	-3.4	-2.1	-1.6	-1.7	-1.5	-2.6	-2.8	-4.4	-5.1	-5.5	-5.4	-2.9	-2.5	-3.6	-2.7	-1.4
Spain	-3.3	-2.8	-1.8	-1.9	-1.7	-1.4	-1.4	-0.5	0.0	0.4	-0.2	-5.9	-9.9	-7.8	-7.1	-4.2	-3.2	-2.8	-2.7	-2.4
Sweden	0.6	1.2	1.4	2.7	1.4	-1.1	-0.8	0.2	1.6	0.7	1.3	1.1	1.6	0.5	0.1	-0.2	-0.4	-0.7	-0.2	0.2
Switzerland	-2.7	-2.2	-1.6	-0.1	-1.4	-1.4	-2.0	-1.7	-1.2	-0.4	-0.2	1.2	0.7	0.2	0.5	0.0	0.2	0.5	0.8	1.0
United Kingdom[2]	-1.9	-0.2	0.7	0.8	0.2	-2.1	-3.8	-4.1	-3.2	-4.0	-4.6	-5.6	-8.5	-8.2	-6.8	-7.1	-6.2	-5.8	-5.2	-3.6
United States	-1.6	-0.8	-0.8	-0.3	-2.1	-4.9	-6.0	-6.0	-5.0	-4.4	-4.7	-7.0	-10.3	-10.0	-8.8	-7.5	-4.6	-4.2	-3.3	-3.1
Euro area	-2.6	-2.1	-1.5	-2.0	-2.7	-3.0	-3.2	-2.9	-2.6	-2.2	-2.2	-3.4	-5.1	-4.5	-3.7	-2.3	-1.4	-1.0	-0.9	-0.7
Total OECD	-2.2	-1.7	-1.4	-1.3	-2.3	-3.7	-4.2	-4.1	-3.3	-2.8	-2.9	-4.4	-7.1	-6.8	-5.9	-5.0	-3.5	-3.1	-2.7	-2.3

Note: The underlying balances are adjusted for the cycle and for one-offs. For more details, see Sources & Methods of the *OECD Economic Outlook (http://www.oecd.org/eco/sources-and-methods.htm).*

1. As a percentage of mainland potential GDP. The financial balances shown are adjusted to exclude net revenues from petroleum activities.
2. Revenues due to quantitative easing that have accumulated in a special fund for several years, and that will be transferred to the UK Treasury in well-identified instalments over the projection period, are treated as fiscal one-offs and excluded from underlying fiscal measures.

Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933222818

Annex Table 30. **General government underlying primary balances**

Surplus (+) or deficit (-) as a per cent of potential GDP

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Australia	2.6	3.5	3.2	1.9	0.4	1.9	2.6	1.7	2.0	2.4	1.6	-0.9	-3.5	-3.5	-2.5	-2.0	-0.8	-1.3	-0.9	-0.5
Austria	1.0	0.6	-0.5	-0.8	1.4	0.7	0.5	1.2	-0.3	-0.8	-0.5	-1.0	-2.2	-1.5	-0.3	0.1	0.7	1.5	1.0	0.6
Belgium	5.4	6.6	5.6	5.3	5.6	5.1	4.0	3.8	3.4	3.2	2.4	1.3	-0.8	-0.4	-0.5	0.3	0.7	0.6	1.0	1.4
Canada	5.3	5.1	5.6	5.1	3.0	2.2	1.7	2.4	2.3	2.0	1.5	-0.6	-2.3	-3.2	-2.7	-1.9	-1.8	-1.0	-0.9	-0.5
Czech Republic	..	-3.0	-2.5	-4.5	-3.7	-3.4	-6.5	-1.8	-2.2	-3.4	-2.5	-3.6	-5.0	-3.8	-2.1	1.1	0.9	0.0	-0.2	0.3
Denmark	1.4	1.9	2.9	2.8	1.3	1.0	1.4	2.8	4.8	3.3	2.9	1.6	-1.7	-0.8	-0.5	-0.8	0.5	1.5	-1.1	-1.9
Estonia	..	..	..	..	..	1.1	1.7	2.0	-0.4	-0.9	-1.9	-3.9	-1.3	-0.3	-0.1	1.0	0.2	1.8	1.5	1.4
Finland	1.3	3.2	3.2	7.0	5.2	4.3	2.8	2.3	2.6	2.9	2.9	1.6	-1.3	-1.9	-1.3	-1.7	-1.5	-1.3	-1.1	-1.0
France	0.2	0.9	1.1	0.3	0.2	-1.1	-1.7	-1.4	-1.4	-0.8	-1.5	-1.6	-4.2	-3.7	-2.4	-2.0	-1.2	-0.8	-0.4	-0.1
Germany	0.4	1.0	1.3	1.1	-0.6	-1.0	-0.5	-0.2	0.3	0.9	1.7	1.7	1.0	0.0	1.0	1.7	1.7	1.8	1.1	1.0
Greece	1.9	3.3	4.6	4.0	2.6	1.8	-2.1	-4.2	-3.4	-6.1	-7.4	-9.3	-12.2	-6.1	-1.0	2.7	6.5	4.5	5.0	4.9
Hungary	2.2	0.8	1.1	2.4	0.7	-3.4	-3.5	-3.6	-5.8	-7.9	-2.6	-1.2	0.1	0.1	-0.2	2.9	2.6	1.1	0.6	0.7
Iceland	3.0	1.7	2.7	2.8	0.2	-1.5	-1.0	0.5	4.1	4.7	2.3	-3.6	-6.4	-1.5	0.5	2.1	2.4	3.1	3.3	3.5
Ireland	3.9	3.4	3.4	3.2	-1.1	-2.7	-0.8	0.1	-0.5	0.0	-3.1	-7.6	-7.5	-5.1	-3.8	-2.3	-0.5	0.5	1.0	0.8
Israel	..	0.1	1.4	2.0	0.6	0.4	1.0	2.7	3.3	3.9	3.8	1.0	-1.3	-0.6	-0.4	-1.4	-0.8	-0.8	-0.7	-0.3
Italy	5.2	4.3	4.2	2.4	1.4	1.5	-0.1	-0.1	-0.4	0.6	1.6	0.8	-0.2	0.9	1.1	4.0	4.2	4.6	4.6	4.5
Japan	-3.7	-3.9	-5.1	-5.1	-4.8	-5.9	-5.8	-6.0	-4.7	-3.2	-3.0	-2.9	-6.9	-7.2	-7.0	-7.2	-7.4	-6.2	-5.6	-4.9
Korea	1.7	1.8	2.4	4.1	2.9	3.3	3.4	2.0	2.4	2.7	2.9	1.6	-1.2	-0.1	0.2	0.4	0.1	0.4	-0.1	-0.3
Luxembourg	4.3	3.1	2.1	2.6	1.5	0.3	-0.2	-1.5	-0.8	0.1	0.9	-0.2	0.1	0.2	0.5	1.3	2.6	1.9	1.5	1.7
Netherlands	3.0	2.5	2.7	2.6	0.8	-0.6	-0.7	0.7	1.7	1.1	0.1	-0.4	-4.5	-3.5	-3.6	-2.7	-0.6	-0.2	-0.2	-0.2
New Zealand	2.8	2.6	1.6	3.2	3.2	4.3	4.0	3.9	4.4	4.9	3.3	1.0	-1.6	-1.6	-0.5	0.6	1.7	2.0	2.3	2.5
Norway[1]	-2.3	-3.2	-2.1	-0.2	-1.4	-3.3	-4.4	-3.1	-2.3	-1.3	-0.8	-1.9	-3.1	-2.2	-1.8	-1.7	-2.3	-3.0	-3.6	-3.9
Poland	..	..	..	..	..	..	..	..	..	..	..	..	..	-5.7	-4.0	-1.9	-1.6	-1.6	-1.5	-1.2
Portugal	-1.3	-2.2	-1.7	-2.7	-4.0	-2.7	-2.5	-3.7	-3.8	-1.8	-1.2	-2.1	-6.1	-5.9	-2.5	-0.4	2.0	3.2	3.4	2.7
Slovenia	..	..	..	..	-1.6	-0.4	-0.2	-0.3	-0.2	-1.4	-1.7	-3.7	-4.2	-4.4	-4.0	-1.6	-0.6	-1.0	0.2	1.3
Spain	0.7	0.9	1.3	1.0	0.9	1.0	0.7	1.3	1.5	1.7	0.9	-4.8	-8.6	-6.2	-5.2	-1.9	-0.6	-0.1	-0.1	0.4
Sweden	3.5	3.7	3.8	4.8	3.1	0.9	0.4	1.1	2.6	1.5	2.0	1.6	1.8	0.7	0.3	-0.2	-0.3	-0.7	-0.2	0.2
Switzerland	-1.8	-1.2	-0.5	0.9	-0.5	-0.4	-1.0	-0.7	-0.2	0.4	0.4	1.7	1.2	0.6	0.9	0.4	0.5	0.7	1.0	1.0
United Kingdom[2]	1.1	2.7	3.1	3.1	2.2	-0.5	-2.2	-2.5	-1.4	-2.2	-2.7	-3.9	-7.0	-5.7	-4.0	-4.6	-3.7	-3.4	-2.8	-1.2
United States	2.2	2.8	2.4	2.5	0.6	-2.3	-3.3	-3.4	-2.3	-1.7	-2.0	-4.5	-7.6	-7.2	-5.8	-4.5	-2.4	-1.5	-1.1	-1.0
Euro area	1.7	1.9	2.1	1.5	0.6	0.0	-0.4	-0.1	0.0	0.4	0.4	-0.8	-2.7	-2.1	-1.1	0.3	1.0	1.3	1.2	1.2
Total OECD	1.2	1.6	1.5	1.4	0.1	-1.4	-2.0	-2.0	-1.3	-0.8	-0.9	-2.5	-5.1	-4.8	-3.7	-2.7	-1.7	-1.1	-0.9	-0.7

Note: Adjusted for the cycle and for one-offs, and excludes net interest payments. For more details, see Sources & Methods of the *OECD Economic Outlook (http://www.oecd.org/eco/sources-and-methods.htm)*.

1. As a percentage of mainland potential GDP. The financial balances shown are adjusted to exclude net revenues from petroleum activities.
2. Revenues due to quantitative easing that have accumulated in a special fund for several years, and that will be transferred to the UK Treasury in well-identified instalments over the projection period, are treated as fiscal one-offs and excluded from underlying fiscal measures.

Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933222824

Annex Table 31. **General government net debt interest payments**

Per cent of nominal GDP

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Australia	1.4	1.0	0.9	0.7	0.4	0.4	0.3	0.3	0.2	0.0	0.0	-0.2	0.1	0.4	0.5	0.5	0.6	0.8	0.8	0.9
Austria	3.1	3.0	2.8	2.7	2.7	2.6	2.4	2.3	2.4	2.3	2.2	2.2	2.2	2.2	2.1	2.1	2.0	1.9	1.8	1.6
Belgium	7.2	6.9	6.4	6.2	5.9	5.3	4.9	4.4	4.0	3.7	3.5	3.5	3.4	3.2	3.1	3.2	2.9	2.8	2.6	2.3
Canada	4.7	4.6	4.1	3.0	2.8	2.5	1.8	1.5	1.0	0.6	0.6	0.0	0.9	0.6	0.4	0.5	0.4	0.3	0.4	0.4
Czech Republic	0.4	0.5	0.5	0.1	0.3	0.3	0.4	0.6	0.7	0.7	0.7	0.7	1.0	1.1	1.1	1.2	1.1	1.1	1.0	0.9
Denmark	3.2	3.0	2.9	2.5	2.0	2.0	1.6	1.4	1.1	0.8	0.5	0.2	0.4	0.6	0.6	0.5	0.5	0.4	0.3	0.1
Estonia	0.1	0.4	0.1	0.1	0.0	0.0	-0.3	-0.1	-0.2	-0.2	-0.3	-0.4	-0.3	-0.2	-0.2	-0.1	-0.1	-0.1	-0.1	-0.1
Finland	1.7	1.5	1.4	0.9	0.5	0.0	0.0	0.0	0.0	-0.2	-0.3	-0.5	-0.4	0.1	0.0	0.2	0.1	0.2	0.3	0.2
France	3.0	2.9	2.6	2.6	2.6	2.6	2.5	2.5	2.4	2.4	2.5	2.6	2.2	2.3	2.5	2.4	2.2	2.1	2.0	1.7
Germany	2.9	2.9	2.7	2.7	2.6	2.5	2.6	2.5	2.4	2.4	2.4	2.3	2.3	2.1	2.0	1.8	1.5	1.3	1.1	0.9
Greece	7.4	6.8	6.0	6.2	5.6	5.0	4.5	4.4	4.3	4.3	4.3	4.6	4.8	5.5	6.8	4.4	3.6	3.7	4.1	4.0
Hungary	7.2	6.1	6.1	4.7	4.0	3.6	3.7	4.0	3.8	3.6	3.7	3.6	4.0	3.8	3.7	4.2	4.3	3.9	3.7	3.4
Iceland	2.2	2.3	2.1	1.9	1.5	1.1	1.4	1.3	1.2	0.4	0.3	0.0	3.3	3.3	3.5	4.0	3.7	3.7	3.5	3.7
Ireland	3.4	3.1	2.1	1.6	1.1	1.1	1.1	1.0	0.9	0.7	0.6	0.7	1.4	2.5	2.6	3.2	3.6	3.5	3.4	3.2
Israel	..	7.2	6.7	6.6	6.3	6.2	6.4	6.3	6.2	5.0	4.5	4.0	3.9	3.8	3.7	3.9	3.5	3.1	2.7	2.5
Italy	8.7	7.5	6.1	5.9	5.8	5.2	4.8	4.5	4.3	4.2	4.5	4.7	4.2	4.1	4.5	5.0	4.7	4.5	4.0	3.9
Japan	1.1	1.2	1.3	1.2	0.9	0.7	0.6	0.4	0.1	-0.1	0.0	0.3	0.5	0.7	0.8	0.9	0.7	1.0	0.9	0.8
Korea	-0.9	-1.1	-0.8	-1.0	-0.9	-0.7	-0.1	-0.1	-0.6	-0.8	-0.9	-0.1	-0.8	-0.5	-0.5	-0.2	-0.4	-0.1	-0.1	-0.2
Luxembourg	-0.9	-1.0	-0.8	-1.2	-1.3	-1.1	-0.9	-0.8	-0.7	-0.8	-1.1	-1.3	-0.5	-0.3	-0.2	-0.2	-0.2	-0.3	-0.3	-0.3
Netherlands	3.7	3.5	3.2	2.5	2.2	2.0	1.8	1.7	1.6	1.4	1.4	1.4	1.2	1.1	1.2	1.1	1.1	1.1	1.0	0.9
New Zealand	2.0	2.0	1.6	1.5	1.5	1.1	1.0	0.8	0.7	0.4	0.1	0.3	0.6	0.5	0.8	0.9	0.6	0.5	0.4	0.3
Norway	-1.4	-1.3	-1.6	-1.8	-2.0	-2.3	-2.2	-2.2	-2.1	-2.2	-2.9	-3.2	-2.6	-2.3	-2.3	-2.0	-2.1	-2.5	-2.8	-2.9
Poland	..	..	..	..	..	..	..	..	..	..	..	..	..	2.2	2.2	2.3	2.2	1.7	1.5	1.5
Portugal	3.3	2.7	2.6	2.5	2.5	2.5	2.4	2.3	2.3	2.5	2.6	2.7	2.7	2.7	3.8	4.3	4.2	4.4	4.2	4.0
Slovak Republic	1.8	2.1	2.9	3.1	3.0	2.9	1.6	1.4	1.1	0.9	0.9	0.9	1.1	1.1	1.3	1.6	1.7	1.7	1.6	1.5
Slovenia	2.0	1.8	1.9	1.8	1.8	1.7	1.4	1.4	1.3	1.2	1.0	0.7	0.9	1.1	1.4	1.4	2.0	2.7	2.9	2.8
Spain	4.0	3.7	3.1	2.9	2.5	2.3	2.0	1.8	1.5	1.3	1.1	1.0	1.3	1.5	2.0	2.5	2.8	2.9	2.8	2.8
Sweden	2.9	2.5	2.4	2.0	1.7	2.0	1.3	0.9	0.9	0.8	0.7	0.5	0.2	0.2	0.2	0.0	0.1	0.0	0.0	0.0
Switzerland	0.9	0.9	1.1	1.0	0.9	1.0	1.0	1.0	1.0	0.8	0.6	0.5	0.5	0.5	0.4	0.4	0.3	0.2	0.1	0.0
United Kingdom	3.0	2.9	2.4	2.3	1.9	1.7	1.6	1.6	1.8	1.7	1.8	1.7	1.5	2.6	2.9	2.6	2.6	2.5	2.5	2.4
United States	3.9	3.6	3.2	2.8	2.7	2.6	2.7	2.6	2.6	2.6	2.6	2.6	2.8	2.9	3.1	3.1	2.2	2.8	2.2	2.1
Euro area	4.3	4.0	3.5	3.4	3.2	3.0	2.9	2.7	2.6	2.5	2.5	2.6	2.4	2.4	2.6	2.6	2.4	2.3	2.1	2.0
Total OECD	3.4	3.2	2.8	2.6	2.4	2.3	2.2	2.0	1.9	1.8	1.8	1.8	2.0	2.1	2.2	2.2	1.8	2.0	1.7	1.6

Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933222838

Annex Table 32. **General government gross financial liabilities**

Per cent of nominal GDP

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Australia	36.9	33.4	28.4	27.2	26.0	24.5	21.8	22.1	21.8	20.7	20.4	21.2	26.7	30.0	34.1	37.3	38.3	42.5	44.6	46.8
Austria	65.6	67.3	70.6	70.4	71.6	75.0	73.7	72.9	80.4	77.8	74.6	80.0	85.4	90.8	92.0	96.7	95.1	96.3	97.6	97.8
Belgium[1]	143.7	138.2	126.7	120.6	119.2	118.3	114.7	110.3	107.9	99.6	93.5	100.7	109.0	107.4	110.2	120.3	117.6	129.8	130.4	128.9
Canada	103.1	101.6	92.2	84.2	85.7	84.8	80.3	76.5	75.8	74.9	70.4	74.7	87.4	89.5	93.1	95.9	92.3	94.8	96.0	95.5
Czech Republic	..	..	..	..	..	30.2	32.7	32.5	32.2	32.0	30.7	34.6	41.4	46.3	48.6	58.2	57.9	57.1	55.1	55.0
Denmark	75.0	72.6	67.1	60.5	58.3	58.1	56.1	52.4	45.1	40.5	34.6	42.0	49.5	53.8	60.6	60.2	57.3	60.4	55.9	55.0
Estonia	11.3	10.0	10.9	6.8	6.7	7.6	8.4	8.6	8.2	8.0	7.3	8.4	12.7	11.9	9.5	13.2	13.5	14.3	12.9	11.4
Finland	62.7	59.3	53.0	50.9	48.2	48.0	49.5	49.6	46.4	43.9	40.1	38.8	49.5	55.9	57.1	63.0	65.1	71.4	73.6	76.2
France	75.3	77.0	73.7	72.0	71.1	74.8	78.7	80.4	81.9	77.0	75.8	81.8	93.4	97.1	101.0	111.8	111.4	120.4	121.9	122.8
Germany	58.8	60.6	60.0	59.7	58.7	61.1	64.6	67.8	70.3	68.3	64.2	68.2	75.6	84.2	83.6	86.3	81.6	82.3	78.7	74.9
Greece	95.7	92.7	95.9	111.1	114.1	113.9	108.9	110.5	112.1	119.1	114.4	118.6	135.2	128.7	111.2	166.2	182.0	184.1	187.9	187.6
Hungary	66.7	64.8	66.8	61.3	59.3	60.0	61.0	64.9	67.8	71.1	71.9	75.8	84.7	86.6	95.5	98.2	96.7	99.8	99.6	98.3
Iceland	..	47.2	43.1	40.4	44.8	40.9	39.8	34.7	26.4	32.0	30.0	70.6	85.8	90.8	97.4	95.2	87.7	85.4	81.9	79.0
Ireland	..	61.3	49.9	38.5	35.4	34.3	33.2	31.6	31.5	27.8	27.5	47.7	67.7	83.7	97.8	120.8	128.9	116.5	114.5	111.4
Israel	..	96.4	90.3	80.1	84.4	91.1	93.9	92.2	88.9	81.0	73.9	72.7	75.0	71.1	69.7	68.3	67.6	67.5	65.4	63.7
Italy	128.5	130.7	123.8	118.8	118.1	117.0	114.2	116.2	118.9	116.2	111.7	114.5	127.3	126.0	119.4	138.1	144.8	158.5	159.6	158.4
Japan[2]	101.7	113.8	127.9	136.1	144.4	153.5	158.3	166.3	169.6	166.8	162.4	171.1	188.7	193.2	209.4	215.4	220.3	226.0	229.2	231.7
Korea[3]	..	..	..	..	..	18.1	18.7	22.0	24.0	26.9	26.9	28.3	31.0	31.8	33.3	34.8	34.8	34.5	34.9	35.5
Luxembourg	9.7	10.7	9.5	8.8	7.9	8.2	7.9	8.6	7.8	11.9	15.5	19.3	19.0	26.4	26.0	29.6	29.7	31.3	33.2	34.7
Netherlands	78.8	76.3	67.6	60.1	56.2	57.0	58.1	58.5	57.6	51.5	48.5	61.3	63.7	67.7	71.6	77.9	77.0	81.8	81.6	81.2
New Zealand	41.0	40.9	38.3	36.2	34.3	32.4	30.4	27.7	26.5	26.2	25.1	28.4	33.6	37.3	40.8	41.8	40.8	39.2	37.2	34.7
Norway	29.2	27.6	28.7	32.2	31.3	38.7	48.0	49.9	46.9	57.8	55.6	54.2	48.1	48.4	33.8	34.5	35.0	32.6	34.5	35.4
Poland	..	..	..	..	..	..	..	..	..	..	..	..	..	61.0	61.6	61.2	62.3	65.8	66.7	66.7
Portugal	66.0	65.3	62.5	62.0	63.5	66.8	70.6	76.7	80.0	79.4	78.1	82.8	96.1	104.1	108.0	137.0	141.8	150.4	148.0	144.5
Slovak Republic	38.1	40.3	52.6	57.9	56.5	49.2	47.3	44.9	37.9	35.7	34.3	33.3	41.9	46.9	49.5	57.9	60.8	60.0	59.9	59.9
Slovenia	..	..	..	..	33.0	34.0	33.5	34.3	33.4	33.3	28.9	28.4	42.4	46.6	50.2	60.4	79.2	97.6	99.7	101.8
Spain	73.0	73.5	67.9	65.2	60.6	59.3	54.4	52.5	50.0	45.7	41.7	47.1	61.9	66.7	77.4	91.0	102.0	115.8	117.1	117.2
Sweden	77.3	76.6	67.2	56.9	58.3	58.1	57.0	56.5	57.5	50.9	45.8	45.9	47.6	44.4	44.8	44.6	44.8	52.1	52.6	51.2
Switzerland	52.6	55.4	52.5	52.7	52.6	60.1	58.5	59.6	57.1	50.7	50.5	48.7	46.5	44.9	45.1	45.8	45.6	45.3	45.1	44.7
United Kingdom	54.8	55.6	50.8	49.5	45.4	47.9	47.1	48.5	50.0	49.6	50.1	62.0	75.7	87.3	101.1	105.1	100.8	111.3	113.3	113.1
United States	61.7	57.7	52.3	48.1	50.7	57.4	58.8	66.7	66.8	63.9	64.3	78.1	92.5	101.8	107.7	110.5	109.2	110.1	111.4	111.1
Euro area	81.4	82.2	78.5	76.3	74.8	76.1	76.9	78.3	79.3	75.8	72.2	77.5	87.9	92.2	93.1	103.9	104.9	111.5	110.9	109.5
Total OECD	71.6	71.9	69.3	67.3	68.6	72.6	73.4	77.5	78.1	75.3	73.5	82.0	93.6	99.8	104.7	110.3	110.3	113.8	114.6	114.2

Note: Gross debt data are not always comparable across countries due to different definitions or treatment of debt components. Maastricht debt for European Union countries is shown in Annex Table 61. Financial liabilities are measured at market value.

For more details, see Sources & Methods of the *OECD Economic Outlook (http://www.oecd.org/eco/sources-and-methods.htm)*.

1. Includes the debt of the Belgium National Railways Company (SNCB) from 2005 onwards.
2. Includes the debt of the Japan Railway Settlement Corporation and the National Forest Special Account from 1998 onwards.
3. Data are on a non-consolidated basis (SNA93).

Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933222848

Annex Table 33. **General government net financial liabilities**

Per cent of nominal GDP

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Australia	-8.0	-17.7	-22.0	-21.5	-19.4	-21.2	-24.8	-26.9	-27.7	-30.1	-31.5	-30.6	-28.1	-23.2	-16.6	-14.5	-16.8	-14.8	-12.6	-10.5
Austria	35.9	36.2	35.7	34.8	33.8	37.5	35.0	36.9	43.4	42.5	39.5	43.9	49.4	50.8	52.2	57.1	57.5	58.7	60.0	60.2
Belgium[1]	124.1	119.7	106.8	101.1	98.6	99.6	96.2	91.0	88.9	80.1	73.9	77.6	82.7	81.4	83.3	92.1	90.5	101.6	102.2	100.7
Canada	72.8	69.9	58.1	49.4	47.8	48.5	43.2	39.0	34.2	29.8	27.0	28.9	34.6	37.4	42.0	43.3	39.7	40.4	41.6	41.1
Czech Republic	..	..	..	..	..	-15.1	-7.0	-10.2	-11.5	-11.7	-14.5	-5.8	-1.4	6.4	6.1	13.6	15.2	17.1	18.3	18.9
Denmark	36.4	37.6	30.6	25.5	22.0	21.1	18.4	14.2	9.5	1.1	-4.6	-6.7	-5.9	-3.3	1.1	5.4	2.7	4.0	5.6	8.0
Estonia	-23.5	-40.4	-39.8	-30.2	-29.1	-28.7	-29.5	-31.9	-32.1	-30.8	-28.5	-25.9	-28.8	-35.9	-34.6	-32.7	-32.2	-30.3	-29.8	-28.9
Finland	-7.3	-14.1	-48.4	-30.1	-30.4	-30.2	-36.8	-44.7	-56.0	-66.5	-69.7	-50.0	-59.6	-61.8	-48.8	-50.2	-53.5	-54.7	-51.0	-47.2
France	37.7	38.9	31.0	32.4	34.6	39.5	41.6	43.1	41.0	35.5	32.2	42.7	50.2	54.6	59.5	68.8	69.9	78.1	79.8	80.7
Germany	30.5	35.2	33.8	33.3	35.5	39.7	42.8	46.7	48.9	47.0	41.7	43.5	47.9	48.4	49.4	49.2	45.3	46.2	44.1	41.4
Greece	70.3	65.9	63.9	82.6	86.9	88.9	82.0	81.6	80.5	87.5	80.3	89.1	99.6	91.1	72.7	101.2	117.5	141.3	146.2	145.9
Hungary	25.8	32.4	34.2	32.9	32.2	36.3	37.3	41.6	44.6	51.3	52.6	50.8	58.6	60.8	62.4	69.6	70.5	72.5	71.5	70.3
Iceland	..	16.6	9.3	8.7	3.5	1.7	3.7	2.1	-9.8	-15.0	-20.4	0.3	13.9	22.1	26.9	28.9	27.4	26.1	23.6	21.7
Ireland	..	41.2	25.7	14.9	11.4	13.1	11.0	7.8	5.6	0.9	-0.6	12.1	24.4	44.0	60.9	78.1	82.7	82.1	80.0	78.0
Italy	101.3	103.6	102.1	96.3	96.9	96.4	93.2	94.4	95.7	92.3	88.8	92.0	102.8	101.3	96.1	112.0	118.2	131.1	132.2	131.1
Japan[2]	34.1	44.7	52.4	58.8	65.5	74.5	77.6	82.4	82.2	81.0	80.5	95.3	106.2	113.1	127.2	129.2	122.9	128.7	131.8	134.4
Korea[3]	..	..	..	..	..	-30.6	-29.4	-29.8	-33.7	-34.6	-37.6	-35.0	-36.0	-35.3	-35.3	-35.9	-36.0	-36.3	-35.8	-35.2
Luxembourg	-39.6	-44.5	-45.5	-48.2	-56.0	-53.8	-56.9	-52.1	-49.4	-49.5	-50.7	-54.1	-58.3	-52.4	-46.1	-48.3	-48.9	-47.4	-45.5	-44.0
Netherlands	41.9	40.2	29.8	28.2	27.6	31.2	31.0	32.5	30.2	27.4	23.7	22.8	27.4	32.0	36.7	39.4	40.4	44.2	45.0	44.6
New Zealand	29.3	27.2	25.0	23.0	20.7	17.2	12.8	8.2	3.7	-1.2	-5.4	-4.9	-0.9	1.7	4.5	6.7	6.3	5.1	3.0	0.5
Norway	-48.7	-52.4	-57.0	-67.2	-84.7	-80.1	-93.5	-101.8	-118.8	-131.9	-137.4	-121.9	-152.3	-161.6	-157.5	-166.8	-204.3	-242.5	-249.8	-256.0
Poland	..	..	..	..	..	..	..	..	..	..	..	..	..	27.0	31.1	32.3	35.5	38.4	39.8	40.2
Portugal	35.9	37.6	36.2	37.8	40.0	44.4	47.2	53.9	55.9	54.7	55.0	59.6	70.3	71.0	66.2	90.2	98.7	107.7	108.4	108.9
Slovak Republic	-11.8	-3.9	1.1	13.4	10.9	1.4	1.8	5.1	9.7	14.1	13.1	14.9	22.0	27.5	32.4	30.9	32.3	35.0	36.7	37.3
Slovenia	..	..	..	..	-15.3	-13.9	-9.3	-9.5	-8.4	-9.8	-18.0	-6.4	-1.1	-0.4	2.1	7.9	19.1	28.3	30.4	32.5
Spain	53.3	52.7	46.7	43.3	40.5	39.1	35.9	33.5	28.5	22.0	17.3	22.1	33.2	38.8	46.8	57.5	68.8	80.7	82.0	82.1
Sweden	24.0	22.0	10.4	2.8	-2.0	4.7	0.9	-1.2	-6.2	-16.5	-20.9	-15.3	-22.7	-25.2	-22.6	-26.9	-29.6	-30.5	-28.0	-26.3
Switzerland	..	..	10.9	7.3	6.9	12.5	11.9	13.8	12.9	9.6	8.5	11.7	7.5	10.3	9.4	7.0	6.8	6.6	6.3	5.9
United Kingdom	33.0	35.0	31.7	28.4	25.5	28.4	27.5	28.8	29.3	29.6	30.1	36.8	46.9	50.0	65.3	67.3	65.6	76.3	78.2	78.1
United States	43.7	39.0	32.7	29.5	31.4	38.4	40.0	48.1	48.3	45.1	44.8	55.8	68.6	76.7	84.8	87.4	85.4	85.8	87.2	86.9
Euro area	51.1	52.6	47.5	46.7	47.2	49.8	49.9	51.1	50.5	46.6	42.2	47.1	54.3	56.2	57.9	65.3	67.0	73.4	73.6	72.7
Total OECD	40.4	40.7	36.5	34.9	36.2	40.7	41.2	44.7	43.9	40.7	38.7	46.3	54.9	59.6	65.6	69.4	68.0	71.0	72.1	71.9

Note: Net debt measures are not always comparable across countries due to different definitions or treatment of debt (and asset) components, see Sources & Methods of the *OECD Economic Outlook (http://www.oecd.org/eco/sources-and-methods.htm)*. Financial liabilities are measured at market value.

1. Includes the debt of the Belgium National Railways Company (SNCB) from 2005 onwards.
2. Includes the debt of the Japan Railway Settlement Corporation and the National Forest Special Account from 1998 onwards.
3. Data are on a non-consolidated basis (SNA93).

Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933222859

Annex Table 34. **Short-term interest rates**

Per cent, per annum

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	Fourth quarter 2014	Fourth quarter 2015	Fourth quarter 2016
Australia	6.2	4.9	4.7	4.9	5.5	5.6	6.0	6.7	7.0	3.4	4.7	4.8	3.7	2.8	2.7	2.3	2.8	2.7	2.2	3.1
Canada	5.7	4.0	2.6	3.0	2.3	2.8	4.2	4.6	3.2	0.5	0.8	1.2	1.2	1.2	1.2	0.9	1.3	1.2	0.9	1.5
Chile	10.8	7.2	3.9	2.8	1.8	3.5	4.8	5.2	7.4	1.7	1.8	4.9	5.0	4.9	3.7	2.5	2.7	3.1	2.5	2.9
Colombia	12.1	12.4	8.9	7.8	7.8	7.0	6.3	8.0	9.7	6.1	3.7	4.2	5.4	4.2	4.1	4.5	4.5	4.3	4.5	4.5
Czech Republic	5.4	5.2	3.5	2.3	2.4	2.0	2.3	3.1	4.0	2.2	1.3	1.2	1.0	0.5	0.4	0.3	0.3	0.3	0.3	0.3
Denmark	5.0	4.7	3.5	2.4	2.2	2.2	3.2	4.4	5.3	2.5	1.2	1.4	0.6	0.3	0.3	-0.1	-0.1	0.3	-0.1	-0.1
Estonia	5.7	5.3	3.9	2.9	2.5	2.4	3.2	4.9	6.7	5.9	1.6									
Hungary	11.0	10.8	8.9	8.2	11.3	7.0	6.9	7.6	8.9	8.5	5.4	6.0	6.9	4.2	2.2	1.6	1.7	1.6	1.5	2.0
Iceland	11.2	12.0	9.0	5.3	6.3	9.4	12.4	14.3	15.8	11.3	6.8	4.3	5.5	6.2	6.1	6.1	7.0	5.9	7.0	7.0
India	..	8.6	8.0	7.1	6.2	6.1	6.8	7.7	8.0	4.9	5.5	7.6	8.1	7.5	8.0	7.5	7.1	8.0	7.3	7.0
Indonesia	12.5	15.5	15.5	10.6	6.4	8.1	11.4	8.0	8.5	9.3	7.0	6.9	5.9	6.3	8.8	8.9	8.6	9.1	8.9	8.6
Israel	9.0	6.5	7.2	6.6	4.3	3.9	5.5	4.3	3.6	0.6	1.6	2.8	2.3	1.3	0.5	0.2	0.7	0.2	0.4	0.9
Japan	0.3	0.2	0.1	0.1	0.1	0.1	0.3	0.8	0.9	0.5	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1
Korea	7.1	5.3	4.8	4.3	3.8	3.6	4.5	5.2	5.5	2.6	2.7	3.4	3.3	2.7	2.5	1.9	1.7	2.2	1.7	1.7
Latvia	5.4	6.9	4.4	3.8	4.2	3.1	4.4	8.7	8.0	13.1	2.0	1.0	0.9	0.4	0.2	0.0	0.0	0.1	0.0	0.0
Mexico	16.2	12.2	7.4	6.5	7.1	9.3	7.3	7.4	7.9	5.5	4.6	4.4	4.4	3.8	3.1	3.2	4.1	2.9	3.5	4.5
New Zealand	6.5	5.7	5.7	5.4	6.1	7.1	7.5	8.3	8.0	3.0	3.0	2.8	2.7	2.7	3.4	3.6	3.6	3.7	3.6	3.6
Norway	6.7	7.2	6.9	4.1	2.0	2.2	3.1	5.0	6.2	2.5	2.5	2.9	2.2	1.8	1.7	1.2	1.1	1.6	1.1	1.1
Poland	18.9	15.7	8.8	5.7	6.2	5.2	4.2	4.8	6.3	4.3	3.9	4.6	4.9	3.0	2.5	1.8	1.9	2.0	1.8	2.1
Slovak Republic	8.6	7.8	7.8	6.2	4.7	2.9	4.3	4.3												
Slovenia	..	..	8.0	6.8	4.7	4.0	3.6													
Sweden	4.1	4.1	4.3	3.2	2.3	1.9	2.6	3.9	4.7	0.9	0.9	2.5	2.0	1.2	0.7	-0.1	-0.2	0.3	-0.2	-0.2
Switzerland	3.2	2.9	1.1	0.3	0.5	0.8	1.6	2.6	2.5	0.4	0.2	0.1	0.1	0.0	0.0	-0.8	-0.8	0.0	-0.8	-0.7
Turkey	..	..	48.8	39.7	24.1	16.8	17.5	18.6	18.2	10.1	7.6	8.8	8.9	6.9	10.3	10.7	10.2	10.2	11.4	9.6
United Kingdom	6.1	5.0	4.0	3.7	4.6	4.7	4.8	6.0	5.5	1.2	0.7	0.9	0.8	0.5	0.5	0.5	1.2	0.5	0.6	1.6
United States	6.5	3.7	1.8	1.2	1.6	3.5	5.2	5.3	3.2	0.9	0.5	0.4	0.4	0.3	0.3	0.5	1.6	0.3	0.7	2.1
Euro area	4.4	4.3	3.4	2.4	2.1	2.2	3.1	4.3	4.6	1.2	0.8	1.4	0.6	0.2	0.2	0.0	0.0	0.1	0.0	0.0

Note: Three-month money market rates where available, or rates on similar financial instruments. For further information, see Sources & Methods of the *OECD Economic Outlook (http://www.oecd.org/eco/sources-and-methods.htm)*. Individual euro area countries are not shown (after 2006 for Slovenia, 2007 for the Slovak Republic and 2010 for Estonia) since their short-term interest rates are equal to the euro area rate.

Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933222869

Annex Table 35. **Long-term interest rates**

Per cent, per annum

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	Fourth quarter 2014	Fourth quarter 2015	Fourth quarter 2016
Australia	6.3	5.6	5.8	5.4	5.6	5.3	5.6	6.0	5.8	5.0	5.4	4.9	3.4	3.7	3.7	2.6	3.3	3.2	2.8	3.7
Austria	5.6	5.1	5.0	4.2	4.2	3.4	3.8	4.3	4.4	3.9	3.2	3.3	2.4	2.0	1.5	0.5	0.5	1.0	0.5	0.5
Belgium	5.6	5.1	4.9	4.1	4.1	3.4	3.8	4.3	4.4	3.8	3.3	4.2	3.0	2.4	1.7	0.7	0.7	1.2	0.7	0.7
Canada	5.9	5.5	5.3	4.8	4.6	4.1	4.2	4.3	3.6	3.2	3.2	2.8	1.9	2.3	2.2	1.7	2.6	2.0	2.0	3.0
Chile	..	..	..	..	6.3	6.0	6.2	6.1	7.0	5.7	6.3	6.0	5.5	5.3	4.7	4.2	4.5	4.5	4.2	4.7
Colombia	..	..	..	15.5	14.6	11.8	9.2	10.0	11.9	9.6	8.5	8.1	6.9	6.4	7.0	7.4	7.6	7.1	7.6	7.6
Czech Republic	6.9	6.3	4.9	4.1	4.8	3.5	3.8	4.3	4.6	4.8	3.9	3.7	2.8	2.1	1.6	0.4	0.4	0.9	0.4	0.5
Denmark	5.7	5.1	5.1	4.3	4.3	3.4	3.8	4.3	4.3	3.6	2.9	2.7	1.4	1.7	1.3	0.6	0.6	1.0	0.6	0.6
Finland	5.5	5.0	5.0	4.1	4.1	3.4	3.8	4.3	4.3	3.7	3.0	3.0	1.9	1.9	1.4	0.5	0.6	0.9	0.6	0.6
France	5.4	4.9	4.9	4.1	4.1	3.4	3.8	4.3	4.2	3.6	3.1	3.3	2.5	2.2	1.7	0.6	0.7	1.1	0.7	0.7
Germany	5.3	4.8	4.8	4.1	4.0	3.4	3.8	4.2	4.0	3.2	2.7	2.6	1.5	1.6	1.2	0.3	0.4	0.7	0.4	0.4
Greece	6.1	5.3	5.1	4.3	4.3	3.6	4.1	4.5	4.8	5.2	9.1	15.7	22.5	10.1	6.9	10.4	8.2	7.9	9.9	7.3
Hungary	8.6	7.9	7.1	6.8	8.3	6.6	7.1	6.7	8.2	9.1	7.3	7.6	7.9	5.9	4.8	3.0	2.9	3.8	2.8	3.1
Iceland	11.2	10.4	8.0	6.7	7.5	8.6	8.8	9.4	11.1	8.3	6.1	6.0	6.2	5.8	6.4	6.7	7.5	6.0	7.5	7.5
India	11.1	9.4	7.2	5.6	5.9	7.0	7.7	8.0	7.9	7.0	7.8	8.4	8.3	8.2	8.6	7.7	7.5	8.1	7.6	7.4
Ireland	5.5	5.0	5.0	4.1	4.1	3.3	3.8	4.3	4.6	5.2	6.0	9.6	6.0	3.8	2.3	0.7	0.7	1.4	0.7	0.7
Israel	5.5	6.4	9.2	8.9	7.6	6.4	6.3	5.6	5.9	5.1	4.7	5.0	4.4	3.8	2.9	2.1	3.2	2.2	2.4	3.6
Italy	5.6	5.2	5.0	4.3	4.3	3.6	4.0	4.5	4.7	4.3	4.0	5.4	5.5	4.3	2.9	1.5	1.6	2.2	1.6	1.6
Japan	1.8	1.3	1.3	1.0	1.5	1.4	1.7	1.7	1.5	1.3	1.2	1.1	0.8	0.7	0.6	0.4	0.4	0.4	0.4	0.4
Korea	8.5	6.9	6.6	5.0	4.7	5.0	5.2	5.4	5.6	5.2	4.8	4.2	3.4	3.3	3.2	2.1	2.0	2.7	1.9	2.1
Latvia	..	7.6	5.4	4.9	4.9	3.9	4.1	5.3	6.4	12.4	10.3	5.9	4.6	3.3	2.5	0.5	0.4	1.9	0.4	0.4
Luxembourg	5.5	4.9	4.7	3.3	2.8	2.4	3.3	4.5	4.6	4.2	3.2	2.9	1.8	1.9	1.3	0.3	0.3	0.8	0.3	0.3
Mexico	..	10.5	10.1	9.0	9.5	9.4	8.4	7.8	8.2	7.8	7.0	6.7	6.0	5.7	5.9	6.0	6.7	6.0	6.4	7.0
Netherlands	5.4	5.0	4.9	4.1	4.1	3.4	3.8	4.3	4.2	3.7	3.0	3.0	1.9	2.0	1.5	0.5	0.6	0.9	0.6	0.6
New Zealand	6.9	6.4	6.5	5.9	6.1	5.9	5.8	6.3	6.1	5.5	5.6	4.9	3.7	4.1	4.3	3.5	4.0	3.9	3.6	4.3
Norway	6.2	6.2	6.4	5.0	4.4	3.7	4.1	4.8	4.5	4.0	3.5	3.1	2.1	2.6	2.5	1.4	1.5	2.0	1.3	1.5
Portugal	5.6	5.2	5.0	4.2	4.1	3.4	3.9	4.4	4.5	4.2	5.4	10.2	10.5	6.3	3.8	2.1	2.1	3.1	2.1	2.1
Slovak Republic	9.8	8.0	6.9	5.0	5.0	3.5	4.4	4.5	4.7	4.7	3.9	4.4	4.6	3.2	2.1	1.0	1.0	1.3	1.0	1.0
Slovenia	..	..	8.6	6.4	4.7	3.8	3.9	4.5	4.6	4.4	3.8	5.0	5.8	5.8	3.3	1.3	1.4	2.4	1.4	1.4
Spain	5.5	5.1	5.0	4.1	4.1	3.4	3.8	4.3	4.4	4.0	4.2	5.4	5.8	4.6	2.7	1.5	1.5	2.0	1.5	1.5
Sweden	5.4	5.1	5.3	4.6	4.4	3.4	3.7	4.2	3.9	3.2	2.9	2.6	1.6	2.1	1.7	0.4	0.5	1.1	0.3	0.8
Switzerland	3.9	3.4	3.2	2.7	2.7	2.1	2.5	2.9	2.9	2.2	1.6	1.5	0.6	0.9	0.7	0.0	0.0	0.5	0.0	0.0
Turkey	..	..	60.4	47.2	25.7	17.2	18.3	19.2	19.6	11.7	8.7	9.3	9.3	7.6	10.6	10.5	10.1	10.2	11.4	9.5
United Kingdom	5.3	4.9	4.9	4.5	4.9	4.4	4.5	5.0	4.6	3.6	3.6	3.1	1.9	2.4	2.6	2.0	2.8	2.1	2.2	3.2
United States	6.0	5.0	4.6	4.0	4.3	4.3	4.8	4.6	3.7	3.3	3.2	2.8	1.8	2.4	2.5	2.3	3.2	2.3	2.7	3.5
Euro area	5.4	5.0	4.9	4.2	4.1	3.4	3.8	4.3	4.3	3.8	3.5	4.2	3.7	2.9	2.0	1.0	1.0	1.4	1.0	0.9

Note: 10-year benchmark government bond yields where available or yield on similar financial instruments (for Korea a 5-year bond is used). The long-term interest rates refer to yields in secondary bond markets and are not representative of average government funding costs. For more details, see *Sources & Methods of the OECD Economic Outlook (http://www.oecd.org/eco/sources-and-methods.htm)*.
Source: OECD Economic Outlook 97 database.

Annex Table 36. **Nominal exchange rates (*vis-à-vis* the US dollar)**

Average of daily rates

	Monetary unit	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Assumptions[1] 2015	Assumptions[1] 2016
Australia	*Australian Dollar*	1.542	1.359	1.313	1.328	1.195	1.198	1.282	1.090	0.969	0.966	1.036	1.109	1.300	1.310
Brazil	*Brazilian Real*	3.078	2.927	2.435	2.175	1.947	1.835	2.000	1.760	1.674	1.953	2.158	2.354	2.996	3.039
Canada	*Canadian Dollar*	1.400	1.301	1.212	1.134	1.074	1.068	1.141	1.030	0.989	0.999	1.030	1.105	1.260	1.267
Chile	*Chilean Peso*	691.3	609.6	559.7	530.3	522.2	523.5	558.9	510.0	483.4	486.0	495.3	570.6	610.9	605.3
China	*Yuan Renminbi*	8.278	8.278	8.194	7.972	7.607	6.950	6.831	6.769	6.463	6.309	6.148	6.160	6.215	6.208
Colombia	*Colombian Peso*	2 877.3	2 629.2	2 321.3	2 359.1	2 077.7	1 966.1	2 156.8	1 899.8	1 847.9	1 797.7	1 869.7	2 002.6	2 418.5	2 389.5
Czech Republic	*Czech Koruny*	28.21	25.69	23.95	22.59	20.29	17.08	19.05	19.08	17.67	19.54	19.56	20.76	24.50	24.374
Denmark	*Danish Krone*	6.577	5.988	5.996	5.943	5.443	5.099	5.359	5.622	5.357	5.790	5.618	5.619	6.659	6.640
Estonia	*Euro*	13.9	12.6	12.6	12.5	11.4	10.7	11.3	11.8						
Hungary	*Hungarian forint*	224.3	202.6	199.5	210.4	183.6	172.5	202.1	207.8	200.9	224.8	223.6	232.6	273.5	272.8
Iceland	*Iceland krone*	76.69	70.19	62.88	69.90	64.07	88.00	123.66	122.24	116.06	125.12	122.17	116.69	132.47	131.65
India	*Indian Rupee*	46.6	45.3	44.1	45.3	41.3	43.5	48.3	45.7	46.6	53.4	58.6	61.0	63.6	64.2
Indonesia	*Rupiah*	8 573.7	8 931.5	9 701.3	9 164.0	9 139.4	9 663.9	10 376.8	9 078.0	8 760.8	9 355.1	10 450.0	11 866.3	13 076.3	13 203.0
Israel	*New Israeli Sheqel*	4.55	4.48	4.49	4.46	4.11	3.58	3.93	3.73	3.57	3.85	3.61	3.58	3.89	3.86
Japan	*Japanese Yen*	115.9	108.1	110.1	116.4	117.8	103.4	93.6	87.8	79.7	79.8	97.6	105.8	119.8	120.0
Korea	*Korean Won*	1 191.0	1 145.2	1 024.2	954.7	929.5	1 100.9	1 274.9	1 155.4	1 107.3	1 125.9	1 094.9	1 053.1	1 096.2	1 096.2
Latvia	*EURO*	0.6	0.5	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5			
Mexico	*Mexican Peso*	10.79	11.28	10.89	10.90	10.93	11.15	13.50	12.63	12.43	13.15	12.77	13.31	15.25	15.36
New Zealand	*New Zealand Dollar*	1.724	1.509	1.421	1.542	1.361	1.425	1.600	1.388	1.266	1.235	1.220	1.206	1.348	1.359
Norway	*Norwegian Krone*	7.078	6.739	6.441	6.415	5.858	5.648	6.290	6.042	5.605	5.815	5.877	6.302	7.577	7.469
Poland	*Polish Zloty*	3.888	3.651	3.234	3.103	2.765	2.410	3.119	3.015	2.962	3.252	3.160	3.154	3.670	3.645
Russian Federation	*Russian Ruble*	30.69	28.80	28.24	27.18	25.57	24.87	31.77	30.37	29.40	31.05	31.86	38.59	53.58	50.11
Slovak Republic	*Euro*	36.76	32.23	31.04	29.65	24.68									
Slovenia	*Euro*	207.1	192.4	192.8	191.0										
South Africa	*rand*	7.569	6.454	6.364	6.770	7.056	8.263	8.417	7.305	7.249	8.202	9.648	10.846	11.978	12.067
Sweden	*Swedish Krona*	8.078	7.346	7.474	7.373	6.758	6.597	7.653	7.202	6.489	6.769	6.513	6.860	8.313	8.266
Switzerland	*Swiss Franc*	1.345	1.243	1.246	1.253	1.200	1.084	1.086	1.043	0.887	0.937	0.927	0.915	0.935	0.924
Turkey	*Turkish Lira*	1.503	1.426	1.341	1.430	1.300	1.299	1.547	1.499	1.672	1.792	1.905	2.189	2.631	2.691
United Kingdom	*Pound Sterling*	0.612	0.546	0.550	0.543	0.500	0.546	0.641	0.647	0.624	0.631	0.640	0.607	0.647	0.638
United States	*U.S. Dollar*	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Euro area	*Euro*	0.884	0.804	0.804	0.796	0.730	0.681	0.718	0.754	0.719	0.778	0.753	0.753	0.892	0.889

1. On the technical assumption that exchange rates remain at their levels of 12 May 2015.

Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933222882

Annex Table 37. **Effective exchange rates**

Indices 2010 = 100, average of daily rates

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Assumptions[1] 2015	Assumptions[1] 2016
Australia	69.8	72.7	81.4	87.9	90.0	88.7	94.5	92.6	88.8	100.0	107.2	109.3	104.4	99.5	93.0	93.3
Austria	93.7	95.1	99.1	100.4	99.5	99.5	100.5	101.5	102.9	100.0	100.0	98.6	100.4	102.0	99.3	99.1
Belgium	89.4	91.8	97.2	99.2	98.5	98.6	100.1	102.3	103.7	100.0	100.6	98.3	100.8	102.5	98.7	98.5
Brazil	78.8	71.9	62.1	62.2	74.3	82.6	88.9	92.8	89.6	100.0	102.3	90.7	83.3	79.9	67.6	66.4
Canada	71.3	70.5	77.5	81.9	87.4	93.0	96.5	95.5	91.7	100.0	101.9	102.5	100.0	94.5	90.3	91.2
Chile	84.0	88.2	83.5	90.8	96.9	101.2	98.4	96.3	93.6	100.0	101.8	104.4	104.7	94.3	95.2	96.0
China	98.2	98.5	92.5	88.2	87.6	89.7	90.7	97.1	103.0	100.0	100.0	105.5	111.7	115.2	124.7	124.5
Colombia	92.8	87.8	72.6	76.7	85.0	82.8	90.6	94.0	90.2	100.0	100.2	106.1	103.1	99.6	88.5	89.5
Czech Republic	70.1	78.7	79.0	79.7	84.5	88.7	90.9	102.0	98.5	100.0	103.3	99.4	97.8	93.7	91.9	91.8
Denmark	90.5	92.6	97.6	99.3	98.4	98.4	99.8	102.0	104.7	100.0	99.8	97.2	99.3	101.5	98.1	97.8
Estonia	88.1	90.8	96.5	98.2	97.7	97.3	98.5	100.3	104.3	100.0	100.0	97.8	100.1	104.5	105.1	104.0
Finland	88.0	90.6	96.6	98.7	97.8	97.6	99.3	101.7	105.3	100.0	100.0	97.1	99.7	103.5	101.7	100.9
France	90.1	92.3	97.6	99.3	98.6	98.7	100.2	102.2	103.5	100.0	100.4	98.1	100.4	101.8	97.9	97.8
Germany	89.5	91.8	97.8	100.0	98.8	98.9	100.5	102.5	104.4	100.0	100.3	97.8	100.5	102.6	98.4	98.2
Greece	89.7	92.1	97.1	99.0	98.1	98.1	99.6	101.7	103.6	100.0	100.7	98.3	100.7	103.8	100.7	100.2
Hungary	99.6	107.3	107.6	109.9	110.5	103.5	109.8	110.9	101.7	100.0	99.2	93.7	93.2	91.5	89.7	89.4
Iceland	166.8	172.0	181.2	183.6	203.7	182.4	184.6	134.4	98.2	100.0	100.4	98.2	100.3	107.6	109.0	109.0
India	120.9	117.4	113.2	110.6	112.3	107.9	112.3	103.6	96.9	100.0	94.2	84.2	77.7	76.3	79.5	78.6
Indonesia	112.7	123.6	126.1	115.7	105.0	109.8	105.3	96.1	91.8	100.0	98.4	93.4	86.3	77.6	75.2	74.4
Ireland	84.3	86.8	93.9	96.3	95.8	95.9	98.3	102.7	104.6	100.0	100.8	97.1	100.0	101.0	95.0	94.9
Israel	108.2	95.3	91.4	87.8	86.8	86.9	89.7	99.9	95.6	100.0	101.3	97.6	104.7	107.9	108.0	108.5
Italy	89.2	91.9	97.5	99.4	98.5	98.6	100.1	102.0	104.0	100.0	100.5	98.2	100.8	103.1	99.4	99.1
Japan	86.3	83.0	85.4	88.8	86.0	79.8	75.4	84.6	97.0	100.0	105.7	107.2	88.0	83.1	77.8	77.5
Korea	108.6	112.5	112.0	112.1	124.6	133.3	131.8	107.5	93.4	100.0	99.8	99.9	105.3	113.1	116.7	116.5
Latvia	110.8	110.4	105.8	103.3	97.4	96.9	97.3	98.4	105.7	100.0	100.9	100.1	102.5	109.5	112.5	110.4
Luxembourg	93.1	94.6	98.3	99.5	98.9	99.0	100.0	101.5	102.6	100.0	100.2	98.6	100.0	100.9	97.9	97.8
Mexico	148.3	144.1	125.3	117.4	120.6	119.7	116.9	113.6	94.9	100.0	100.0	95.4	98.9	96.1	87.0	86.3
Netherlands	89.9	92.0	97.3	99.1	98.3	98.3	99.8	102.0	103.8	100.0	100.4	98.1	100.5	102.4	98.9	98.7
New Zealand	77.0	83.9	96.2	103.3	108.0	99.5	106.6	100.0	92.5	100.0	103.3	107.5	111.7	116.6	112.9	111.8
Norway	88.8	97.0	96.1	93.3	97.0	96.5	98.2	99.1	95.8	100.0	102.7	104.0	101.9	96.4	91.3	92.1
Poland	101.4	98.2	89.4	87.9	98.1	101.0	104.9	114.6	95.2	100.0	97.3	94.0	95.5	98.1	98.4	98.3
Portugal	93.6	95.2	98.6	99.5	98.9	98.9	99.8	101.4	102.3	100.0	100.3	98.9	100.7	101.9	99.0	99.0
Russian Federation	138.0	126.1	115.2	114.7	115.4	118.8	117.5	114.7	95.2	100.0	99.2	98.7	95.9	81.8	65.4	69.1
Slovak Republic	66.6	68.0	72.9	76.4	77.9	80.3	88.8	96.2	103.4	100.0	100.1	99.2	101.0	103.3	101.7	101.3
Slovenia	102.9	100.5	101.1	100.3	99.2	99.2	100.0	101.1	103.3	100.0	100.5	98.9	100.9	103.1	100.6	100.3
South Africa	108.9	87.8	111.4	122.5	122.9	115.5	103.9	86.1	88.6	100.0	97.1	88.8	76.3	69.2	68.2	67.6
Spain	90.9	93.3	97.7	99.1	98.4	98.5	99.8	101.7	103.1	100.0	100.5	98.5	100.8	102.6	98.9	98.9
Sweden	92.2	95.2	101.7	103.9	101.1	101.5	103.1	101.5	93.5	100.0	106.0	107.4	110.7	107.4	101.6	101.5
Switzerland	81.9	86.6	88.5	89.1	88.2	86.9	84.7	89.6	94.9	100.0	113.0	112.2	112.8	116.3	129.1	130.0
Turkey	168.7	126.6	112.9	110.5	116.2	108.2	111.0	106.8	96.6	100.0	86.3	84.4	79.3	70.9	67.7	65.4
United Kingdom	124.9	126.9	122.2	128.0	125.9	126.5	128.6	112.5	100.7	100.0	99.3	103.4	101.4	109.1	116.3	117.3
United States	122.1	123.0	115.8	110.5	107.6	105.9	101.1	97.8	103.9	100.0	95.8	98.6	99.8	103.1	113.3	113.2
Euro area	80.2	84.4	95.0	98.7	97.0	96.9	100.0	104.0	107.9	100.0	100.6	96.3	100.8	104.5	97.7	97.2

Note: For details on the method of calculation, see Sources & Methods of the *OECD Economic Outlook (http://www.oecd.org/eco/sources-and-methods.htm).*

1. On the technical assumption that exchange rates remain at their levels of 12 May 2015.

Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933222895

Annex Table 38. **Export volumes of goods and services**

National accounts basis, percentage change from previous year

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Australia	12.2	0.3	4.5	11.3	2.7	0.6	-1.7	3.9	3.0	3.2	3.2	3.5	2.5	5.4	-0.2	6.5	6.2	6.7	5.7	6.2
Austria	11.1	8.0	6.3	13.4	5.8	4.0	0.4	8.8	6.4	7.6	7.5	2.1	-14.9	12.7	6.6	1.4	1.3	1.8	3.3	5.9
Belgium	9.5	4.1	5.1	12.5	0.3	3.2	1.6	6.4	4.8	5.2	5.6	1.6	-9.5	10.0	6.6	1.9	2.9	3.8	3.4	5.3
Brazil	12.1	4.8	5.6	13.9	8.3	6.6	11.1	13.9	10.8	4.8	5.7	0.1	-8.8	11.6	5.2	0.1	2.2	-1.0	-6.3	5.9
Canada	8.6	9.5	10.8	9.1	-3.0	1.2	-1.7	5.5	2.2	0.9	1.1	-4.5	-13.1	6.9	4.6	2.6	2.0	5.4	3.4	6.9
Chile	11.2	5.3	6.4	5.1	6.9	2.0	6.7	14.0	2.8	5.1	7.2	-0.7	-4.5	2.3	5.5	0.1	3.4	0.7	3.0	6.1
China	23.2	6.4	12.8	27.7	5.6	26.1	26.4	24.6	23.4	23.8	19.8	8.5	-10.2	27.6	9.0	5.3	8.6	5.7	6.1	5.5
Colombia	3.2	9.6	5.6	7.8	2.8	-2.4	7.4	9.8	5.7	8.6	6.9	4.5	-2.8	1.3	11.8	6.0	5.3	-1.7	3.6	5.0
Czech Republic	7.6	9.7	4.8	15.6	9.4	0.8	8.9	29.2	18.4	14.8	11.0	3.8	-9.5	14.4	9.3	4.3	0.3	8.8	8.0	6.2
Denmark	4.5	4.1	11.3	12.6	3.4	3.6	-0.4	2.6	8.1	9.8	3.6	3.2	-9.5	1.9	7.3	0.1	0.8	2.6	3.0	4.9
Estonia	26.4	13.4	0.4	27.4	6.3	2.8	10.2	17.3	19.9	9.5	12.6	0.9	-20.3	24.0	24.9	6.2	2.4	2.6	1.8	4.5
Finland	14.0	8.9	11.3	16.1	1.3	3.7	-1.2	8.7	6.9	10.1	9.1	6.6	-20.1	6.2	2.0	1.2	-0.7	-0.4	1.2	3.9
France	12.9	8.6	4.8	13.0	3.0	1.8	-1.0	4.5	3.8	6.0	2.7	0.0	-11.0	8.6	7.1	2.6	1.8	2.4	4.9	5.3
Germany	12.4	7.1	5.0	14.5	6.1	4.3	1.8	10.4	7.0	12.8	9.7	1.3	-14.3	14.2	8.2	3.5	1.7	3.7	3.9	5.2
Greece	21.9	4.2	24.7	23.8	-1.5	-7.4	-0.7	18.0	4.7	5.2	9.7	3.5	-18.1	4.3	1.0	1.0	1.5	8.8	2.3	7.8
Hungary	22.9	15.6	11.9	25.0	8.8	5.8	6.3	18.0	12.9	19.5	16.1	6.9	-11.4	11.3	6.6	-1.5	5.9	8.7	6.4	5.7
Iceland	5.6	1.4	3.1	3.9	6.7	3.4	0.9	8.2	7.1	-4.8	23.8	2.8	8.3	1.5	3.4	3.7	6.9	3.1	3.9	3.2
India	-8.0	12.8	17.9	19.3	6.6	17.1	10.1	23.7	27.6	23.1	6.4	17.7	-5.8	14.1	19.4	9.4	4.4	4.1	5.2	7.2
Indonesia	7.8	11.2	-31.8	26.5	0.6	-1.2	5.9	13.5	16.6	9.4	8.5	9.5	-2.0	15.3	14.8	1.6	4.2	1.0	4.6	6.0
Ireland	17.6	23.1	15.5	20.1	9.2	4.9	0.7	7.5	4.6	5.3	8.9	-0.9	-4.0	6.2	5.5	4.7	1.1	12.6	6.5	6.4
Israel	9.3	6.4	14.7	23.5	-11.2	-2.2	8.0	17.4	4.9	5.2	10.5	6.4	-11.3	14.9	6.5	1.0	1.5	1.2	3.7	5.0
Italy	5.2	2.4	-1.3	12.8	2.3	-2.5	-1.5	5.4	4.3	8.5	5.5	-3.3	-17.9	11.3	6.1	2.0	0.7	2.4	3.4	5.1
Japan	11.1	-2.7	1.8	12.6	-7.0	7.9	9.5	14.0	6.2	9.9	8.7	1.4	-24.2	24.8	-0.4	-0.2	1.2	8.4	7.2	5.8
Korea	18.8	14.3	13.1	17.2	-2.3	13.0	13.9	20.6	7.8	12.1	12.7	7.5	-0.3	12.7	15.1	5.1	4.3	2.8	1.7	5.9
Latvia	12.7	4.7	-6.3	14.4	9.0	5.0	4.0	13.7	23.5	7.5	13.8	2.4	-12.9	13.4	12.0	9.8	1.4	2.2	0.9	4.6
Luxembourg	11.4	11.2	14.3	12.6	5.6	2.3	2.8	10.8	5.5	12.5	7.7	7.4	-12.8	8.2	5.0	3.0	5.6	2.5	3.6	4.0
Mexico	8.5	7.5	6.5	11.0	-3.4	2.0	0.9	9.2	5.6	7.7	3.6	-1.2	-11.9	20.6	8.3	5.9	2.1	7.3	8.5	7.6
Netherlands	9.7	6.6	7.2	12.3	1.3	0.5	1.0	7.2	6.1	7.6	7.1	1.3	-8.1	8.7	4.6	3.2	2.2	4.0	3.0	5.2
New Zealand	2.9	2.0	8.3	7.7	3.3	6.9	2.4	5.2	-0.6	1.8	4.9	-1.2	1.9	3.3	2.6	1.7	1.1	2.7	3.0	3.9
Norway	7.8	0.7	2.8	3.2	4.3	-0.3	-0.1	1.0	0.5	-0.8	1.4	0.1	-4.1	0.7	-0.8	1.4	-3.0	2.7	1.8	2.2
Poland	12.5	14.3	-2.6	23.9	2.4	4.7	14.1	4.9	9.7	15.6	10.2	7.0	-6.3	12.9	7.9	4.3	5.0	5.6	6.0	7.7
Portugal	7.4	8.0	3.6	8.4	2.3	3.1	3.3	4.5	0.5	12.4	7.3	-0.3	-10.2	9.5	7.0	3.4	6.4	3.4	6.2	5.4
Russian Federation	-0.5	1.9	11.2	9.5	4.2	10.3	12.6	11.8	6.5	7.3	6.3	0.6	-4.7	7.0	0.3	1.1	4.6	-0.1	0.6	2.1
Slovak Republic	10.0	-2.6	10.1	7.5	10.6	7.0	18.4	20.9	12.9	22.9	14.6	3.0	-17.0	15.7	12.0	9.3	5.2	4.6	2.8	6.1
Slovenia	11.6	7.8	2.0	12.6	7.2	7.8	3.2	13.0	11.4	14.1	13.6	4.2	-16.6	10.1	7.0	0.3	2.6	6.3	5.2	5.5
South Africa	5.3	3.2	1.3	8.3	2.4	1.0	0.1	2.8	8.6	7.5	7.8	1.5	-17.0	7.7	4.3	0.1	4.6	2.6	4.8	5.2
Spain	14.6	8.0	8.0	10.5	3.7	1.4	3.4	4.3	1.8	4.9	8.3	-0.8	-11.0	9.4	7.4	1.2	4.3	4.2	5.4	6.1
Sweden	14.2	8.8	6.8	11.9	0.9	1.3	4.4	9.9	6.6	9.1	4.7	1.6	-14.3	11.4	6.2	1.5	-0.1	3.5	4.6	4.7
Switzerland	14.8	2.6	3.3	12.2	0.0	-2.0	-1.0	9.5	6.5	6.3	11.4	3.9	-10.0	12.8	4.9	0.8	15.3	-7.1	1.9	2.0
Turkey	19.1	12.0	-10.7	16.0	3.9	6.9	6.9	11.2	7.9	6.6	7.3	2.7	-5.0	3.4	7.9	16.3	-0.2	6.8	2.6	5.6
United Kingdom	7.8	2.9	2.9	9.4	2.0	2.7	2.8	4.8	8.4	12.4	-2.1	1.6	-8.2	6.2	5.6	0.7	1.5	0.6	3.8	3.0
United States	11.9	2.3	2.6	8.6	-5.8	-1.7	1.8	9.8	6.2	9.0	9.3	5.7	-8.8	11.9	6.9	3.3	3.0	3.2	1.7	4.9
Total OECD	11.0	5.2	4.8	11.9	0.4	2.0	2.3	8.6	5.8	8.6	6.9	2.0	-11.2	11.3	6.2	2.8	2.7	3.7	3.8	5.3

Note: Regional aggregates are calculated inclusive of intra-regional trade as the sum of volumes expressed in 2010 $.
Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933222907

Annex Table 39. **Import volumes of goods and services**

National accounts basis, percentage change from previous year

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Australia	10.5	6.8	8.4	7.6	-4.6	11.1	10.9	15.4	8.8	8.5	13.1	10.5	-8.8	15.3	10.7	6.3	-1.9	-1.8	-0.3	2.7
Austria	7.3	5.7	4.2	10.2	5.2	0.3	3.3	8.0	5.6	5.9	5.6	0.8	-11.7	10.9	6.5	0.8	-0.2	2.5	4.2	5.4
Belgium	8.3	5.0	3.3	13.7	-1.1	0.8	1.6	6.5	6.4	4.6	5.7	3.4	-9.1	9.6	7.4	1.8	1.7	3.6	2.9	5.0
Brazil	15.9	0.3	-15.2	11.9	2.6	-13.5	-0.7	9.7	8.9	17.7	18.5	16.4	-7.3	33.9	10.5	0.2	7.2	-1.0	-3.3	2.4
Canada	14.4	5.3	8.1	8.5	-4.9	1.8	4.2	8.5	7.3	5.3	5.8	0.8	-12.4	13.6	5.7	3.7	1.3	1.7	2.0	4.8
Chile	13.2	6.7	-9.9	9.9	4.5	2.0	9.6	18.3	17.3	11.4	14.3	11.2	-16.2	25.5	16.0	4.8	1.7	-7.0	1.9	4.3
China	13.4	-3.1	23.0	22.7	8.3	25.2	30.2	23.4	13.5	15.9	13.7	4.0	4.5	20.6	10.2	6.3	10.7	6.9	7.0	6.2
Colombia	6.6	-3.9	-24.2	6.7	8.7	0.3	8.2	10.3	11.9	20.0	14.0	10.5	-9.1	10.8	21.5	9.1	6.4	9.2	3.4	2.0
Czech Republic	5.8	5.5	4.3	15.4	11.2	4.7	8.6	25.6	13.0	11.9	12.8	2.8	-10.7	14.5	6.7	2.6	0.3	9.6	8.5	6.0
Denmark	9.2	7.6	2.6	13.7	2.4	6.4	-1.0	7.1	11.0	14.2	5.7	4.3	-12.4	0.9	7.1	0.9	1.5	3.8	3.1	4.4
Estonia	28.6	12.5	-5.9	27.1	12.4	13.3	14.0	16.1	16.7	20.7	13.0	-6.2	-30.6	21.2	26.5	11.8	3.3	2.7	2.2	4.9
Finland	11.9	8.5	4.3	14.9	1.4	4.3	4.1	8.1	11.2	6.7	7.4	7.9	-16.9	6.5	6.0	1.6	-1.6	-1.4	0.7	3.7
France	7.9	12.0	6.6	15.9	2.2	2.0	1.0	5.6	6.5	5.9	5.7	1.1	-9.3	8.5	6.5	0.8	1.8	3.9	5.5	4.2
Germany	9.2	8.9	8.6	11.3	1.2	-2.5	5.7	7.1	6.0	11.5	6.5	1.8	-9.6	12.6	7.3	0.4	3.2	3.4	5.4	6.0
Greece	8.5	15.1	16.8	21.3	-1.6	-3.3	5.9	6.5	1.2	13.4	13.7	2.2	-19.2	-5.5	-7.8	-9.4	-2.9	7.4	3.5	4.0
Hungary	24.1	22.6	13.3	23.1	5.8	8.7	9.5	17.3	7.8	15.5	13.9	6.0	-14.7	10.1	4.5	-3.3	5.9	10.0	5.7	5.2
Iceland	8.0	21.9	3.3	7.8	-10.0	-2.8	10.2	13.7	28.8	9.7	-2.3	-20.2	-22.4	4.3	6.9	4.7	0.3	9.9	7.6	6.7
India	8.3	30.6	-1.7	13.7	1.6	5.8	16.8	19.3	32.2	24.9	7.1	32.5	-8.2	17.8	18.3	11.7	-6.7	-2.2	3.0	6.0
Indonesia	14.7	-5.3	-40.7	25.9	4.2	-4.2	1.6	26.7	17.8	8.6	9.1	10.0	-9.3	16.6	15.0	8.0	1.9	2.2	2.5	5.9
Ireland	16.5	27.5	12.6	21.3	7.5	2.3	-1.0	8.4	8.5	7.1	8.0	-2.5	-9.1	3.0	-0.6	6.9	0.6	13.2	7.2	6.6
Israel	4.2	2.1	15.5	11.9	-5.5	-1.1	-0.9	11.8	3.4	3.2	10.9	2.3	-13.8	15.2	10.7	2.5	-0.1	2.4	4.7	5.5
Italy	10.2	8.6	4.1	11.2	1.7	0.9	1.3	4.1	3.8	8.2	4.8	-4.0	-12.7	12.1	1.2	-8.3	-2.2	1.6	2.9	3.3
Japan	1.2	-6.7	3.3	10.7	0.9	0.3	3.9	7.9	4.2	4.5	2.3	0.3	-15.7	11.1	5.9	5.3	3.1	7.4	4.9	4.6
Korea	2.5	-24.0	24.9	21.8	-3.6	15.0	10.6	12.3	7.8	12.4	11.6	3.2	-6.8	17.3	14.3	2.4	1.7	2.1	2.6	5.9
Latvia	4.5	16.8	-5.2	2.7	15.6	2.7	11.9	21.0	16.9	21.4	17.3	-10.7	-31.7	12.4	22.0	5.4	-0.2	1.6	1.7	4.6
Luxembourg	12.6	11.8	14.8	10.6	6.7	-0.1	5.1	10.6	5.3	12.2	7.3	9.4	-14.1	9.6	6.9	3.8	5.8	2.1	4.0	4.0
Mexico	18.2	14.5	14.0	20.6	-0.2	2.4	3.1	8.8	8.4	10.5	5.4	3.7	-16.7	20.2	8.2	4.6	2.9	6.3	6.4	6.8
Netherlands	11.5	8.5	9.1	10.7	2.3	0.7	1.2	5.5	5.3	8.2	6.4	1.7	-7.5	8.1	3.7	2.8	1.0	4.0	1.9	5.0
New Zealand	3.1	-0.1	12.4	-0.9	2.3	9.8	8.6	16.8	6.2	-2.4	9.3	3.3	-14.4	10.9	6.9	2.7	6.3	7.9	5.6	4.2
Norway	12.5	8.8	-1.6	2.0	1.7	1.0	1.2	9.0	7.9	9.1	10.0	3.2	-10.0	8.3	4.0	3.1	4.3	1.9	1.3	1.6
Poland	22.9	18.7	1.2	13.6	-3.8	2.6	9.6	8.1	6.3	18.1	15.8	9.4	-12.4	14.0	5.5	-0.6	1.8	8.7	7.6	8.3
Portugal	10.4	14.7	9.1	5.5	1.1	-0.2	-0.4	7.6	2.2	7.5	5.4	2.5	-9.9	7.8	-5.8	-6.3	3.9	6.4	4.7	4.8
Russian Federation	0.4	-17.4	-17.0	32.4	18.7	14.6	17.3	23.3	16.6	21.3	26.2	14.8	-30.4	25.8	20.3	8.7	3.8	-7.9	-14.1	4.2
Slovak Republic	10.2	-1.1	-3.6	6.6	18.9	5.8	8.0	21.6	15.3	19.5	9.4	3.6	-19.1	14.7	9.7	2.6	3.8	5.0	2.8	5.6
Slovenia	11.7	10.1	8.4	6.6	3.6	5.6	6.5	14.0	7.3	12.4	16.8	3.8	-18.8	6.6	5.0	-3.9	1.4	4.1	3.1	4.4
South Africa	5.4	2.0	-8.4	5.3	0.2	5.3	8.1	15.5	10.9	18.3	9.4	2.8	-17.7	10.8	10.5	6.0	1.8	-0.5	4.3	5.2
Spain	12.9	14.1	13.9	9.5	3.5	3.6	5.9	10.1	7.0	8.2	8.6	-5.6	-18.3	6.9	-0.8	-6.3	-0.5	7.6	6.2	6.5
Sweden	12.8	11.1	4.7	12.0	-1.6	-1.3	4.0	5.7	7.0	8.7	7.9	3.4	-13.9	12.3	7.4	1.1	-0.5	6.5	5.2	4.9
Switzerland	10.3	4.9	3.4	7.9	1.0	-2.3	0.4	3.9	9.8	3.2	5.8	4.9	-3.8	8.1	9.2	-2.8	13.5	-9.4	-1.2	1.8
Turkey	22.4	2.3	-3.7	21.8	-24.8	20.9	23.5	20.8	12.2	6.9	10.7	-4.1	-14.3	20.7	10.7	-0.4	9.0	-0.2	4.9	5.6
United Kingdom	9.3	8.6	7.4	9.6	4.8	5.4	2.9	7.1	6.6	9.9	-0.8	-1.8	-9.8	8.7	1.0	3.1	1.4	2.2	4.8	3.1
United States	13.5	11.7	10.1	13.0	-2.8	3.7	4.5	11.4	6.3	6.3	2.5	-2.6	-13.7	12.7	5.5	2.3	1.1	4.0	6.4	6.7
Total OECD	10.1	7.1	7.8	12.3	0.0	2.4	4.1	8.8	6.6	8.0	5.5	0.5	-12.0	11.4	5.7	1.3	1.9	3.5	4.6	5.3

Note: Regional aggregates are calculated inclusive of intra-regional trade as the sum of volumes expressed in 2010 $.
Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933222917

Annex Table 40. **Export prices of goods and services**

National accounts basis, percentage change from previous year, national currency terms

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Australia	-0.6	2.1	-4.7	12.4	5.9	-2.2	-5.4	4.1	11.9	12.6	1.0	22.2	-12.2	8.2	11.2	-9.8	-0.5	-4.0	-1.2	1.5
Austria	0.7	-0.1	0.1	1.7	0.5	0.1	0.0	1.1	2.0	2.4	1.9	2.4	-2.6	2.9	4.2	1.3	0.0	0.5	1.7	2.0
Belgium	1.1	-1.3	0.0	5.8	1.4	-0.8	-1.3	2.2	3.9	2.7	2.3	3.9	-5.2	4.6	4.1	1.3	-0.4	-1.0	-2.4	1.2
Brazil	3.1	1.1	39.8	3.1	23.0	22.1	10.8	9.0	-7.8	-0.1	-1.0	16.0	-5.8	3.4	14.4	12.2	7.7	3.6	6.2	2.1
Canada	-0.2	-0.6	1.1	6.3	1.3	-1.8	-1.6	2.1	2.8	0.2	0.8	10.6	-9.6	1.5	7.0	-0.4	1.3	3.6	-3.9	0.9
Chile	-1.1	-3.5	7.9	10.9	6.5	5.8	11.0	13.2	12.0	23.5	5.9	-4.1	-3.6	15.2	3.6	-4.2	-3.0	11.2	2.0	2.8
China	-2.2	-6.2	-5.6	-0.9	1.4	-3.2	5.0	9.0	1.9	-0.3	0.6	-0.7	-7.8	1.5	5.0	-0.2	-3.2	-0.5	-0.3	1.4
Colombia	13.8	7.0	24.7	23.7	1.8	7.1	15.7	4.1	5.0	8.8	-1.5	14.7	-2.5	6.0	19.7	-1.5	-2.1	-1.4	-1.0	1.7
Czech Republic	5.7	4.3	1.0	3.8	0.3	-4.8	0.1	2.7	-2.2	-1.3	0.3	-4.3	0.5	-1.2	0.7	3.3	1.6	4.0	0.6	1.0
Denmark	2.7	-2.1	-0.5	8.2	1.6	-1.2	-1.1	1.9	5.5	3.0	1.4	5.1	-8.6	9.6	1.2	3.6	0.8	-1.9	1.5	0.9
Estonia	13.0	2.9	0.2	8.3	5.8	3.0	0.1	1.9	3.6	5.6	6.2	6.5	-2.2	3.6	4.6	1.8	1.0	-0.2	1.1	1.8
Finland	-1.0	-1.0	-5.0	3.5	-1.3	-2.5	-1.4	-0.4	1.2	2.3	1.0	-0.2	-5.9	3.8	4.5	1.1	-0.8	-1.7	-0.1	1.2
France	1.2	-1.6	-1.6	2.6	-0.3	-1.5	-1.7	0.5	1.8	2.1	1.9	3.2	-3.8	2.3	2.9	1.4	-0.3	-0.9	0.2	0.9
Germany	0.8	-0.7	-0.7	2.7	0.7	-0.6	-1.3	-0.2	1.1	1.1	0.3	1.0	-2.6	2.3	2.8	1.6	-0.2	-0.3	0.6	0.5
Greece	3.1	5.7	1.6	7.2	2.9	2.1	1.8	1.8	2.5	3.3	2.7	3.8	-1.9	5.9	5.7	2.7	-1.8	-1.6	-2.8	-1.6
Hungary	15.5	13.1	4.8	10.1	3.0	-4.1	0.1	-1.1	-0.5	6.4	-3.9	0.8	2.9	1.8	3.4	3.2	0.3	0.9	-1.9	1.0
Iceland	2.1	5.3	0.4	4.1	21.8	-1.2	-6.4	1.7	-4.3	21.7	-0.7	35.4	14.1	8.5	7.0	1.5	-3.1	-1.2	9.6	3.9
India	-23.7	2.5	-0.1	2.3	1.8	0.3	4.2	8.0	1.9	4.2	6.6	13.2	1.1	10.6	9.1	8.2	7.5	3.9	3.5	5.0
Indonesia	17.9	160.4	13.1	9.9	12.1	-6.2	-2.7	6.2	9.6	0.2	3.4	15.8	-5.8	1.9	7.7	1.1	3.5	8.4	1.4	5.6
Ireland	1.2	3.0	2.4	7.0	4.0	-0.1	-5.1	-0.8	1.3	0.9	-0.5	-0.6	1.5	1.6	0.3	4.3	-0.3	0.3	2.3	2.1
Israel	6.4	7.3	9.7	-1.8	0.9	11.9	-1.9	0.9	4.5	1.9	-3.8	-5.9	3.4	-2.4	0.8	8.5	-5.3	-1.0	7.2	1.4
Italy	1.3	1.1	0.4	4.3	2.4	1.4	-0.1	1.1	1.9	2.2	2.4	2.9	-2.0	2.3	4.0	1.9	0.1	-0.3	0.5	1.7
Japan	1.8	1.1	-8.6	-4.1	2.4	-1.4	-3.7	-1.4	2.0	3.3	2.2	-3.9	-11.1	-1.6	-2.2	-2.0	9.5	2.7	1.0	1.3
Korea	6.3	20.6	-19.2	-2.0	3.7	-7.7	-0.9	4.9	-6.4	-5.4	1.1	25.6	-0.4	1.3	3.2	-0.6	-4.8	-5.0	1.0	2.1
Latvia	0.4	5.2	-0.6	0.5	3.1	3.0	8.0	10.0	10.1	8.3	11.7	8.3	-4.4	5.8	8.8	4.1	1.3	-1.0	0.2	1.2
Luxembourg	1.6	0.6	5.3	9.7	-3.4	-1.4	-0.3	5.6	7.9	8.6	6.0	-0.6	-3.2	8.3	5.2	4.8	2.9	2.5	1.8	1.3
Mexico	9.6	14.3	12.3	8.4	-2.3	2.6	13.2	9.0	4.1	7.5	5.1	9.5	9.5	-0.2	5.8	6.0	-1.8	1.7	0.7	1.6
Netherlands	3.2	-1.3	-1.0	5.8	0.9	-2.0	-0.8	0.9	3.0	2.9	1.5	4.4	-6.1	5.7	4.8	2.3	-0.6	-1.7	-3.1	1.0
New Zealand	-1.7	4.2	0.0	13.3	7.3	-6.9	-7.4	0.8	1.1	7.2	1.0	15.3	-8.0	3.0	5.7	-5.3	2.3	2.4	-4.0	1.1
Norway	2.0	-7.9	10.7	36.7	-2.2	-10.2	2.0	12.9	17.4	15.5	1.5	17.5	-17.0	7.5	12.8	2.9	1.9	-1.3	-4.7	2.3
Poland	13.4	11.7	7.0	0.6	2.7	4.6	6.2	8.4	-2.4	2.3	2.8	-0.7	11.6	0.7	6.8	4.1	0.3	-0.5	0.3	1.5
Portugal	3.3	1.4	0.4	5.5	0.6	0.1	-1.5	1.7	1.6	4.4	1.9	2.7	-5.0	3.3	5.0	1.7	-0.8	-0.3	-0.7	0.1
Russian Federation	11.2	39.1	128.3	41.0	-1.6	4.8	8.4	12.6	21.9	11.2	3.9	28.1	-11.9	16.6	24.8	7.2	-1.4	13.2	7.6	1.9
Slovak Republic	6.5	-5.0	-1.1	17.3	4.9	1.0	1.5	1.8	1.6	2.1	0.5	1.4	-5.1	3.0	4.0	1.2	-1.9	-3.3	-0.8	0.7
Slovenia	5.2	2.8	2.2	10.5	8.0	4.5	2.8	3.0	2.8	2.7	2.5	1.4	-1.1	2.2	4.1	1.3	-0.3	-0.3	3.2	0.4
South Africa	4.8	9.4	6.9	15.1	16.8	24.7	-8.0	2.6	6.2	15.6	13.3	26.4	0.0	4.3	12.2	5.2	7.9	5.6	1.2	3.8
Spain	3.2	0.6	0.1	6.7	1.7	0.4	-0.3	1.8	4.0	4.1	2.4	2.6	-2.7	3.0	4.5	2.1	-0.8	-1.7	1.5	0.7
Sweden	-0.2	-1.2	-1.6	2.3	2.6	-1.5	-2.0	-0.3	2.6	3.1	2.0	4.0	1.3	-0.7	-1.0	-1.0	-2.6	1.8	-0.1	1.0
Switzerland	0.5	-0.9	0.1	3.4	-0.1	-1.9	0.4	0.7	1.8	4.9	3.9	2.6	-0.4	2.3	-0.5	2.2	-5.1	-2.8	-4.4	-0.1
Turkey	87.0	60.1	52.0	42.0	89.4	25.4	10.7	13.3	-0.2	13.7	2.1	17.5	2.9	1.5	23.8	2.9	8.1	13.0	7.5	2.8
United Kingdom	-4.2	-5.0	0.6	1.6	1.1	-1.6	1.8	-0.6	3.1	1.7	-0.6	9.1	3.6	5.1	5.8	-0.4	1.5	-2.2	-1.7	0.5
United States	-1.8	-2.4	1.4	1.8	-0.6	-0.6	2.0	3.5	4.3	3.4	3.2	4.7	-5.5	4.3	6.4	0.9	0.1	0.1	-3.6	0.4
Total OECD	2.9	2.1	0.6	4.4	2.6	-0.4	0.4	2.2	2.4	3.0	1.8	4.9	-2.9	2.9	4.5	1.2	0.1	0.0	-0.5	1.1

Note: Regional aggregates are calculated inclusive of intra-regional trade. They are calculated as the geometric averages of prices weighted by 2010 GDP volumes expressed in $.
Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933222924

Annex Table 41. **Import prices of goods and services**

National accounts basis, percentage change from previous year, national currency terms

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Australia	-1.6	6.4	-4.3	7.6	5.8	-4.1	-8.5	-5.0	0.6	4.2	-4.0	7.4	-2.4	-7.5	-1.3	0.9	3.6	4.0	8.5	2.3
Austria	1.8	0.3	0.6	2.7	0.3	-0.6	-0.8	1.7	2.8	3.6	2.3	3.8	-4.6	4.7	6.1	1.8	-0.3	-0.5	1.1	1.9
Belgium	1.5	-1.8	0.9	7.6	1.3	-1.8	-1.0	2.9	4.4	3.3	2.0	6.6	-8.3	6.3	5.1	1.5	-0.5	-1.5	-4.2	1.2
Brazil	3.5	2.9	55.3	7.4	25.1	20.3	12.5	5.3	-8.2	-7.1	-2.3	12.6	-5.2	-8.8	5.8	16.9	10.1	7.5	4.5	2.0
Canada	0.7	3.5	-0.3	2.0	2.5	0.5	-6.7	-2.2	-0.7	-0.8	-2.2	6.0	-0.7	-3.3	3.4	0.7	1.3	4.9	2.4	1.1
Chile	-1.0	-0.1	4.2	8.2	9.7	3.9	3.4	-6.1	1.4	-0.5	4.0	15.5	-8.2	-1.9	3.8	0.4	0.0	12.8	2.5	3.0
China	-4.8	2.3	-5.5	7.4	-0.1	-3.5	5.2	9.5	2.2	0.5	1.7	4.9	-15.1	12.2	8.7	-2.9	-4.4	-3.2	-3.2	2.4
Colombia	14.4	22.4	23.6	19.6	10.1	6.2	12.7	-1.9	-2.8	2.8	-5.1	3.2	4.2	-5.2	5.1	-1.2	1.4	3.7	5.3	1.5
Czech Republic	5.2	-1.1	1.8	7.0	-2.5	-8.1	0.0	1.6	0.0	0.7	-0.8	-3.0	-1.5	0.7	2.3	3.9	0.5	2.4	-0.3	1.1
Denmark	2.6	-1.8	-0.2	7.5	1.7	-2.2	-1.9	1.1	3.6	3.5	1.7	3.4	-8.8	7.0	3.4	3.5	-0.6	-2.3	1.0	0.9
Estonia	8.6	2.2	0.8	5.9	1.3	-0.9	-1.6	1.1	1.7	3.1	4.1	6.3	-2.6	5.6	5.3	2.4	-0.4	-1.5	0.9	1.7
Finland	0.5	-2.8	-2.0	7.4	-2.9	-2.7	0.0	1.8	4.7	5.6	1.1	1.7	-7.1	6.0	6.1	2.1	-1.3	-1.8	-1.4	1.7
France	1.2	-2.9	-1.9	5.3	-0.5	-3.1	-1.6	1.4	3.2	3.6	0.7	3.8	-6.2	3.7	5.4	1.7	-1.3	-2.4	-2.2	0.8
Germany	2.6	-2.6	-1.5	7.3	0.6	-2.6	-2.5	-0.4	3.0	2.8	0.1	2.8	-6.9	4.8	5.3	2.1	-1.7	-1.5	-1.9	0.6
Greece	2.2	5.0	1.3	8.3	3.2	0.7	-0.1	2.2	3.0	3.5	2.2	5.6	-1.7	5.4	6.0	4.2	-2.7	-2.8	-2.9	-0.6
Hungary	13.3	12.0	5.4	12.3	2.4	-5.3	0.4	-0.9	1.3	7.8	-4.4	2.0	1.6	1.7	4.9	4.2	-0.5	0.2	-2.9	1.0
Iceland	0.0	0.2	1.1	6.9	21.7	-1.7	-2.4	3.2	-5.3	17.8	2.6	45.3	24.3	3.5	10.2	4.7	-1.2	-4.4	2.1	2.7
India	-25.8	-9.3	15.8	5.8	3.1	7.1	2.7	13.4	1.8	3.7	5.9	8.3	3.5	8.3	9.3	8.1	11.2	5.2	3.5	6.0
Indonesia	9.3	147.0	23.1	11.4	14.8	-0.8	-4.6	7.2	11.5	-5.1	7.5	28.9	-7.7	3.8	5.6	6.7	7.6	7.0	1.6	6.5
Ireland	0.9	2.5	2.4	7.6	3.4	-1.1	-4.2	-0.2	1.8	1.7	1.2	1.8	0.0	3.0	3.2	3.9	-0.2	0.6	0.8	2.8
Israel	3.0	4.3	7.4	0.8	1.8	12.1	0.5	3.7	6.7	3.1	-1.8	-2.6	-4.1	0.1	4.5	5.0	-7.3	-2.0	0.4	1.5
Italy	1.3	-1.5	0.8	10.8	1.2	-0.3	-1.7	2.0	5.3	5.4	1.3	5.1	-7.8	6.6	6.8	3.5	-1.9	-2.5	-1.0	1.1
Japan	5.5	-3.1	-8.1	0.2	2.3	-0.6	-0.9	3.0	10.1	11.2	6.5	6.2	-21.5	4.5	5.8	-0.5	11.7	3.7	-6.9	1.1
Korea	13.0	29.8	-17.1	6.8	6.4	-9.4	0.7	8.0	-2.9	-1.1	1.2	34.7	-4.1	1.1	8.1	-0.4	-6.8	-5.7	-0.9	3.2
Latvia	8.7	0.5	-3.9	6.4	1.7	5.7	5.9	7.3	11.1	9.0	6.7	10.2	-4.6	5.7	5.6	7.1	0.7	-0.3	-0.7	1.1
Luxembourg	5.2	1.6	3.0	12.3	-2.1	-1.4	-1.7	6.8	8.5	6.8	7.3	-2.0	-4.6	8.2	4.2	4.5	3.0	2.0	1.8	1.3
Mexico	7.0	13.8	5.1	0.8	-2.5	3.0	10.4	10.3	0.3	3.9	4.5	6.7	12.8	-1.3	5.9	6.9	-3.2	2.6	1.3	1.5
Netherlands	1.3	-2.5	-1.0	5.4	-0.4	-2.8	-1.1	1.7	3.0	2.9	1.8	4.6	-6.8	6.4	6.4	2.7	-1.0	-2.3	-3.4	0.8
New Zealand	-1.3	7.1	0.3	15.8	2.2	-5.9	-11.4	-4.4	0.7	9.9	-4.9	12.5	-1.4	-4.1	2.6	-1.0	-4.6	-3.3	0.1	1.2
Norway	0.3	1.2	-1.1	7.5	-0.1	-5.0	1.4	4.7	1.5	3.2	3.9	4.2	-0.3	0.8	3.3	0.1	2.5	4.2	2.4	2.5
Poland	14.4	10.8	6.9	9.3	0.2	5.5	6.7	4.6	-3.6	2.4	1.1	0.9	8.0	2.1	8.8	5.5	-1.3	-2.5	-2.0	1.2
Portugal	2.6	-1.5	-0.7	8.4	0.3	-1.6	-1.5	2.1	2.9	3.8	1.4	5.1	-9.3	4.7	7.1	1.1	-1.9	-2.2	-1.5	1.0
Russian Federation	19.8	48.1	135.6	5.1	3.9	6.6	1.6	-2.9	5.6	0.3	0.4	10.8	25.5	-2.2	3.3	4.8	4.4	18.0	19.9	-0.5
Slovak Republic	3.4	-1.9	0.6	13.4	6.1	1.0	1.9	2.1	1.7	3.6	1.6	3.0	-4.1	3.6	5.3	2.5	-1.4	-3.4	-0.8	0.7
Slovenia	4.8	1.8	1.9	14.0	6.2	2.5	2.1	4.2	5.0	3.3	1.5	2.7	-4.4	6.5	5.6	2.3	-1.2	-1.0	2.6	1.2
South Africa	6.4	11.0	11.0	17.9	15.5	21.6	-11.7	0.7	4.4	10.2	10.0	25.1	-5.1	-1.6	7.6	6.6	14.1	7.6	-0.1	3.7
Spain	3.5	-2.1	0.0	10.8	-0.1	-2.4	-1.7	2.2	3.1	3.9	1.7	5.1	-7.4	5.5	8.5	3.7	-2.2	-1.3	-1.3	0.4
Sweden	0.4	-1.0	1.1	4.1	4.0	0.1	-2.1	0.9	4.6	3.4	0.5	4.4	0.4	-0.1	-0.2	-1.1	-3.1	2.0	-1.1	1.0
Switzerland	2.5	-1.9	-0.4	5.4	-0.2	-4.6	-1.1	1.9	3.5	6.2	4.9	3.5	-2.7	2.5	0.0	2.8	-5.1	-2.7	-5.7	-0.4
Turkey	74.1	62.5	47.9	56.7	93.4	22.1	7.1	10.8	0.2	19.0	0.1	21.3	0.8	4.7	30.2	5.6	3.8	11.7	3.8	1.9
United Kingdom	-6.4	-5.5	-0.5	2.6	-0.2	-2.6	0.4	-0.8	3.5	2.4	0.1	12.9	2.0	3.9	7.0	-0.8	1.2	-3.6	-2.2	0.3
United States	-3.5	-5.4	1.6	4.4	-2.5	-1.2	3.4	4.7	6.0	4.1	3.4	10.5	-10.4	5.8	7.7	0.5	-0.9	-0.2	-6.7	-0.1
Total OECD	2.7	1.4	0.5	6.4	2.2	-1.2	0.2	2.6	3.4	4.0	1.8	8.0	-5.6	3.6	6.7	1.8	-0.5	-0.2	-2.4	0.9

Note: Regional aggregates are calculated inclusive of intra-regional trade. They are calculated as the geometric averages of prices weighted by 2010 GDP volumes expressed in $.
Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933222932

Annex Table 42. **Competitive positions: relative consumer prices**

Indices, 2010 = 100

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Australia	71.6	71.6	68.2	65.8	69.6	78.7	85.1	87.6	87.4	92.9	91.0	88.2	100.0	106.9	108.3	103.7	99.0	92.3	92.9
Austria	102.0	101.2	98.1	98.3	99.0	102.3	103.4	102.5	101.7	102.1	102.3	103.1	100.0	100.4	98.9	100.8	102.6	99.9	99.7
Belgium	96.8	95.8	91.7	92.5	94.1	99.0	100.9	100.7	100.2	100.9	103.5	103.6	100.0	100.8	98.8	100.2	100.5	95.7	95.0
Brazil	95.4	63.9	69.4	58.8	55.8	53.7	55.9	69.2	77.5	83.6	87.9	87.9	100.0	104.8	94.8	89.9	88.7	79.2	80.0
Chile	76.1	75.3	76.1	74.5	73.9	81.7	85.8	90.9	95.9	98.8	96.0	92.1	100.0	101.4	101.1	97.6	92.1	88.2	89.0
Chile	102.6	96.5	95.5	86.7	89.1	83.1	88.7	94.3	98.7	97.1	98.5	94.9	100.0	101.1	103.7	103.1	94.4	96.4	97.7
China	97.2	92.3	92.8	97.8	95.8	89.4	86.7	85.7	87.1	90.1	97.9	102.0	100.0	102.3	108.0	114.7	117.6	126.7	125.5
Colombia	91.9	83.2	76.1	75.2	73.7	63.4	69.1	78.0	77.0	86.2	91.6	90.4	100.0	99.9	106.0	102.4	99.0	90.0	91.6
Czech Republic	66.5	66.6	67.2	71.5	79.6	78.1	78.9	83.3	87.5	89.9	102.9	99.1	100.0	102.0	98.7	96.6	91.5	88.7	88.0
Denmark	95.0	95.5	91.5	92.7	94.9	100.1	101.0	99.7	99.3	99.9	101.5	104.5	100.0	99.4	96.8	97.7	98.9	95.1	94.3
Estonia	79.1	85.6	82.3	83.9	86.1	89.3	90.8	91.0	91.9	95.6	101.7	103.7	100.0	101.1	100.0	102.8	104.8	102.2	100.4
Finland	105.1	106.0	100.8	101.6	103.0	107.8	107.6	104.2	102.6	103.6	105.1	106.7	100.0	99.6	96.9	98.6	101.3	96.7	94.6
France	103.2	101.3	96.0	95.8	97.6	103.0	104.8	103.4	102.7	103.1	103.8	104.1	100.0	99.2	96.3	97.4	97.8	93.1	92.2
Germany	107.7	105.8	99.1	99.1	100.3	105.3	106.7	104.5	103.5	104.8	104.9	105.7	100.0	98.9	95.8	97.8	99.0	94.0	93.4
Greece	89.8	90.8	84.7	85.3	88.0	93.6	95.8	95.9	96.6	98.0	99.8	101.4	100.0	100.6	96.8	95.8	95.3	88.8	86.8
Israel	69.8	73.0	73.3	79.1	87.3	89.5	95.3	96.9	92.1	102.5	105.2	99.2	100.0	99.7	96.9	95.9	92.4	89.4	89.9
Iceland	125.4	128.9	133.1	117.3	125.0	131.8	135.3	153.0	142.8	148.4	116.4	95.0	100.0	101.1	101.5	105.4	113.3	114.5	115.2
India	86.4	86.1	88.0	88.8	88.5	87.0	86.0	88.1	87.2	93.5	88.9	90.2	100.0	99.2	94.7	93.9	96.6	103.4	104.2
Indonesia	48.8	71.8	69.8	66.8	81.1	87.0	83.0	81.7	94.8	94.3	90.4	89.5	100.0	99.8	96.0	91.9	85.7	86.5	87.1
Ireland	86.3	84.6	81.9	84.8	89.6	98.3	100.9	100.5	102.1	107.2	112.1	107.9	100.0	100.1	95.7	97.3	96.9	90.1	90.0
Israel	111.2	107.5	114.6	113.7	102.9	96.8	90.3	87.7	87.2	87.7	97.7	95.5	100.0	101.0	96.1	102.2	103.4	100.8	100.1
Italy	97.7	97.4	93.0	94.0	96.5	102.5	104.3	102.8	102.3	102.8	103.6	104.9	100.0	99.9	97.9	99.5	100.1	94.8	93.4
Japan	106.0	118.5	125.4	112.5	105.1	105.7	107.0	100.6	90.8	83.2	89.8	100.5	100.0	101.2	99.8	80.2	75.9	70.0	68.9
Korea	86.9	99.9	108.4	102.0	107.0	108.2	109.8	122.7	131.1	129.1	105.0	93.1	100.0	100.0	99.7	103.8	109.9	111.9	111.2
Latvia	79.0	93.2	98.0	94.3	91.3	87.0	87.5	85.1	87.4	93.2	102.9	110.5	100.0	100.5	98.6	97.7	101.6	99.9	97.2
Luxembourg	95.0	94.3	92.1	92.9	94.3	98.0	99.4	99.1	99.7	100.6	101.6	102.3	100.0	100.5	99.0	100.5	100.8	97.4	97.2
Mexico	96.6	105.8	115.2	123.2	123.5	109.8	105.1	108.9	108.9	107.6	105.5	92.8	100.0	100.1	97.2	102.7	101.9	94.6	94.8
Netherlands	97.6	97.5	92.9	95.5	98.6	104.1	105.0	103.5	102.1	102.5	103.0	104.8	100.0	99.4	96.9	99.8	101.0	96.7	95.8
New Zealand	88.1	84.0	76.0	75.0	82.3	94.2	101.2	106.7	99.0	106.0	98.9	92.6	100.0	103.8	106.6	109.4	113.0	107.7	105.8
Norway	89.3	90.0	88.4	91.1	98.8	98.2	94.0	97.3	96.8	96.8	97.5	95.5	100.0	100.7	100.3	98.6	93.9	90.0	91.3
Poland	85.7	85.0	92.9	103.9	99.5	88.8	88.0	97.7	99.3	102.5	111.7	94.9	100.0	98.2	95.7	96.0	97.1	94.6	93.6
Portugal	95.0	95.3	92.9	95.3	97.9	102.1	103.2	102.3	102.8	103.5	103.6	102.9	100.0	100.8	99.5	99.6	99.3	96.1	95.5
Russian Federation	74.6	48.4	54.3	64.5	66.2	67.2	72.4	80.3	88.6	92.9	99.3	91.1	100.0	104.1	105.8	107.6	97.1	90.0	99.7
Slovak Republic	54.1	54.7	59.6	60.0	61.2	69.4	76.1	77.7	81.6	90.0	97.5	104.7	100.0	100.8	100.5	101.8	102.7	99.4	98.6
Slovenia	95.8	96.6	94.0	93.8	95.8	99.3	99.5	98.4	98.4	99.9	102.2	103.7	100.0	99.0	97.1	98.8	99.4	94.5	92.4
South Africa	106.3	100.0	97.1	85.5	74.1	97.1	103.8	104.0	98.5	91.6	80.0	87.3	100.0	98.2	92.3	81.8	77.0	77.7	79.7
Spain	88.7	88.8	86.5	88.3	91.0	95.9	98.0	98.5	99.8	101.3	103.4	103.4	100.0	100.5	98.2	99.9	99.8	93.8	92.7
Sweden	114.7	112.9	110.4	101.1	104.1	110.8	111.3	106.4	105.7	106.9	104.5	94.5	100.0	105.7	105.3	106.3	101.2	94.3	93.8
Switzerland	96.3	95.7	92.7	94.8	98.5	99.0	98.1	95.9	93.1	88.9	92.4	96.3	100.0	109.7	105.4	103.7	105.1	113.7	112.5
Turkey	70.2	74.7	82.9	67.4	73.7	78.2	80.9	89.6	88.8	96.1	97.0	91.3	100.0	88.4	91.7	90.3	86.1	85.7	86.3
United Kingdom	129.4	129.6	130.4	127.0	127.4	121.6	126.3	123.9	124.4	126.0	109.7	99.5	100.0	100.6	105.1	103.7	111.3	116.8	117.2
United States	114.2	113.4	117.5	124.1	124.1	116.7	111.7	109.9	109.1	104.2	100.3	104.8	100.0	95.4	97.6	97.9	100.2	107.9	107.1
Euro area	100.6	98.4	88.5	89.8	93.6	104.5	107.9	105.0	104.0	105.8	107.8	109.6	100.0	99.1	94.2	97.3	98.8	90.0	88.4

Note . Competitiveness-weighted relative consumer prices in dollar terms. Competitiveness weights take into account the structure of competition in both export and import markets of the goods sector of 51 countries. An increase in the index indicates a real effective appreciation and a corresponding deterioration of the competitive position. For details on the method of calculation, see Sources & Methods of the *OECD Economic Outlook (http://www.oecd.org/eco/sources-and-methods.htm)*.

Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933222940

Annex Table 43. **Competitive positions: relative unit labour costs**

Indices, 2010 = 100

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Australia	65.4	66.6	62.8	58.9	61.6	70.4	77.7	81.1	82.3	90.7	89.5	84.5	100.0	110.0	111.3	105.2	98.8	91.4	91.7
Austria	106.1	105.4	100.0	98.6	97.5	101.2	101.3	100.1	100.3	100.5	100.9	102.6	100.0	99.1	98.0	100.6	102.7	99.0	97.5
Belgium	96.9	96.5	91.1	93.3	95.3	100.1	100.2	99.3	100.0	101.3	103.5	104.4	100.0	101.5	99.9	102.4	102.7	97.1	96.0
Brazil	117.8	71.8	73.8	61.9	58.1	53.9	56.3	70.0	77.0	82.1	88.3	90.4	100.0	108.9	101.2	95.8	95.2	83.5	85.3
Canada	69.8	68.6	69.6	67.7	67.1	74.8	79.7	85.4	92.3	96.1	94.7	91.8	100.0	101.8	102.7	100.7	94.4	89.5	90.5
Chile	86.8	84.5	82.1	74.5	79.3	74.3	78.3	82.3	85.9	85.6	89.5	91.3	100.0	104.2	107.6	110.9	101.6	104.5	106.5
China	64.7	67.4	71.1	79.4	82.8	79.4	78.5	78.9	80.9	83.8	92.6	98.6	100.0	102.5	110.2	118.8	123.9	135.7	137.4
Colombia	88.3	80.5	72.7	71.8	71.6	60.7	65.8	74.5	74.3	83.0	87.4	87.6	100.0	99.0	107.7	107.0	106.2	97.2	101.4
Czech Republic	66.0	66.8	66.2	70.7	81.7	81.8	84.5	88.7	92.1	94.9	105.7	99.4	100.0	101.6	97.6	94.9	90.3	87.6	87.7
Denmark	89.8	89.9	83.9	86.2	88.8	94.1	94.9	94.8	95.1	98.9	102.1	105.5	100.0	97.8	94.2	96.0	98.0	93.5	92.0
Estonia	70.2	78.8	73.6	73.9	75.4	80.6	82.9	83.5	87.3	96.8	108.2	109.9	100.0	95.5	92.5	97.7	105.9	108.4	107.5
Finland	103.8	106.7	98.5	99.0	99.7	104.1	104.4	103.2	100.9	98.7	100.7	107.4	100.0	98.7	97.2	99.1	101.0	97.5	95.1
France	98.3	97.4	92.1	92.4	95.0	100.5	101.8	101.2	101.2	101.8	102.1	102.6	100.0	99.2	96.4	97.5	99.0	94.4	94.2
Germany	121.2	120.2	111.9	108.4	108.3	113.8	113.9	108.8	103.9	101.6	101.3	105.9	100.0	98.6	96.6	100.0	102.6	99.4	99.2
Israel	78.4	82.7	75.8	76.5	84.6	88.7	91.2	93.7	92.8	95.3	98.1	102.7	100.0	98.1	89.9	83.7	84.9	81.1	78.9
Hungary	71.0	72.1	74.7	82.9	94.7	99.7	105.3	107.6	101.7	112.0	112.8	102.0	100.0	98.8	93.8	93.0	92.3	91.2	91.4
Iceland	137.9	147.5	153.3	134.9	146.0	155.4	157.5	182.3	180.3	183.1	135.5	91.3	100.0	103.5	104.2	107.8	117.4	123.9	125.4
India	131.2	126.9	131.6	125.8	121.2	115.8	111.7	111.7	107.8	109.2	98.2	93.9	100.0	96.8	84.9	76.9	74.0	75.5	73.2
Indonesia	49.8	75.7	75.4	85.3	100.8	105.5	101.1	97.9	112.5	107.3	98.6	92.6	100.0	95.2	88.9	81.4	72.4	69.5	68.1
Ireland	83.5	82.6	78.3	81.6	83.6	94.1	98.9	102.2	104.6	109.1	117.2	112.2	100.0	96.2	90.8	94.9	95.2	89.7	90.3
Israel	120.3	117.5	125.8	128.7	111.5	102.0	94.1	92.0	92.6	93.7	102.5	95.0	100.0	101.7	97.8	104.8	107.6	106.3	106.8
Italy	89.6	89.9	84.2	85.5	89.3	96.5	98.9	99.3	99.9	100.7	102.2	105.1	100.0	99.0	95.5	96.7	98.5	93.9	92.1
Japan	124.8	139.1	144.7	126.4	114.9	111.8	110.0	103.0	92.2	82.6	90.1	102.2	100.0	103.5	100.5	80.6	76.2	71.3	71.0
Korea	92.0	101.8	108.3	100.9	105.8	110.3	112.8	127.5	134.8	132.8	106.2	93.1	100.0	99.2	99.3	105.3	113.4	116.2	114.8
Latvia	77.8	98.3	98.8	91.1	84.6	82.2	82.6	88.4	98.0	119.5	134.4	118.4	100.0	96.1	93.2	98.2	106.1	107.3	104.4
Luxembourg	83.0	82.1	80.3	84.1	86.7	90.1	91.6	91.8	93.6	95.3	98.8	103.8	100.0	101.0	100.6	103.9	105.1	101.5	101.6
Mexico	80.2	90.3	102.2	113.5	118.0	107.1	102.4	107.4	107.8	106.5	107.0	94.4	100.0	100.5	97.4	102.7	99.9	90.0	88.5
Netherlands	96.0	97.3	94.1	95.8	100.5	106.9	107.3	103.5	101.2	101.9	102.9	105.6	100.0	99.0	97.1	98.6	98.8	94.0	92.2
New Zealand	80.6	76.3	68.2	68.4	74.5	86.7	95.1	102.4	96.0	104.7	100.2	91.9	100.0	102.5	105.6	110.4	116.5	113.1	111.9
Norway	69.8	72.0	70.0	72.3	79.9	79.2	76.8	81.4	84.9	90.9	96.1	93.5	100.0	106.2	108.8	110.0	104.8	100.2	101.8
Poland	101.1	99.5	102.5	114.7	104.3	90.8	86.0	96.2	98.6	102.9	116.5	93.7	100.0	96.4	92.8	93.3	92.7	92.3	92.3
Portugal	93.3	94.4	93.7	95.2	97.8	102.3	103.0	104.0	102.9	102.4	102.0	102.4	100.0	97.2	90.9	94.0	93.4	89.2	88.2
Russian Federation	55.3	27.4	35.5	42.9	47.8	49.2	56.9	63.8	75.7	87.3	97.6	88.5	100.0	112.4	119.0	123.3	111.1	94.8	106.6
Slovak Republic	72.3	69.8	74.2	71.3	72.2	77.3	79.7	82.8	85.2	91.3	97.0	104.8	100.0	100.1	97.7	98.1	101.7	99.5	98.4
Slovenia	94.3	94.2	91.8	92.6	92.6	95.6	96.8	95.8	95.4	96.2	98.5	104.1	100.0	97.4	93.3	93.1	91.1	86.8	84.9
South Africa	86.1	82.3	79.8	68.5	58.3	77.7	88.8	91.4	88.9	84.9	74.4	82.1	100.0	100.7	95.2	86.2	81.4	84.0	87.4
Spain	83.7	84.3	82.0	83.4	86.4	91.8	94.9	96.3	98.7	102.3	105.8	104.8	100.0	97.6	89.7	89.0	89.1	83.9	81.8
Sweden	105.2	105.1	106.8	99.8	101.7	107.6	108.0	103.5	101.5	104.1	103.0	96.1	100.0	106.8	109.2	111.8	108.3	101.9	101.4
Switzerland	93.2	93.0	89.2	94.1	99.6	100.1	97.3	94.7	91.3	87.6	90.6	96.8	100.0	112.6	110.6	109.9	111.3	121.9	121.5
Turkey	89.2	115.7	124.2	92.3	92.9	86.6	85.7	96.4	90.7	94.1	98.7	91.0	100.0	86.5	90.8	92.6	81.9	76.5	72.5
Euro area	102.7	102.2	90.4	89.9	94.0	105.8	108.2	104.9	102.4	102.9	105.1	110.0	100.0	97.6	91.6	94.7	97.5	90.0	88.1

Note: Competitiveness-weighted relative unit labour costs for the overall economy in dollar terms. Competitiveness weights take into account the structure of competition in both export and import markets of the goods sector of 51 countries. An increase in the index indicates a real effective appreciation and a corresponding deterioration of the competitive position. For details on the method of calculation, see Sources & Methods of the *OECD Economic Outlook (http://www.oecd.org/eco/sources-and-methods.htm)*.

Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933222957

Annex Table 44. **Export performance for total goods and services**

Percentage change from previous year

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Australia	-1.4	-2.0	1.9	-5.7	-10.5	-8.7	-5.6	-6.0	-4.4	-1.1	12.0	-8.6	-8.2	1.3	1.8	2.3	0.9	0.7
Austria	0.5	1.4	3.7	2.6	-4.7	-0.6	-1.1	-2.7	-0.9	-0.8	-3.9	0.7	-0.2	0.6	-1.8	-0.9	-0.6	0.7
Belgium	-1.7	0.2	-1.5	1.5	-2.4	-1.8	-2.2	-3.9	-1.2	-0.8	1.4	-0.6	0.5	0.2	0.6	0.6	-0.8	0.3
Canada	1.6	-3.4	-1.1	-2.5	-6.3	-5.2	-4.3	-5.8	-2.4	-3.4	-0.4	-5.2	-1.2	-0.1	0.2	1.6	-2.3	0.6
Chile	0.9	-7.2	6.2	-1.9	-1.6	1.4	-5.2	-4.5	-1.4	-4.4	4.4	-11.5	-2.7	-3.4	-1.1	-3.1	-1.2	0.7
Czech Republic	-0.6	3.6	6.5	-0.5	3.5	18.3	10.0	3.3	2.7	0.9	3.0	2.4	2.3	3.1	-2.3	5.4	3.9	0.7
Denmark	5.4	1.0	2.2	2.0	-4.9	-5.6	0.6	0.2	-3.6	0.8	2.4	-8.4	1.1	-1.8	-1.4	-1.1	-1.0	0.0
Estonia	-1.8	13.5	3.6	-0.2	4.3	6.4	9.1	-1.3	1.6	-3.6	-4.4	11.4	14.3	2.9	1.1	1.4	0.8	-0.1
Finland	6.7	3.1	-0.2	0.6	-6.8	-1.5	-1.6	-0.6	-0.2	2.8	-7.8	-6.0	-5.8	-1.8	-3.3	-2.7	-1.2	-1.1
France	-1.0	1.3	1.3	-0.4	-5.8	-4.4	-3.6	-3.3	-4.9	-2.5	0.2	-2.1	1.3	1.2	-0.9	-0.6	1.0	0.3
Germany	-0.2	1.8	4.1	1.2	-2.8	0.7	-0.9	3.2	1.5	-1.5	-3.3	2.6	1.7	1.8	-1.0	0.9	0.3	0.3
Greece	20.6	12.0	-3.0	-10.5	-6.3	7.1	-3.0	-4.0	-0.1	-0.8	-7.5	-5.6	-5.6	-1.4	-1.2	6.3	-1.3	2.4
Hungary	6.5	12.2	5.8	3.7	0.8	7.5	4.8	8.0	6.9	3.7	1.1	-0.3	-0.4	-3.0	3.3	5.7	2.6	0.3
Iceland	-3.3	-6.1	4.5	1.5	-2.4	0.3	0.3	-12.8	16.1	1.0	21.2	-7.3	-1.5	1.6	4.5	0.0	0.8	-1.5
Ireland	7.9	7.2	8.8	2.1	-3.1	-1.2	-2.1	-2.4	4.1	-1.3	8.0	-4.3	0.2	3.0	-1.2	9.4	1.9	1.3
Israel	7.2	9.3	-10.3	-6.1	1.6	5.2	-3.0	-3.3	4.0	4.0	-0.1	1.1	-0.6	-2.0	-1.0	-1.5	-0.8	-0.7
Italy	-6.5	0.6	0.6	-4.8	-6.5	-3.9	-3.5	-0.9	-3.1	-6.5	-7.5	0.7	-0.4	0.0	-2.3	-0.3	-0.3	0.1
Japan	-4.8	-2.4	-6.1	0.5	-0.2	-0.5	-2.6	-0.1	-0.1	-2.2	-17.3	7.8	-7.7	-4.1	-3.3	4.9	2.6	0.0
Korea	8.0	2.5	-3.1	6.0	3.2	5.1	-1.8	1.2	2.8	2.6	8.7	-2.4	6.6	0.3	-0.8	-1.2	-2.8	0.3
Luxembourg	7.8	0.1	4.0	1.0	-0.7	3.1	-1.4	3.3	1.1	5.5	-2.6	-2.0	-0.8	2.2	3.0	-0.3	-0.4	-0.8
Mexico	-2.1	-1.3	-1.1	-1.2	-3.7	-2.0	-1.0	0.8	-0.1	0.0	1.4	6.8	2.1	3.3	0.5	3.4	2.6	1.2
Netherlands	1.0	0.0	-0.1	-1.0	-3.2	-1.2	-0.9	-1.6	0.0	-0.8	3.4	-2.0	-1.4	2.0	-0.2	0.7	-1.2	0.1
New Zealand	2.9	-4.0	3.7	0.2	-5.7	-7.3	-8.8	-7.1	-4.2	-6.6	12.3	-9.2	-5.2	-3.3	-1.2	0.3	-0.3	-0.8
Norway	-3.7	-7.7	2.3	-3.0	-3.6	-6.4	-6.2	-9.3	-3.3	-0.9	7.5	-8.6	-5.3	-0.6	-4.7	-0.7	-2.4	-2.3
Poland	-7.7	10.6	-0.4	2.8	8.6	-4.3	1.9	4.5	1.8	4.4	6.9	1.3	1.0	2.9	2.5	2.4	2.3	2.5
Portugal	-3.9	-2.4	-0.5	0.6	-1.3	-4.1	-6.5	3.3	-0.8	-0.8	2.6	0.5	2.8	3.4	4.4	-0.9	1.5	0.2
Slovak Republic	4.2	-4.7	7.6	4.9	12.2	9.4	4.9	11.0	5.0	0.1	-5.6	3.5	5.3	8.7	3.0	0.2	-1.7	0.6
Slovenia	-2.2	0.9	4.0	5.7	-1.9	3.4	3.7	3.3	4.0	0.5	-4.8	-1.1	0.0	-0.7	0.4	3.4	1.6	0.2
Spain	2.4	-1.2	2.1	-0.3	-0.2	-3.7	-4.7	-3.6	0.8	-3.4	-0.5	-0.9	2.1	0.4	1.7	1.1	1.3	1.3
Sweden	2.5	0.7	-0.6	-1.6	0.3	0.6	-1.6	-0.8	-2.7	-1.5	-3.2	1.4	0.0	-0.8	-2.5	0.8	1.2	0.1
Switzerland	-2.9	-0.2	-1.1	-4.3	-6.0	-0.1	-0.7	-2.9	3.9	1.8	1.1	0.7	-1.2	-1.0	12.5	-10.2	-2.3	-3.0
Turkey	-13.9	4.7	-0.2	3.6	1.3	0.8	-1.2	-3.4	-4.0	-3.0	6.2	-4.8	1.5	12.1	-3.2	3.9	-0.3	0.9
United Kingdom	-3.7	-3.4	0.5	0.5	-1.1	-4.1	0.6	3.5	-9.2	-0.4	2.6	-3.4	0.0	-1.8	-1.0	-3.3	-0.6	-2.2
United States	-3.0	-3.5	-5.5	-4.7	-4.0	-0.9	-2.1	-0.1	0.9	1.4	2.0	-2.1	-0.6	-0.7	-0.4	0.1	-1.9	-0.2
Total OECD	-1.2	-0.6	-0.5	-1.1	-3.2	-1.6	-2.0	-0.7	-0.8	-0.8	-0.5	-0.9	-0.4	0.2	-0.3	0.4	-0.3	0.0
China	7.6	12.8	6.3	21.5	19.2	11.3	14.3	13.9	11.5	4.6	2.2	12.6	1.9	1.7	5.9	2.9	2.3	0.0
Other industrialised Asia[1]	0.5	2.9	-2.9	2.8	1.5	2.3	2.5	1.7	-0.5	1.0	0.9	1.7	0.3	-1.1	0.5	-0.5	0.1	1.0
Russia	5.9	-2.1	2.9	6.5	6.3	1.7	-1.4	-2.2	-2.5	-2.9	6.6	-3.6	-6.1	-1.2	1.7	-3.1	-3.2	-3.0
Brazil	3.1	2.8	7.9	6.7	1.6	-0.1	0.7	-5.2	-4.6	-5.2	1.6	-2.4	-3.7	-3.2	-1.7	-2.8	-9.3	0.7
Other oil producers	-9.9	-7.4	0.8	-7.5	5.3	-2.6	-1.7	-5.9	-4.3	-1.0	5.0	-8.6	-3.7	0.8	-0.7	-3.2	-2.7	-1.3
Rest of the world	-0.1	-3.0	2.5	-0.1	0.0	-1.1	-3.1	-3.7	-2.7	-1.1	5.0	-4.4	-1.2	-0.9	1.3	-0.2	0.3	0.7

Note: Regional aggregates are calculated inclusive of intra-regional trade. Export performance is measured as actual growth in exports relative to the growth of the country's export market. For more details, see Sources & Methods of the *OECD Economic Outlook (http://www.oecd.org/eco/sources-and-methods.htm)*.

1. Chinese Taipei; Hong Kong, China; Malaysia; Philippines; Singapore; Vietnam; Thailand; India and Indonesia.

Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933222966

Annex Table 45. **Shares in world exports and imports**

Percentage, value of goods and services, national accounts basis

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
A. Exports																	
Canada	4.2	4.1	3.8	3.6	3.4	3.4	3.2	2.9	2.7	2.5	2.5	2.5	2.5	2.4	2.4	2.3	2.3
France	4.9	5.1	5.1	5.1	4.9	4.5	4.3	4.2	4.1	4.1	3.7	3.6	3.4	3.5	3.5	3.3	3.3
Germany	7.7	8.2	8.5	8.9	8.9	8.4	8.4	8.7	8.3	8.2	7.7	7.6	7.3	7.4	7.5	7.1	7.1
Italy	3.7	3.9	3.9	4.0	3.8	3.6	3.5	3.5	3.3	3.1	2.8	2.8	2.6	2.7	2.7	2.5	2.5
Japan	6.5	5.7	5.6	5.5	5.5	5.1	4.8	4.5	4.4	4.1	4.5	4.1	3.9	3.4	3.5	3.6	3.6
United Kingdom	5.2	5.3	5.3	5.2	5.0	4.9	4.9	4.4	4.0	4.0	3.7	3.6	3.5	3.5	3.6	3.7	3.6
United States	14.0	13.5	12.6	11.2	10.5	10.2	10.0	9.7	9.4	10.1	9.9	9.5	9.8	9.8	10.0	10.5	10.3
Other OECD countries	26.7	27.3	27.6	28.0	28.1	27.5	27.1	27.6	27.6	28.0	26.9	26.8	26.2	26.5	26.6	25.7	25.7
Total OECD	72.9	73.1	72.4	71.5	70.1	67.6	66.2	65.6	63.8	64.1	61.7	60.4	59.2	59.2	59.8	58.7	58.3
China	3.6	3.9	4.6	5.2	5.8	6.5	7.2	7.8	8.1	8.5	9.3	9.4	10.0	10.5	10.9	12.2	12.2
Other industrialised Asia	12.5	11.9	12.0	11.6	11.6	11.7	11.8	11.6	11.4	12.1	13.0	12.9	13.1	13.0	13.1	14.3	14.5
Brazil	0.9	0.9	0.9	0.9	1.0	1.1	1.1	1.1	1.2	1.2	1.3	1.4	1.3	1.2	1.2	1.0	1.0
Russia	1.5	1.5	1.5	1.6	1.8	2.1	2.3	2.3	2.7	2.2	2.4	2.6	2.6	2.6	2.4	2.0	2.1
Other oil producers	4.6	4.3	4.3	4.6	5.1	6.3	6.7	6.7	7.7	6.6	6.9	7.8	8.2	7.9	7.3	6.2	6.1
Rest of the world	4.0	4.2	4.1	4.3	4.3	4.4	4.5	4.6	4.9	5.1	5.1	5.2	5.2	5.1	5.0	5.4	5.6
Total of non-OECD countries	27.1	26.9	27.6	28.5	29.9	32.4	33.8	34.4	36.2	35.9	38.3	39.6	40.8	40.8	40.2	41.3	41.7
B. Imports																	
Canada	3.7	3.5	3.4	3.2	3.0	3.1	3.0	2.8	2.6	2.7	2.7	2.6	2.7	2.6	2.6	2.5	2.4
France	4.7	4.8	4.8	4.9	4.8	4.7	4.5	4.5	4.4	4.5	4.0	4.0	3.8	3.8	3.8	3.5	3.4
Germany	7.6	7.8	7.4	7.9	7.7	7.4	7.5	7.5	7.3	7.3	6.9	6.9	6.5	6.6	6.6	6.1	6.1
Italy	3.6	3.7	3.8	3.9	3.8	3.6	3.7	3.7	3.4	3.3	3.1	3.0	2.6	2.5	2.5	2.2	2.2
Japan	5.7	5.4	5.0	4.8	4.7	4.7	4.5	4.2	4.4	4.0	4.2	4.4	4.5	4.2	4.2	3.8	3.8
United Kingdom	5.6	5.7	5.9	5.7	5.6	5.4	5.4	5.0	4.5	4.4	4.1	3.9	3.9	3.8	3.9	4.0	3.9
United States	18.8	18.3	18.0	16.8	16.2	16.1	15.6	14.2	13.3	12.9	12.9	12.4	12.6	12.3	12.6	13.3	13.2
Other OECD countries	25.8	25.9	26.3	27.0	27.1	26.9	26.8	27.6	27.6	27.0	26.1	26.2	25.3	25.3	25.2	24.0	23.9
Total OECD	75.6	75.2	74.7	74.2	72.9	71.8	70.9	69.4	67.5	66.0	64.0	63.3	61.8	61.1	61.5	59.4	59.0
China	3.2	3.6	4.1	4.9	5.5	5.6	5.9	6.2	6.4	7.2	8.3	8.8	9.2	9.7	9.9	10.8	10.9
Other industrialised Asia	11.7	11.0	11.0	10.7	11.0	11.2	11.2	11.0	11.3	11.6	12.8	12.8	13.2	13.1	12.8	13.7	13.8
Brazil	1.0	1.1	0.9	0.8	0.8	0.8	0.9	1.0	1.2	1.2	1.4	1.5	1.5	1.5	1.5	1.2	1.2
Russia	0.8	1.0	1.1	1.1	1.2	1.3	1.4	1.7	1.9	1.6	1.8	1.9	2.0	2.1	1.9	1.5	1.5
Other oil producers	2.8	3.1	3.3	3.3	3.5	3.8	4.1	4.6	5.1	5.8	5.3	5.1	5.5	5.6	5.8	6.4	6.3
Rest of the world	4.6	4.7	4.6	4.7	4.9	5.1	5.3	5.7	6.2	6.2	6.1	6.3	6.4	6.4	6.2	6.6	6.8
Total of non-OECD countries	24.4	24.8	25.3	25.8	27.1	28.2	29.1	30.6	32.5	34.0	36.0	36.7	38.2	38.9	38.5	40.6	41.0

Note: Regional aggregates are calculated inclusive of intra-regional trade.
Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933222975

Annex Table 46. **Geographical structure of world trade growth**

Average of export and import volumes

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
A. Trade growth	Percentage change from previous year																
OECD America[1]	11.0	-3.6	1.5	2.8	9.9	6.1	6.7	4.9	0.5	-12.0	12.8	6.3	3.1	2.0	3.8	4.4	6.1
OECD Europe	12.4	2.5	1.7	2.5	7.5	6.4	9.0	6.3	1.1	-11.3	9.8	5.6	1.3	2.4	3.2	4.2	4.9
OECD Asia & Pacific[2]	12.7	-2.2	6.2	7.3	11.8	5.8	8.1	7.7	3.0	-12.3	15.3	7.0	3.5	2.5	5.1	4.2	5.3
Total OECD	12.1	0.2	2.2	3.2	8.7	6.2	8.3	6.2	1.2	-11.6	11.4	6.0	2.1	2.3	3.6	4.2	5.3
China	25.2	6.9	25.7	28.3	24.0	18.4	20.0	17.0	6.4	-3.7	24.2	9.6	5.8	9.6	6.2	6.5	5.8
Other industrialised Asia	17.9	-3.8	7.7	9.9	17.0	11.4	10.7	7.6	7.1	-9.6	17.4	8.0	4.2	3.5	2.1	4.1	6.3
Brazil	12.9	5.6	-2.9	6.1	12.3	10.0	9.7	10.9	7.2	-8.1	22.2	8.0	0.2	4.9	-1.0	-4.7	4.0
Russia	14.9	8.1	11.6	14.1	15.4	9.9	12.3	13.9	6.6	-16.5	14.2	8.7	4.6	4.2	-3.8	-6.2	3.0
Other oil producers	5.5	4.4	0.0	11.6	10.9	10.6	6.8	10.5	8.0	-4.9	2.8	4.0	7.2	3.2	2.3	2.3	3.7
Rest of the world	6.7	4.3	2.1	7.3	11.5	7.4	9.1	11.1	7.2	-10.4	8.6	9.2	3.9	3.6	1.3	3.0	5.8
Total Non-OECD	13.2	1.8	6.9	12.5	15.7	11.6	11.5	11.1	7.1	-8.0	14.7	7.9	4.9	5.0	2.6	3.4	5.5
World	12.4	0.6	3.5	5.8	10.8	7.9	9.3	7.8	3.2	-10.3	12.6	6.7	3.1	3.3	3.2	3.9	5.3
B. Contribution to world trade growth	Percentage points																
OECD America[1]	2.2	-0.7	0.3	0.5	1.8	1.1	1.2	0.8	0.1	-2.0	2.1	1.0	0.5	0.3	0.6	0.7	1.0
OECD Europe	5.4	1.1	0.8	1.1	3.2	2.6	3.6	2.6	0.4	-4.4	3.8	2.1	0.5	0.9	1.2	1.5	1.8
OECD Asia & Pacific[2]	1.1	-0.2	0.5	0.6	1.1	0.5	0.7	0.7	0.3	-1.1	1.3	0.6	0.3	0.2	0.4	0.4	0.5
Total OECD	8.8	0.1	1.6	2.3	6.1	4.3	5.6	4.1	0.8	-7.5	7.2	3.8	1.3	1.4	2.2	2.6	3.2
China	0.1	0.1	0.3	0.3	0.3	0.3	0.3	0.3	-0.1	0.3	0.3	0.1	0.2	0.2	0.2	0.1	0.2
Other industrialised Asia	1.8	-0.4	0.8	1.0	1.8	1.3	1.3	0.9	0.8	-1.2	2.2	1.0	0.5	0.5	0.3	0.5	0.8
Brazil	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Russia	0.0	0.0	0.1	0.1	0.1	0.0	0.1	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Other oil producers	0.3	0.2	0.0	0.6	0.6	0.6	0.4	0.6	0.5	-0.3	0.2	0.2	0.4	0.2	0.1	0.1	0.2
Rest of the world	0.4	0.2	0.1	0.4	0.7	0.4	0.5	0.6	0.4	-0.6	0.5	0.5	0.2	0.2	0.1	0.2	0.3
Total Non-OECD	3.6	0.5	1.9	3.5	4.7	3.7	3.7	3.7	2.4	-2.9	5.4	2.9	1.8	1.9	1.0	1.3	2.1
World	12.4	0.6	3.5	5.8	10.8	7.9	9.3	7.8	3.2	-10.3	12.6	6.7	3.1	3.3	3.2	3.9	5.3

Note : Regional aggregates are calculated inclusive of intra-regional trade as the sum of volumes expressed in 2010 $.

1. Canada, Chile, Mexico and the United States.
2. Australia, Japan, Korea and New Zealand.

Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933222988

Annex Table 47. **Trade balances for goods and services**

$ billion, national accounts basis

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Australia	1.6	-6.5	-10.1	-4.3	2.1	-4.7	-14.3	-19.2	-14.8	-12.3	-22.7	-14.2	-9.9	6.6	13.1	-22.9	-10.1	-8.9	-17.5	-11.0
Austria	-1.7	-0.2	1.0	2.6	3.4	7.7	7.0	8.8	9.5	11.4	16.2	18.3	11.7	12.6	11.0	10.7	15.1	16.2	13.9	16.4
Belgium	8.9	8.5	10.0	5.8	8.1	14.6	16.9	18.2	14.3	15.2	18.2	3.2	12.4	8.9	2.6	1.9	7.4	10.2	17.5	20.0
Brazil	-23.1	-20.5	-11.1	-14.7	-12.6	2.9	12.5	22.8	30.4	30.0	18.8	-3.7	-7.4	-22.9	-20.2	-32.5	-56.3	-64.5	-54.7	-48.9
Canada	12.5	12.1	24.1	41.6	41.8	32.8	34.1	44.9	45.6	35.2	30.5	28.3	-20.2	-30.6	-21.6	-33.9	-29.3	-16.0	-39.5	-32.2
Chile	-1.7	-2.7	1.7	1.4	1.2	1.6	3.1	9.3	10.5	22.1	22.9	4.6	13.3	14.0	7.9	-0.6	-1.9	3.8	4.3	6.2
China	42.7	43.8	30.6	28.9	28.1	37.4	35.8	51.2	124.6	208.9	308.0	348.8	220.1	223.0	181.9	231.8	235.4	284.0	348.2	331.9
Colombia	-7.5	-7.3	-1.5	-0.9	-3.1	-3.3	-3.2	-2.7	-2.8	-4.7	-6.7	-6.0	-5.1	-5.3	-4.1	-6.6	-9.9	-20.4	-21.7	-21.0
Czech Republic	-2.7	-0.2	-0.3	-1.1	-0.8	-1.1	-1.2	1.0	3.2	4.3	4.7	5.2	8.2	6.4	8.9	10.3	12.0	14.2	13.6	14.7
Denmark	7.6	5.5	10.7	10.9	11.8	11.7	14.9	13.7	14.8	11.1	9.1	11.6	14.0	19.6	19.0	17.3	19.3	18.0	16.5	18.2
Estonia	-0.4	-0.4	-0.2	-0.2	-0.2	-0.5	-0.8	-0.9	-0.7	-1.7	-2.0	-1.0	1.0	1.2	1.3	0.2	0.4	0.6	0.5	0.5
Finland	9.3	10.6	12.1	11.5	11.9	12.5	11.1	12.2	8.0	9.0	12.4	10.4	5.2	3.2	-2.3	-3.7	-2.3	-1.2	0.5	0.2
France	42.3	39.1	33.3	14.7	18.1	25.4	20.2	12.7	-8.9	-18.9	-34.9	-52.2	-38.0	-49.5	-73.5	-58.2	-52.6	-53.6	-33.4	-25.9
Germany	26.3	29.4	14.8	5.9	35.1	92.5	92.8	139.7	143.5	160.0	231.2	224.1	169.2	173.8	178.4	209.0	219.5	249.6	235.1	237.6
Greece	-10.2	-13.7	-13.8	-14.7	-14.4	-15.8	-21.7	-21.3	-20.7	-29.4	-39.5	-46.1	-34.2	-25.9	-20.2	-11.2	-7.2	-5.4	-5.4	-3.8
Hungary	0.4	-0.8	-1.3	-1.7	-0.7	-1.4	-3.4	-4.1	-2.6	-1.2	0.9	0.5	5.4	7.0	8.6	8.7	10.1	10.1	10.6	11.8
Iceland	0.0	-0.4	-0.4	-0.6	-0.1	0.1	-0.3	-0.7	-2.0	-2.9	-1.9	-0.7	1.1	1.4	1.2	0.9	1.3	1.1	1.4	1.3
India	-6.1	-7.5	-6.5	-6.8	-4.6	-2.6	-6.9	-11.1	-20.8	-28.0	-35.4	-70.6	-60.1	-84.1	-102.6	-118.2	-79.2	-52.0	-42.6	-46.4
Indonesia	0.0	10.6	13.5	17.2	12.7	11.5	16.7	10.8	10.3	18.3	15.6	2.5	14.5	14.3	22.3	-3.4	-7.6	-6.7	-2.5	-4.6
Ireland	9.8	9.8	12.8	12.9	16.1	21.3	25.2	27.9	23.9	21.6	24.0	23.9	34.7	38.3	48.3	45.5	48.2	52.8	50.1	52.7
Israel	-5.4	-3.0	-2.8	0.1	-3.0	-3.4	-0.9	0.1	-0.3	0.2	-1.6	-1.4	5.9	4.8	-1.3	0.4	4.0	3.8	9.0	9.1
Italy	46.6	38.5	22.1	9.5	14.4	9.6	7.5	9.8	-1.9	-16.5	-8.5	-18.4	-14.3	-42.5	-35.4	20.6	50.3	67.9	69.4	86.5
Japan	46.3	73.3	70.6	68.6	26.6	53.5	71.7	91.1	64.6	54.7	73.6	8.2	18.8	68.9	-50.8	-114.8	-139.2	-144.3	-47.6	-40.2
Korea	-4.4	39.7	27.7	11.7	8.3	9.0	13.8	29.2	21.9	8.0	12.7	-2.1	41.4	34.7	17.9	34.5	64.9	75.2	80.5	80.2
Latvia	-0.6	-0.9	-0.7	-0.6	-0.9	-1.0	-1.5	-2.3	-2.5	-4.5	-5.9	-4.6	-0.4	-0.3	-1.4	-1.3	-0.9	-0.9	-0.8	-0.8
Luxembourg	4.3	4.3	5.4	5.7	5.1	6.0	7.2	8.8	9.9	13.3	15.9	18.0	16.4	17.5	19.5	19.0	21.1	23.1	20.2	21.4
Mexico	5.7	-1.2	-1.6	-3.8	-9.0	-10.4	-10.1	-13.3	-12.4	-12.0	-16.5	-24.2	-13.0	-12.5	-14.6	-13.4	-11.6	-12.1	-6.0	-2.5
Netherlands	26.2	26.0	21.9	27.0	27.9	31.0	37.2	46.9	54.5	58.8	71.8	77.7	64.1	69.4	76.2	74.9	88.6	94.9	86.9	94.9
New Zealand	0.9	0.7	0.1	1.1	2.2	1.8	1.7	0.6	-1.3	-0.8	-0.2	-1.1	2.8	3.4	3.5	0.8	1.9	2.5	-1.1	-1.4
Norway	13.0	2.8	11.6	28.7	29.0	25.8	29.1	34.9	49.3	58.5	54.2	80.0	44.1	48.3	64.1	65.9	53.2	43.8	26.9	29.2
Poland	-5.9	-8.6	-9.8	-10.9	-6.8	-6.8	-5.8	-6.3	-2.9	-6.6	-14.3	-26.2	-3.2	-8.7	-9.4	-1.0	9.9	8.4	9.6	10.1
Portugal	-9.4	-11.4	-13.2	-13.1	-12.4	-11.1	-11.5	-15.7	-18.0	-17.2	-18.4	-25.6	-16.9	-18.0	-10.5	-1.1	2.0	1.2	2.7	2.6
Russian Federati	9.0	12.0	33.0	52.0	39.0	37.2	48.9	72.4	104.6	125.9	112.5	155.7	92.5	123.2	162.2	145.7	123.0	133.0	121.2	133.5
Slovak Republic	-2.1	-2.4	-0.9	-0.5	-1.7	-1.8	-0.6	-1.2	-2.2	-2.2	-0.9	-2.8	-1.2	-1.3	-0.9	3.4	4.4	4.2	3.6	4.3
Slovenia	-0.2	-0.4	-1.0	-0.8	-0.2	0.2	-0.1	-0.5	-0.2	0.0	-0.6	-1.1	0.9	0.7	1.0	2.0	2.9	4.0	4.5	4.9
South Africa	1.7	1.7	3.5	3.9	4.9	4.4	4.1	-0.4	-0.7	-4.6	-4.0	-4.9	1.3	4.7	3.8	-5.0	-8.3	-6.6	-4.4	-4.6
Spain	1.3	-3.2	-12.2	-17.9	-14.7	-14.5	-20.3	-41.3	-57.7	-74.9	-88.9	-84.9	-17.6	-18.6	-3.8	21.2	47.5	33.4	37.8	40.1
Sweden	18.4	16.8	16.4	15.2	14.9	16.7	21.2	29.0	28.0	31.9	34.1	32.4	24.8	26.8	26.6	26.8	29.3	22.5	20.2	21.2
Switzerland	14.6	13.3	13.8	16.6	15.7	20.6	23.7	35.2	29.7	36.6	54.2	59.2	41.8	62.9	58.8	69.3	83.0	84.9	96.7	101.4
Turkey	-1.1	2.8	0.9	-8.0	7.7	3.8	-3.1	-10.4	-16.9	-26.1	-33.8	-33.7	-7.1	-40.9	-67.7	-40.8	-53.9	-35.2	-29.6	-28.8
United Kingdom	7.8	-11.2	-24.6	-30.5	-35.9	-45.2	-44.5	-64.8	-63.3	-61.5	-81.4	-83.9	-43.8	-57.3	-38.2	-54.6	-52.9	-55.8	-57.9	-59.4
United States	-102.0	-162.7	-256.6	-375.8	-368.7	-426.5	-503.7	-619.2	-721.2	-771.0	-718.5	-723.1	-395.5	-512.7	-580.0	-568.3	-508.2	-538.2	-561.7	-628.3
Euro area	151.1	134.4	92.3	48.4	96.3	177.0	170.2	204.2	153.3	128.5	196.0	143.5	193.4	169.9	191.7	334.2	445.3	497.9	504.0	552.3
Total OECD	157.0	104.3	-37.7	-192.5	-167.2	-145.0	-204.0	-244.7	-416.7	-503.4	-398.1	-537.1	-77.7	-188.1	-362.3	-281.5	-73.0	-24.3	32.5	51.7

Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933222992

Annex Table 48. **Balance of primary income**

$ billion

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Australia	-13.7	-11.4	-11.9	-11.1	-10.3	-11.6	-15.1	-22.0	-28.0	-32.5	-41.1	-37.8	-38.0	-49.3	-54.6	-41.0	-37.7	-29.6	-20.2	-20.1
Austria	-0.4	-0.9	-1.7	-1.2	-2.0	-0.2	0.4	0.6	0.2	0.8	-0.4	3.6	-0.2	3.3	1.4	0.5	-2.6	-2.5	-2.2	-2.2
Belgium	5.9	6.5	6.2	5.9	4.0	3.9	5.9	4.9	4.0	3.9	5.9	10.3	-2.5	8.8	5.8	8.8	9.8	14.6	10.8	10.7
Brazil	-14.9	-18.2	-18.8	-17.9	-19.7	-18.2	-18.6	-20.5	-26.0	-27.5	-29.3	-40.6	-33.7	-39.5	-47.3	-35.4	-39.8	-40.3	-17.1	-16.8
Canada	-21.6	-21.4	-23.5	-23.4	-26.5	-20.7	-23.5	-21.1	-22.3	-15.6	-17.3	-24.1	-17.8	-22.8	-23.3	-22.8	-23.5	-21.9	-19.1	-19.0
Chile	-2.7	-2.0	-2.3	-3.0	-2.6	-2.9	-4.5	-7.8	-10.4	-18.4	-18.9	-13.6	-11.4	-14.7	-13.9	-11.2	-10.6	-8.7	-5.9	-6.0
China	-11.0	-16.6	-14.5	-14.7	-19.2	-14.9	-10.2	-5.1	-16.1	-5.1	8.0	28.6	-8.5	-25.9	-70.3	-19.9	-78.4	-34.1	-49.5	-49.5
Colombia	-2.2	-1.6	-1.3	-2.2	-2.4	-2.6	-3.2	-4.1	-5.3	-5.7	-7.8	-9.6	-8.4	-11.2	-15.5	-15.0	-14.2	-12.9	-7.7	-7.8
Czech Republic	-0.8	-1.1	-1.4	-1.4	-2.2	-3.5	-4.3	-6.1	-5.4	-7.3	-12.6	-8.8	-11.3	-13.1	-12.8	-12.2	-12.7	-12.6	-11.8	-12.7
Denmark	-3.3	-2.7	-2.5	-3.5	-3.5	-2.6	-2.4	-2.0	2.1	3.4	1.6	4.0	3.2	5.3	7.3	7.4	12.0	9.8	8.8	8.9
Estonia	-0.2	-0.1	-0.1	-0.2	-0.3	-0.3	-0.5	-0.6	-0.5	-0.8	-1.5	-1.3	-0.6	-1.0	-1.2	-0.9	-0.7	-0.7	-0.4	-0.4
Finland	-2.5	-3.2	-2.1	-1.8	-1.1	-0.7	-2.7	0.2	-0.3	0.8	-0.8	-1.9	1.6	1.9	-0.2	-0.4	0.4	-0.7	0.7	0.7
France	13.2	16.0	31.4	24.3	24.9	14.2	23.6	28.4	39.0	48.5	55.0	64.5	61.3	70.8	79.4	51.7	52.1	63.0	51.6	51.7
Germany	-5.3	-13.8	-18.9	-13.2	-15.5	-24.4	-22.1	20.0	24.6	50.6	50.5	37.8	77.8	66.3	97.9	86.5	78.7	90.4	92.7	95.8
Greece	-1.8	-1.7	-0.8	-1.0	-1.9	-2.1	-4.7	-5.7	-7.4	-9.5	-13.3	-16.3	-9.4	-7.7	-9.1	1.0	-0.6	0.2	0.4	0.3
Hungary	-2.7	-3.0	-2.9	-2.6	-2.8	-3.6	-4.1	-5.0	-5.4	-5.7	-9.0	-9.8	-6.0	-6.1	-6.8	-5.4	-3.9	-3.6	-3.2	-3.4
Iceland	-0.2	-0.2	-0.2	-0.3	-0.3	0.0	-0.2	-0.6	-0.7	-1.1	-1.0	-3.6	-2.4	-2.2	-1.9	-1.4	-0.2	-0.3	-0.6	-0.6
India	-3.4	-3.6	-3.7	-4.9	-4.1	-3.9	-4.7	-4.0	-6.5	-6.2	-6.6	-5.4	-7.8	-15.5	-16.1	-20.9	-21.7	-25.9	-28.3	-32.7
Indonesia	-6.3	-8.2	-9.0	-8.4	-6.9	-7.0	-6.2	-10.9	-12.9	-13.8	-15.5	-15.2	-15.1	-20.7	-26.5	-26.6	-27.1	-27.8	-27.1	-27.6
Ireland	-9.7	-10.7	-14.0	-13.9	-16.7	-22.7	-25.2	-28.5	-31.5	-30.9	-39.1	-37.8	-39.6	-35.1	-45.0	-39.0	-34.8	-34.7	-34.8	-37.1
Israel	-4.0	-4.0	-5.1	-8.3	-5.5	-4.6	-4.7	-4.1	-1.4	-0.9	-0.2	-4.0	-5.2	-5.2	-3.6	-6.4	-6.3	-4.8	-5.7	-5.8
Italy	-5.0	-5.9	-1.6	-4.3	-3.0	-5.2	-7.4	-3.0	3.2	8.4	1.8	-20.9	-3.3	-6.4	-8.9	-5.3	-4.8	-5.3	-1.6	-1.6
Japan	56.4	50.1	57.1	71.7	67.1	62.3	75.0	96.1	109.1	123.5	139.1	138.9	135.1	156.3	184.9	175.0	175.8	171.5	167.4	174.1
Korea	-3.1	-5.1	-5.4	-4.0	-3.5	-2.2	-2.5	-1.3	-7.3	-4.0	-3.4	-1.2	-2.4	0.5	6.6	12.1	9.1	10.2	10.5	11.1
Latvia	..	..	..	0.0	0.0	0.0	0.0	-0.3	-0.2	-0.6	-1.2	-0.9	1.6	0.2	0.0	-0.2	-0.1	-0.3	-0.2	-0.2
Luxembourg	0.2	0.0	-0.8	-1.6	-1.9	-3.7	-5.3	-3.7	-4.7	-7.9	-11.1	-13.7	-11.4	-11.5	-12.9	-13.8	-17.2	-19.5	-18.8	-19.6
Mexico	-12.1	-12.8	-12.0	-13.8	-13.0	-12.2	-12.2	-10.0	-16.4	-19.7	-23.1	-20.0	-14.8	-13.0	-20.3	-24.1	-38.9	-34.4	-41.0	-48.8
Netherlands	21.1	-0.6	14.1	1.8	6.0	6.4	12.2	37.3	23.7	56.3	22.4	-22.1	-3.6	7.2	17.2	27.6	21.7	11.9	3.4	0.6
New Zealand	-4.8	-2.6	-3.2	-3.2	-2.8	-3.1	-3.9	-5.4	-6.9	-7.5	-9.4	-10.1	-5.7	-6.8	-8.0	-7.3	-7.5	-8.5	-8.4	-9.1
Norway	-1.7	-1.7	-1.3	-2.3	0.2	0.6	1.4	0.5	3.4	0.4	-1.2	-2.5	2.3	4.6	4.6	4.2	6.9	8.6	8.6	8.6
Poland	-1.0	-1.0	-0.9	-0.5	-0.4	-0.9	-2.2	-8.1	-5.1	-7.2	-13.2	-10.2	-12.7	-17.4	-18.0	-16.2	-17.6	-16.9	-14.6	-15.0
Portugal	-0.3	-0.5	-0.7	-2.0	-2.7	-1.8	-1.6	-1.9	-2.8	-6.1	-7.3	-8.7	-9.3	-7.6	-6.6	-5.6	-2.4	-3.3	-4.5	-4.5
Russian Federation	-8.7	-11.8	-7.7	-6.7	-4.2	-6.6	-13.2	-12.8	-18.5	-28.8	-28.8	-46.5	-39.7	-47.1	-60.4	-67.7	-79.6	-67.2	-55.7	-54.1
Slovak Republic	-0.1	-0.1	-0.3	-0.3	-0.3	-0.4	-1.8	-2.1	-1.9	-2.3	-3.0	-2.3	-0.8	-2.5	-3.3	-1.6	-1.8	-3.0	-2.2	-2.1
Slovenia	0.1	0.1	0.1	0.0	0.1	-0.1	-0.2	-0.4	-0.3	-0.5	-1.1	-1.6	-0.8	-0.5	-0.4	-0.4	-0.3	-0.8	-0.8	-0.9
South Africa	-3.2	-3.2	-3.2	-3.2	-3.8	-2.8	-4.6	-4.3	-4.9	-5.2	-9.8	-9.1	-6.7	-8.0	-10.7	-10.8	-9.6	-9.3	-11.2	-11.3
Spain	-3.3	-4.7	-6.0	-3.9	-8.2	-7.4	-6.9	-9.3	-16.6	-21.4	-36.5	-44.7	-26.7	-20.1	-25.5	-11.6	-10.0	-8.4	-17.9	-19.0
Sweden	-5.0	-3.1	-1.9	-1.1	-1.1	-0.8	4.1	0.1	2.9	7.9	14.9	17.5	7.5	9.8	15.4	16.2	18.8	18.9	19.8	19.9
Switzerland	14.5	15.9	18.4	19.9	12.6	10.1	25.5	26.9	35.7	33.9	4.6	-34.3	11.3	35.9	9.1	18.6	17.1	-1.9	7.0	7.9
Turkey	-3.0	-3.0	-3.5	-4.0	-5.0	-4.6	-5.6	-5.6	-5.8	-6.7	-7.1	-8.4	-8.3	-7.2	-7.9	-7.2	-9.0	-9.1	-7.6	-8.2
United Kingdom	1.5	21.4	-3.1	8.6	13.9	26.1	30.8	39.8	56.0	26.6	28.2	6.3	4.8	26.5	30.1	-8.4	-25.0	-63.9	-53.8	-47.0
United States	12.6	4.3	11.9	19.2	29.7	25.2	42.8	64.1	67.6	43.3	100.6	146.1	123.6	177.7	221.0	203.0	199.7	217.9	219.1	220.0
Euro area	12.0	-19.6	4.7	-11.3	-18.4	-44.6	-36.3	36.2	28.8	89.8	21.5	-55.1	32.6	65.9	88.5	97.6	87.2	101.2	76.4	72.3
Total OECD	17.4	-3.0	11.2	25.7	25.7	6.5	57.9	164.6	190.4	202.2	153.0	69.3	184.4	324.8	396.6	370.5	333.8	321.9	325.9	327.2

Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933223002

Annex Table 49. **Balance of secondary income**

$ billion

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Australia	0.2	0.0	0.2	-0.1	0.3	0.3	0.2	-0.1	-0.4	-0.5	-0.2	-0.4	-0.9	-1.6	-2.2	-2.4	-2.3	-2.0	-1.7	-1.7
Austria	-4.2	-4.1	-4.4	-3.5	-3.6	-3.2	-3.7	-3.5	-3.7	-3.5	-3.7	-4.5	-3.8	-4.0	-4.2	-4.1	-5.1	-4.7	-3.9	-4.1
Belgium	-10.5	-10.9	-11.2	-9.1	-8.5	-10.5	-13.4	-13.7	-12.3	-12.1	-11.8	-8.2	-7.9	-6.8	-7.9	-8.7	-10.1	-8.4	-8.5	-8.5
Brazil	1.8	1.5	1.7	1.5	1.6	2.4	2.9	3.2	3.6	4.3	4.0	4.2	3.3	2.9	3.0	2.8	3.4	1.9	2.1	2.3
Canada	0.2	0.4	0.2	0.3	0.4	0.3	-0.2	-0.5	-1.5	-1.7	-2.0	-0.6	-2.3	-3.2	-2.9	-3.3	-1.8	-1.3	-0.6	-0.4
Chile	0.5	0.5	0.6	0.6	0.4	0.6	0.6	1.1	1.8	3.4	3.1	2.9	1.6	4.4	2.9	2.1	2.2	1.9	1.6	1.7
China	5.1	4.3	4.9	6.3	8.5	13.0	17.4	22.9	23.9	28.1	37.1	43.2	31.7	40.7	24.5	3.4	-8.7	-30.2	-32.2	-32.2
Colombia	0.7	0.8	1.5	1.7	2.4	2.7	3.3	3.7	4.1	4.7	5.2	5.5	4.6	4.4	4.8	4.6	4.6	4.4	4.7	5.1
Czech Republic	0.4	0.5	0.6	0.4	0.5	0.9	0.5	0.2	0.5	-0.5	-0.4	-0.7	-1.1	-0.6	-1.0	-1.4	-0.5	-0.4	-0.3	-0.3
Denmark	-2.7	-3.2	-3.7	-3.7	-3.3	-3.3	-4.4	-5.6	-5.5	-5.6	-6.2	-6.1	-6.5	-6.5	-6.6	-6.5	-7.1	-6.7	-4.4	-4.6
Estonia	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.2	0.1	0.0	0.0	0.1	0.1
Finland	-0.7	-1.0	-0.8	-0.6	-0.8	-0.8	-1.2	-1.2	-1.6	-1.8	-2.0	-2.5	-2.4	-2.3	-2.3	-1.8	-3.2	-3.4	-3.4	-2.8
France	-13.0	-12.4	-13.2	-14.0	-14.8	-14.2	-19.2	-21.8	-27.3	-27.5	-32.1	-35.5	-46.3	-42.2	-49.0	-46.5	-51.7	-59.8	-49.5	-51.2
Germany	-32.7	-32.6	-28.5	-27.5	-26.0	-26.6	-35.7	-36.1	-37.7	-38.3	-47.1	-53.0	-52.1	-54.4	-50.1	-52.6	-50.1	-43.9	-39.9	-42.2
Greece	8.3	8.0	6.6	3.4	3.5	3.5	4.3	4.5	3.9	4.3	2.1	4.2	-1.4	-2.4	-2.1	-1.6	2.4	-0.4	-1.9	-1.9
Hungary	0.2	0.2	0.4	0.4	0.4	0.5	0.7	-0.5	-1.2	-1.2	-1.6	-1.9	-0.4	-0.5	-0.8	-1.0	-0.7	-0.9	-0.9	-1.3
Iceland	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.3	-0.3
India	13.9	10.4	12.0	13.5	14.8	16.2	22.1	19.8	23.6	28.6	37.1	48.5	49.1	52.2	60.2	65.2	64.8	65.3	62.9	63.1
Indonesia	1.0	1.5	1.9	1.8	1.5	1.7	1.9	1.1	4.8	4.9	5.1	5.4	4.6	4.6	4.2	4.1	4.2	5.2	6.7	6.7
Ireland	-2.2	-1.6	-1.4	-1.0	-0.3	-0.7	-1.0	-1.2	-1.7	-2.2	-3.0	-3.4	-3.9	-3.3	-3.4	-3.1	-3.3	-3.0	-2.9	-3.0
Israel	6.1	6.1	6.2	6.6	6.7	6.9	6.5	6.2	6.1	7.6	7.3	8.3	7.3	8.2	8.8	8.3	9.1	10.0	10.1	10.4
Italy	-4.3	-7.4	-5.5	-4.4	-5.8	-5.3	-8.0	-10.3	-12.5	-16.6	-19.7	-21.7	-17.0	-21.5	-21.9	-19.7	-19.2	-23.7	-19.1	-19.1
Japan	-8.8	-8.8	-10.8	-9.8	-8.1	-5.6	-7.7	-8.0	-7.3	-10.6	-11.6	-13.1	-12.0	-12.8	-15.2	-14.2	-10.4	-19.0	-12.2	-12.2
Korea	0.3	2.8	0.8	-0.2	-1.3	-2.1	-3.2	-3.0	-3.3	-4.4	-4.4	-1.3	-2.2	-5.3	-4.7	-5.5	-4.2	-5.4	-5.2	-5.8
Latvia	..	..	..	0.2	0.1	0.3	0.5	0.7	0.5	0.4	0.3	0.5	0.6	0.6	0.5	0.5	0.4	0.2	0.1	0.1
Luxembourg	-0.6	-0.5	-0.7	-0.5	-0.7	-0.4	0.2	-0.1	0.1	0.1	0.3	0.3	-0.8	0.2	0.2	-0.4	0.1	0.1	0.8	0.8
Mexico	5.2	6.0	6.3	7.0	9.3	10.3	15.6	18.8	22.1	25.9	26.4	25.5	21.6	21.5	23.0	22.6	22.1	23.9	23.1	24.4
Netherlands	-6.1	-7.1	-6.4	-6.3	-6.8	-6.6	-7.2	-10.4	-12.1	-12.8	-16.3	-17.3	-12.0	-14.4	-16.2	-16.2	-18.6	-16.7	-14.3	-14.3
New Zealand	0.3	0.3	0.2	0.2	0.1	0.1	0.2	0.1	0.2	0.4	0.4	0.7	0.3	0.0	-0.2	-0.4	-0.4	-0.5	-0.3	-0.3
Norway	-1.4	-1.5	-1.4	-1.3	-1.6	-2.2	-2.9	-2.6	-2.7	-3.0	-3.5	-3.8	-4.8	-5.9	-7.1	-6.7	-7.8	-8.1	-7.0	-7.4
Poland	2.0	2.9	2.2	1.3	1.5	2.0	2.5	3.7	5.0	6.6	1.1	1.4	-1.4	-0.1	1.1	-0.2	-0.5	-0.6	-0.5	-0.5
Portugal	2.4	2.4	2.5	2.1	2.2	1.4	1.1	1.5	0.7	0.9	1.5	1.5	0.2	0.4	0.8	1.3	1.7	2.1	1.4	1.3
Russian Federatior	-0.4	-0.3	0.6	0.1	-0.8	-0.8	-0.4	-0.8	-1.6	-2.6	-5.7	-6.8	-5.5	-6.3	-5.7	-6.1	-9.3	-7.9	-5.1	-10.0
Slovak Republic	0.3	0.5	0.3	0.2	0.3	0.3	0.4	0.3	0.0	-0.1	-0.6	-1.8	-1.4	-0.7	-1.1	-1.3	-1.8	-1.6	-1.3	-1.3
Slovenia	0.2	0.2	0.2	0.1	0.1	0.1	0.0	-0.1	-0.2	-0.3	-0.4	-0.4	-0.5	-0.2	-0.1	-0.3	-0.3	-0.3	-0.3	-0.6
South Africa	-0.7	-0.7	-0.9	-0.9	-0.7	-0.6	-1.0	-1.7	-2.5	-2.4	-2.3	-2.3	-2.7	-2.3	-2.0	-3.8	-3.2	-3.2	-3.1	-3.1
Spain	-2.5	-2.6	-2.4	-4.2	-4.7	-4.9	-8.6	-9.6	-12.8	-18.0	-18.3	-22.7	-20.6	-17.7	-19.1	-13.5	-17.4	-16.7	-10.8	-11.8
Sweden	-2.3	-2.7	-3.2	-3.1	-3.1	-3.6	-2.0	-4.1	-4.6	-5.2	-5.3	-7.0	-5.6	-6.5	-7.0	-10.2	-9.9	-10.0	-9.6	-9.7
Switzerland	-4.0	-4.2	-4.5	-4.4	-5.7	-6.3	-6.2	-7.6	-12.0	-10.4	-10.8	-14.4	-13.9	-14.5	-16.3	-15.2	-19.1	-26.4	-25.4	-25.7
Turkey	4.5	5.5	4.9	4.8	3.0	2.4	1.0	1.1	1.5	1.9	2.2	2.1	2.4	1.5	1.8	1.4	1.2	1.0	0.6	0.5
United Kingdom	-9.9	-14.9	-13.0	-15.4	-10.0	-14.2	-17.7	-20.3	-23.5	-23.4	-28.1	-26.4	-24.8	-32.0	-35.2	-35.2	-42.5	-41.8	-42.5	-36.8
United States	-45.1	-53.2	-48.8	-57.4	-63.5	-64.3	-70.2	-88.0	-98.8	-88.3	-113.9	-124.1	-120.6	-126.9	-131.7	-126.1	-123.5	-123.8	-152.2	-168.3
Euro area	-65.7	-69.1	-64.9	-65.3	-65.7	-67.9	-91.9	-101.7	-117.1	-127.9	-151.0	-164.8	-169.7	-169.1	-176.1	-168.2	-176.6	-180.5	-153.5	-158.8
Total OECD	-119.9	-132.3	-127.7	-139.3	-139.6	-145.2	-178.7	-210.9	-240.6	-236.9	-298.3	-323.6	-333.2	-349.9	-369.5	-362.3	-372.7	-390.8	-381.3	-397.3

Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933223015

Annex Table 50. **Current account balances**

$ billion

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Australia	-11.9	-17.8	-21.8	-15.5	-8.0	-16.0	-29.3	-41.3	-43.3	-45.3	-64.0	-52.3	-48.8	-44.3	-43.7	-66.4	-50.0	-40.5	-39.4	-32.8
Austria	-6.4	-4.3	-4.4	-1.8	-2.0	6.9	5.3	7.8	8.0	11.1	14.8	19.5	10.4	11.2	7.0	6.1	4.0	3.3	3.2	5.6
Belgium	7.5	7.2	7.0	5.1	4.3	6.3	7.0	6.8	5.1	4.5	4.2	-4.7	-5.0	8.2	-5.6	-3.7	-1.0	9.5	12.2	13.0
Brazil	-30.5	-33.4	-25.3	-24.2	-23.2	-7.6	4.2	11.7	14.0	13.6	1.6	-28.2	-24.3	-47.3	-52.5	-54.2	-81.1	-90.9	-69.6	-63.4
Canada	-8.9	-8.9	0.8	18.5	15.8	12.5	10.3	23.2	21.8	17.9	11.2	3.6	-40.3	-56.6	-47.8	-60.0	-54.6	-39.2	-59.2	-51.7
Chile	-3.7	-4.0	0.0	-1.0	-1.2	-0.7	-0.8	2.6	1.9	7.1	7.1	-5.8	3.5	3.8	-3.1	-9.6	-10.0	-2.9	-2.1	-0.1
China	36.8	31.5	21.1	20.5	17.4	35.4	43.1	68.9	132.4	231.8	353.2	420.6	243.3	237.8	136.1	215.4	148.2	219.7	266.6	250.1
Colombia	-5.7	-4.8	0.7	0.8	-1.0	-1.3	-0.9	-0.8	-1.9	-2.9	-6.0	-6.5	-4.6	-8.7	-9.7	-11.3	-12.3	-19.8	-20.0	-19.0
Czech Republic	-3.6	-1.3	-1.5	-2.7	-3.3	-4.2	-5.7	-5.0	-1.3	-3.3	-8.2	-4.4	-4.5	-7.4	-5.0	-3.2	-1.1	1.2	1.4	1.6
Denmark	0.7	-1.5	3.4	2.5	4.2	5.1	7.5	5.8	11.3	8.9	4.5	9.5	10.7	18.4	19.6	18.1	24.2	21.6	20.8	22.3
Estonia	-0.6	-0.5	-0.2	-0.3	-0.4	-0.8	-1.3	-1.5	-1.2	-2.6	-3.3	-2.1	0.5	0.4	0.3	-0.6	-0.3	0.0	0.2	0.2
Finland	6.0	6.4	6.6	9.0	9.9	10.9	7.5	11.2	6.2	8.2	9.8	6.4	5.0	3.1	-4.9	-5.0	-4.8	-5.2	-2.1	-1.9
France	41.1	43.0	50.7	16.1	20.9	17.6	16.2	9.2	-0.3	0.7	-8.5	-28.1	-22.3	-22.0	-29.5	-41.5	-40.3	-28.7	-13.2	-6.9
Germany	-11.4	-17.1	-32.1	-35.0	-5.9	42.0	35.2	123.1	130.4	171.3	233.8	208.5	195.1	184.7	226.7	243.1	248.1	300.9	287.1	291.2
Greece	-5.3	-3.8	-5.4	-10.0	-9.6	-9.8	-13.0	-13.6	-18.5	-30.2	-45.4	-51.8	-36.0	-30.0	-28.8	-6.3	1.5	2.2	4.2	5.7
Hungary	-1.9	-3.5	-3.9	-4.0	-3.1	-4.3	-6.8	-8.8	-7.9	-8.0	-9.9	-11.1	-0.9	0.4	1.0	2.3	5.4	5.7	6.6	7.3
Iceland	-0.2	-0.6	-0.6	-0.9	-0.4	0.1	-0.6	-1.4	-2.7	-4.0	-2.9	-4.3	-1.3	-0.9	-0.8	-0.6	0.9	0.6	0.5	0.4
India	-2.9	-6.8	-3.1	-4.6	1.6	7.5	9.7	1.1	-10.0	-9.1	-7.8	-31.5	-25.8	-54.4	-63.1	-92.3	-49.3	-27.8	-24.1	-33.9
Indonesia	-4.9	4.1	5.8	8.0	6.9	7.8	8.1	1.6	0.3	10.9	10.5	0.1	10.6	5.1	1.7	-24.4	-29.1	-26.2	-18.9	-21.4
Ireland	1.9	0.7	0.3	-0.3	-0.7	-1.2	-0.4	-1.2	-7.2	-8.2	-14.5	-16.0	-7.2	1.3	1.9	3.5	10.2	15.2	12.5	12.6
Israel	-3.6	-1.2	-1.5	-2.0	-1.9	-1.1	0.8	2.0	4.3	6.1	5.7	2.7	6.9	8.1	3.4	1.5	7.6	9.1	12.7	12.8
Italy	32.4	20.8	10.0	-3.3	1.4	-7.0	-12.7	-9.6	-17.3	-30.0	-31.6	-67.0	-42.1	-73.8	-70.3	-9.0	20.6	38.9	47.6	64.6
Japan	94.8	115.3	115.0	130.5	87.1	108.6	139.2	182.0	170.1	175.9	213.1	142.1	146.1	220.8	127.7	61.9	39.6	22.9	115.7	129.8
Korea	-10.3	40.1	21.6	10.4	2.7	4.7	11.9	29.7	12.7	3.6	11.8	3.2	33.6	28.9	18.7	50.8	81.1	90.3	98.2	97.9
Latvia	..	..	..	-0.4	-0.6	-0.6	-0.9	-1.8	-2.0	-4.6	-6.4	-4.5	2.1	0.6	-0.8	-0.9	-0.7	-1.0	-0.9	-0.9
Luxembourg	1.7	1.5	1.5	2.5	1.5	2.1	2.0	4.1	4.1	4.2	5.0	4.1	3.7	3.7	3.4	3.2	2.9	3.5	2.3	2.6
Mexico	-7.7	-16.0	-14.0	-18.8	-17.8	-14.8	-8.3	-7.0	-9.0	-7.8	-14.7	-20.1	-8.3	-4.9	-13.3	-15.9	-29.7	-26.5	-23.9	-26.9
Netherlands	25.9	13.3	16.3	8.0	10.6	12.1	31.0	47.8	48.3	64.4	53.4	38.6	47.8	63.1	79.0	90.6	93.4	90.1	75.4	80.5
New Zealand	-3.6	-1.5	-2.9	-1.8	-0.4	-1.3	-2.0	-4.7	-8.0	-7.9	-9.1	-10.4	-2.8	-3.3	-4.7	-6.9	-5.9	-6.5	-9.8	-10.8
Norway	10.0	-0.5	8.9	25.1	27.5	24.1	27.6	32.8	50.1	55.9	49.5	73.4	41.5	46.9	61.7	63.5	52.4	42.7	28.8	30.6
Poland	-5.9	-7.1	-12.8	-10.6	-6.1	-5.7	-5.6	-13.6	-7.8	-13.7	-27.0	-34.9	-17.3	-26.9	-27.0	-17.6	-6.9	-7.6	-5.5	-5.5
Portugal	-7.2	-9.4	-11.3	-12.8	-12.7	-11.4	-11.9	-15.8	-19.5	-22.2	-23.5	-31.9	-25.5	-24.2	-14.9	-4.5	3.2	1.4	1.3	1.2
Russian Federation	-0.1	0.2	24.6	46.8	33.9	29.1	35.4	59.5	84.4	92.3	72.2	103.9	50.4	67.5	97.3	71.3	34.8	59.5	55.2	57.4
Slovak Republic	-2.5	-2.7	-1.3	-0.9	-2.4	-2.7	-2.7	-4.5	-5.6	-6.0	-5.5	-7.8	-3.0	-4.2	-4.9	0.9	1.5	0.1	0.0	0.8
Slovenia	0.0	-0.2	-0.9	-0.7	0.0	0.2	-0.2	-0.9	-0.6	-0.7	-2.0	-3.0	-0.3	0.0	0.1	1.2	2.7	2.9	3.4	3.4
South Africa	-2.2	-2.3	-0.7	-0.2	0.3	1.1	-1.5	-6.4	-8.1	-12.1	-16.2	-16.3	-8.1	-5.6	-8.9	-19.6	-21.1	-19.1	-18.7	-19.0
Spain	-4.3	-10.4	-20.7	-26.2	-27.5	-26.5	-35.3	-59.8	-86.7	-114.0	-143.3	-152.4	-64.0	-56.0	-47.2	-4.0	20.0	10.9	16.4	16.7
Sweden	10.3	9.7	10.6	10.2	11.4	11.8	21.9	24.0	25.1	34.8	43.4	44.5	25.3	29.4	38.9	36.1	42.3	35.6	31.8	32.8
Switzerland	26.8	27.3	31.6	32.7	22.8	26.2	45.0	57.1	54.7	61.0	47.4	12.3	39.6	81.8	47.0	66.2	73.2	49.1	70.0	75.2
Turkey	-2.6	2.0	-0.9	-9.9	3.8	-0.6	-7.6	-14.2	-21.4	-31.8	-37.8	-40.2	-12.0	-45.3	-75.0	-48.5	-64.7	-46.4	-38.2	-38.6
United Kingdom	-0.9	-5.1	-40.7	-37.2	-32.0	-33.2	-31.4	-45.2	-30.6	-58.7	-81.4	-104.5	-63.7	-62.8	-43.2	-98.2	-120.2	-161.5	-143.9	-132.8
United States	-140.7	-215.1	-295.5	-410.8	-395.3	-458.1	-521.3	-633.8	-745.4	-806.7	-718.6	-686.6	-380.8	-443.9	-459.3	-460.8	-400.3	-410.6	-474.8	-556.6
Euro area	78.8	44.4	15.9	-50.6	-12.6	38.7	26.7	103.1	45.2	50.5	43.3	-87.8	57.1	65.3	112.4	274.0	361.8	445.0	450.5	489.0
Total OECD	15.8	-45.3	-188.3	-335.7	-306.9	-308.1	-328.5	-312.6	-480.2	-565.7	-536.7	-771.2	-216.5	-192.7	-292.7	-213.2	-54.8	-17.7	40.5	44.3

Note: Balance-of-payments data in this table are based on the concepts and definition of the International Monetary Fund, Fifth and Sixth Balance of Payments Manual.
Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933223027

Annex Table 51. **Current account balances as a percentage of GDP**

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Australia	-2.8	-4.7	-5.3	-3.8	-2.1	-3.7	-5.4	-6.3	-5.9	-5.8	-6.7	-4.8	-4.7	-3.6	-2.9	-4.3	-3.3	-2.8	-3.1	-2.5
Austria	-3.0	-2.0	-2.0	-0.9	-1.0	3.2	2.0	2.6	2.6	3.3	3.8	4.5	2.6	2.9	1.6	1.5	0.9	0.8	0.9	1.4
Belgium	2.9	2.8	2.7	2.1	1.8	2.4	2.2	1.8	1.4	1.0	0.9	-1.0	-1.1	1.8	-1.1	-0.7	-0.2	1.8	2.7	2.7
Brazil	-3.4	-3.9	-4.2	-3.7	-4.1	-1.2	0.7	1.8	1.6	1.2	0.1	-1.6	-1.4	-2.1	-2.0	-2.3	-3.4	-3.9	-3.6	-3.1
Canada	-1.4	-1.4	0.1	2.5	2.1	1.7	1.1	2.3	1.9	1.4	0.8	0.1	-2.9	-3.5	-2.7	-3.3	-3.0	-2.2	-3.7	-3.1
Chile	-4.4	-4.9	0.0	-1.3	-1.6	-1.0	-1.1	2.6	1.5	4.6	4.1	-3.4	2.0	1.7	-1.2	-3.6	-3.6	-1.1	-0.8	0.0
China	3.9	3.1	1.9	1.7	1.3	2.4	2.6	3.6	5.8	8.5	10.0	9.2	4.8	3.9	1.8	2.5	1.6	2.1	2.4	2.1
Colombia	-4.7	-4.1	0.7	0.8	-1.1	-1.4	-1.0	-0.7	-1.3	-1.8	-2.9	-2.7	-2.0	-3.0	-2.9	-3.1	-3.2	-5.3	-6.0	-5.3
Czech Republic	-5.8	-1.9	-2.3	-4.4	-4.9	-5.1	-5.7	-4.2	-0.9	-2.1	-4.3	-1.9	-2.3	-3.6	-2.1	-1.6	-0.5	0.6	0.8	0.8
Denmark	0.4	-0.8	1.9	1.6	2.5	2.8	3.4	2.3	4.3	3.2	1.4	2.7	3.3	5.7	5.7	5.6	7.2	6.3	7.0	7.2
Estonia	-11.1	-8.6	-4.3	-5.4	-7.1	-11.2	-12.9	-12.0	-8.7	-15.0	-15.0	-8.7	2.6	1.8	1.4	-2.5	-1.1	-0.1	0.8	0.6
Finland	4.8	4.7	4.9	7.1	7.6	7.8	4.4	5.6	3.0	3.8	3.8	2.2	1.9	1.2	-1.8	-1.9	-1.8	-1.9	-0.9	-0.8
France	2.8	2.8	3.4	1.2	1.5	1.2	0.9	0.4	0.0	0.0	-0.3	-1.0	-0.8	-0.8	-1.0	-1.5	-1.4	-1.0	-0.5	-0.3
Germany	-0.5	-0.8	-1.5	-1.8	-0.3	2.0	1.4	4.4	4.6	5.7	6.8	5.5	5.7	5.4	6.1	6.9	6.6	7.8	8.5	8.3
Greece	-3.7	-2.7	-3.6	-7.6	-7.0	-6.3	-6.4	-5.6	-7.5	-11.0	-14.2	-14.6	-10.9	-9.9	-9.9	-2.5	0.6	0.9	2.1	2.8
Hungary	-4.0	-7.1	-7.9	-8.5	-5.8	-6.3	-8.0	-8.6	-7.0	-7.0	-7.1	-7.1	-0.8	0.3	0.7	1.8	4.0	4.1	5.4	5.6
Iceland	-2.3	-7.2	-7.1	-10.3	-4.3	1.2	-4.9	-9.8	-15.8	-23.2	-13.7	-22.8	-9.9	-6.4	-5.3	-4.4	5.8	3.6	3.1	2.4
India	-0.7	-1.6	-0.7	-1.0	0.3	1.5	1.6	0.2	-1.3	-1.0	-0.7	-2.5	-2.1	-3.4	-3.4	-5.1	-2.5	-1.4	-1.1	-1.4
Indonesia	-1.7	3.8	3.4	4.5	3.9	3.7	3.1	0.6	0.1	2.7	2.2	0.0	1.8	0.7	0.2	-2.7	-3.1	-3.0	-2.1	-2.2
Ireland	2.3	0.8	0.2	-0.4	-0.7	-1.0	-0.2	-0.6	-3.4	-3.6	-5.4	-5.7	-3.0	0.6	0.8	1.6	4.4	6.2	5.7	5.4
Israel	-3.2	-1.0	-1.3	-1.5	-1.5	-0.9	0.6	1.5	3.1	4.0	3.2	1.3	3.3	3.5	1.3	0.6	2.6	3.0	4.3	4.1
Italy	2.6	1.7	0.8	-0.3	0.1	-0.5	-0.8	-0.5	-0.9	-1.5	-1.4	-2.8	-1.9	-3.5	-3.1	-0.4	1.0	1.8	2.6	3.4
Japan	2.2	2.9	2.6	2.8	2.1	2.7	3.2	3.9	3.7	4.0	4.9	3.0	2.9	4.0	2.2	1.0	0.8	0.5	2.8	3.0
Korea	-1.7	10.9	4.4	1.9	0.5	0.8	1.7	3.9	1.4	0.3	1.0	0.6	3.8	2.7	1.6	4.1	6.2	6.4	7.0	6.6
Latvia	..	..	..	-4.8	-7.5	-6.5	-7.8	-12.2	-11.8	-20.9	-20.8	-12.3	8.0	2.3	-2.8	-3.3	-2.3	-3.1	-3.1	-3.0
Luxembourg	8.7	7.4	6.7	11.5	7.1	9.5	6.6	12.0	11.1	10.1	10.1	7.4	7.6	7.0	5.8	5.7	4.9	5.7	4.1	4.4
Mexico	-1.6	-3.2	-2.4	-2.7	-2.5	-2.0	-1.2	-0.9	-1.0	-0.8	-1.4	-1.9	-0.9	-0.5	-1.1	-1.3	-2.4	-2.1	-2.0	-2.1
Netherlands	6.3	3.1	3.7	1.9	2.5	2.6	5.4	7.4	7.2	8.9	6.4	4.0	5.5	7.5	8.8	11.0	11.0	10.3	10.0	10.3
New Zealand	-5.2	-2.7	-4.9	-3.2	-0.8	-2.2	-2.4	-4.6	-7.1	-7.1	-6.8	-7.7	-2.3	-2.3	-2.8	-4.0	-3.2	-3.3	-5.4	-5.7
Norway	6.2	-0.3	5.5	14.7	15.8	12.3	12.1	12.4	16.2	16.1	12.2	15.7	10.6	10.9	12.4	12.4	10.0	8.5	6.9	6.9
Poland	-3.8	-4.1	-7.7	-6.2	-3.2	-2.9	-2.6	-5.4	-2.5	-4.0	-6.3	-6.5	-3.9	-5.6	-5.1	-3.5	-1.3	-1.4	-1.1	-1.1
Portugal	-6.2	-7.5	-8.9	-10.8	-10.4	-8.5	-7.2	-8.3	-9.9	-10.7	-9.7	-12.1	-10.4	-10.1	-6.0	-2.1	1.4	0.6	0.7	0.6
Russian Federation	0.0	2.2	12.8	18.1	11.1	8.5	8.2	10.1	11.0	9.3	5.5	6.2	4.0	4.4	5.1	3.5	1.7	3.3	3.7	3.5
Slovak Republic	-11.5	-12.0	-6.5	-4.7	-11.2	-10.7	-8.0	-10.5	-11.4	-10.6	-7.1	-8.1	-3.5	-4.7	-5.0	0.9	1.5	0.1	0.0	0.9
Slovenia	0.1	-0.9	-4.0	-3.2	0.0	0.9	-0.8	-2.7	-1.8	-1.8	-4.2	-5.4	-0.6	-0.1	0.2	2.7	5.6	5.9	7.8	7.7
South Africa	-1.5	-1.7	-0.5	-0.1	0.3	0.9	-0.8	-2.8	-3.1	-4.5	-5.4	-5.5	-2.7	-1.5	-2.2	-5.0	-5.8	-5.4	-5.5	-5.2
Spain	-0.7	-1.7	-3.3	-4.4	-4.4	-3.7	-3.9	-5.6	-7.5	-9.0	-9.6	-9.3	-4.3	-3.9	-3.2	-0.3	1.4	0.8	1.3	1.3
Sweden	3.9	3.6	3.9	4.0	4.7	4.5	6.6	6.3	6.5	8.3	8.9	8.6	5.9	6.0	6.9	6.6	7.3	6.3	6.5	6.3
Switzerland	9.3	9.3	10.9	12.0	8.2	8.6	12.7	14.5	13.4	14.2	10.0	2.2	7.1	14.0	6.8	9.9	10.7	7.0	10.1	10.5
Turkey	-1.0	0.9	-0.6	-3.8	2.0	-0.4	-2.5	-3.6	-4.4	-6.0	-5.8	-5.4	-1.9	-6.1	-9.6	-6.1	-7.9	-5.8	-5.2	-4.9
United Kingdom	-0.1	-0.3	-2.6	-2.4	-2.1	-2.0	-1.6	-2.0	-1.3	-2.2	-2.7	-3.7	-2.8	-2.6	-1.7	-3.7	-4.5	-5.5	-5.1	-4.4
United States	-1.6	-2.4	-3.1	-4.0	-3.7	-4.2	-4.5	-5.2	-5.7	-5.8	-5.0	-4.7	-2.6	-3.0	-3.0	-2.9	-2.4	-2.4	-2.6	-3.0
Euro area	1.1	0.6	0.2	-0.8	-0.2	0.5	0.3	1.0	0.4	0.4	0.3	-0.6	0.4	0.5	0.8	2.2	2.8	3.4	3.9	4.1
Total OECD	0.1	-0.2	-0.7	-1.2	-1.1	-1.1	-1.0	-0.9	-1.3	-1.5	-1.3	-1.7	-0.5	-0.4	-0.6	-0.4	-0.1	0.0	0.1	0.1

Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933223034

Annex Table 52. **Structure of current account balances of major world regions**

$ billion

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Goods and services trade balance[1]																	
OECD	-192	-167	-145	-204	-245	-417	-503	-398	-537	-78	-188	-362	-281	-73	-24	32	52
China	29	28	37	36	51	125	209	308	349	220	223	182	232	235	284	348	332
Other industrialised Asia[2]	67	66	83	96	82	87	117	141	57	107	91	84	21	69	132	181	196
Russia	52	39	37	49	72	105	126	113	156	93	123	162	146	123	133	121	133
Brazil	-15	-13	3	13	23	30	30	19	-4	-7	-23	-20	-33	-56	-65	-55	-49
Other oil producers	139	85	80	120	187	326	397	370	523	150	329	636	650	574	405	-28	-28
Rest of the world	-51	-48	-38	-44	-65	-87	-116	-177	-255	-156	-169	-212	-258	-272	-272	-261	-280
World[3]	29	-10	58	65	106	169	260	376	289	329	386	469	477	600	593	338	356
Balance of secondary income																	
OECD	26	26	6	58	165	190	202	153	69	184	325	397	370	334	322	326	327
China	-15	-19	-15	-10	-5	-16	-5	8	29	-9	-26	-70	-20	-78	-34	-49	-50
Other industrialised Asia[2]	-17	-12	-16	-12	-21	-33	-25	-24	-26	-29	-46	-48	-72	-81	-80	-91	-96
Russia	-7	-4	-7	-13	-13	-19	-29	-29	-46	-40	-47	-60	-68	-80	-67	-56	-54
Brazil	-18	-20	-18	-19	-21	-26	-27	-29	-41	-34	-39	-47	-35	-40	-40	-17	-17
Other oil producers	-4	-7	-16	-22	-28	-42	-21	-29	-56	-44	-69	-87	-89	-85	-82	-81	-81
Rest of the world	-34	-34	-33	-42	-50	-55	-60	-75	-83	-75	-102	-124	-126	-126	-127	-123	-123
World[3]	-68	-70	-99	-60	27	-1	35	-26	-153	-46	-4	-41	-39	-156	-109	-92	-93
Balance of secondary income																	
OECD	-139	-140	-145	-179	-211	-241	-237	-298	-324	-333	-350	-370	-362	-373	-391	-381	-397
China	6	8	13	17	23	24	28	37	43	32	41	25	3	-9	-30	-32	-32
Other industrialised Asia[2]	16	17	20	28	25	36	43	55	69	68	71	84	91	92	93	95	95
Russia	0	-1	-1	0	-1	-2	-3	-6	-7	-6	-6	-6	-6	-9	-8	-5	-10
Brazil	2	2	2	3	3	4	4	4	4	3	3	3	3	3	2	2	2
Other oil producers	-19	-20	-20	-19	-19	-20	-11	-20	-28	-38	-42	-49	-56	-68	-75	-76	-78
Rest of the world	45	51	58	68	78	89	103	120	138	129	137	149	156	165	169	169	169
World[3]	-89	-82	-73	-83	-102	-110	-72	-108	-104	-144	-146	-164	-171	-198	-241	-229	-251
Current balance																	
OECD	-336	-307	-308	-329	-313	-480	-566	-537	-771	-216	-193	-293	-213	-55	-18	40	44
China	21	17	35	43	69	132	232	353	421	243	238	136	215	148	220	267	250
Other industrialised Asia[2]	47	60	78	104	77	72	125	159	88	136	103	101	18	65	131	170	190
Russia	47	34	29	35	60	84	92	72	104	50	67	97	71	35	59	55	57
Brazil	-24	-23	-8	4	12	14	14	2	-28	-24	-47	-52	-54	-81	-91	-70	-63
Other oil producers	121	60	44	81	144	295	380	340	442	81	230	493	494	405	273	66	96
Rest of the world	-35	-27	-7	-13	-30	-45	-63	-115	-183	-82	-112	-159	-197	-198	-184	-207	-219
World[3]	-160	-185	-136	-73	19	72	214	273	73	188	287	323	335	319	390	322	354

Note: Historical data for the OECD area are aggregates of reported balance-of-payments data of each individual country. Because of various statistical problems as well as a large number of non-reporters among non-OECD countries, trade and current account balances estimated on the basis of these countries' own balance-of-payments records may differ from corresponding estimates shown in this table.

1. National-accounts basis for OECD countries and balance-of-payments basis for the non-OECD regions.
2. Dynamic Asian Economies (Chinese Taipei; Hong Kong, China; Malaysia; Philippines; Singapore; Vietnam and Thailand), India and Indonesia.
3. Reflects statistical errors and asymmetries. Given the very large gross flows of world balance-of-payments transactions, statistical errors and asymmetries easily give rise to world totals (balances) that are significantly different from zero.

Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933223048

Annex Table 53. **Export market growth in goods and services**

Percentage change from previous year

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Australia	6.1	-3.1	6.0	13.6	0.7	6.7	9.8	13.8	9.2	9.8	8.0	4.7	-8.5	15.3	8.7	5.1	4.3	4.3	4.8	5.5
Austria	10.1	7.6	5.8	11.9	2.1	1.3	5.4	9.5	7.6	10.6	8.4	3.0	-11.4	11.9	6.8	0.8	3.1	2.8	3.9	5.2
Belgium	10.1	9.0	7.0	12.3	1.8	1.7	4.2	8.4	7.1	9.4	6.9	2.5	-10.8	10.7	6.0	1.7	2.2	3.2	4.2	5.0
Canada	12.4	9.9	9.1	12.8	-1.9	3.8	4.9	11.3	6.8	7.1	3.6	-1.2	-12.7	12.8	5.9	2.7	1.8	3.8	5.8	6.3
Chile	9.2	1.5	5.5	13.3	0.7	4.0	8.5	12.4	8.5	10.1	8.7	3.9	-8.6	15.7	8.5	3.6	4.5	3.9	4.2	5.4
Czech Republic	10.1	7.9	5.5	11.6	2.7	1.3	5.2	9.2	7.6	11.1	8.1	2.9	-12.1	11.7	6.8	1.1	2.6	3.2	3.9	5.4
Denmark	10.7	8.4	5.6	11.4	1.1	1.6	4.7	8.8	7.5	9.6	7.5	2.4	-11.6	11.3	6.1	2.0	2.2	3.7	4.1	4.9
Estonia	10.0	7.3	2.3	12.2	2.6	3.0	5.7	10.2	9.9	11.0	10.9	4.7	-16.6	11.3	9.2	3.1	1.3	1.2	1.0	4.6
Finland	10.3	6.3	4.3	12.7	1.5	3.0	6.0	10.3	8.6	10.7	9.3	3.6	-13.3	13.0	8.3	3.0	2.6	2.4	2.4	5.0
France	10.3	7.1	5.8	11.6	1.6	2.2	5.2	9.4	7.6	9.6	8.1	2.6	-11.1	10.9	5.7	1.4	2.8	3.0	3.8	5.1
Germany	10.3	7.2	5.2	12.4	1.9	3.0	4.8	9.6	7.9	9.3	8.1	2.9	-11.3	11.3	6.4	1.7	2.8	2.8	3.6	4.9
Greece	10.4	7.3	3.4	10.6	1.5	3.5	6.0	10.2	7.9	9.6	9.9	4.4	-11.5	10.5	7.0	2.4	2.8	2.3	3.7	5.2
Hungary	9.6	7.3	5.1	11.4	2.9	1.9	5.5	9.8	7.7	10.7	8.6	3.1	-12.4	11.6	7.0	1.5	2.4	2.9	3.7	5.4
Iceland	10.2	7.8	6.7	10.6	2.1	1.9	3.3	7.8	6.8	9.2	6.7	1.8	-10.7	9.5	5.0	2.0	2.3	3.1	3.2	4.8
Ireland	10.3	8.0	7.1	12.0	0.4	2.8	3.9	8.8	6.8	7.8	4.6	0.4	-11.1	10.9	5.3	1.6	2.4	2.9	4.5	5.1
Israel	11.2	7.2	7.0	13.1	-1.0	4.2	6.4	11.7	8.1	8.8	6.3	2.3	-11.2	13.6	7.2	3.1	2.5	2.7	4.4	5.7
Italy	10.2	7.6	5.6	12.1	1.7	2.5	5.3	9.8	8.0	9.5	8.9	3.5	-11.3	10.6	6.6	2.0	3.2	2.7	3.8	5.0
Japan	9.8	0.2	6.9	15.4	-0.9	7.3	9.7	14.5	9.1	10.1	8.8	3.7	-8.4	15.8	8.0	4.0	4.6	3.4	4.5	5.8
Korea	9.6	1.6	4.7	14.3	0.8	6.7	10.3	14.8	9.7	10.7	9.6	4.8	-8.3	15.4	8.0	4.8	5.1	4.0	4.6	5.6
Luxembourg	9.7	8.3	6.0	12.4	1.5	1.3	3.6	7.5	7.0	8.9	6.5	1.7	-10.4	10.4	5.8	0.8	2.6	2.9	4.1	4.8
Mexico	13.1	10.5	8.8	12.5	-2.3	3.3	4.8	11.4	6.7	6.9	3.7	-1.3	-13.2	12.9	6.1	2.5	1.6	3.7	5.8	6.4
Netherlands	9.7	8.0	6.1	12.3	1.4	1.5	4.4	8.4	7.2	9.3	7.0	2.2	-11.1	10.9	6.1	1.2	2.4	3.3	4.2	5.1
New Zealand	8.8	2.0	5.3	12.2	-0.5	6.7	8.6	13.5	9.0	9.5	9.5	5.8	-9.2	13.7	8.2	5.2	2.4	2.4	3.3	4.8
Norway	10.1	8.2	6.8	11.8	2.0	2.8	3.6	7.9	7.1	9.4	4.9	1.1	-10.8	10.2	4.8	2.1	1.8	3.5	4.3	4.7
Poland	9.6	7.9	5.5	12.1	2.8	1.9	5.0	9.6	7.7	10.6	8.2	2.6	-12.4	11.4	6.8	1.3	2.4	3.1	3.7	5.1
Portugal	10.9	10.0	7.8	11.1	2.8	2.4	4.7	9.0	7.5	8.8	8.2	0.5	-12.4	9.0	4.1	0.0	1.9	4.3	4.7	5.2
Slovak Republic	10.3	9.0	5.6	12.8	2.8	2.0	5.5	10.5	7.6	10.7	9.2	2.9	-12.1	11.8	6.4	0.6	2.1	4.4	4.7	5.5
Slovenia	9.8	7.9	4.3	11.5	3.1	2.0	5.1	9.4	7.4	10.5	9.2	3.6	-12.4	11.3	7.0	1.1	2.2	2.8	3.5	5.3
Spain	10.0	8.9	5.5	11.8	1.6	1.7	3.6	8.2	6.8	8.9	7.4	2.6	-10.6	10.5	5.2	0.8	2.5	3.1	4.0	4.7
Sweden	10.6	7.7	4.2	11.2	1.5	3.0	4.0	9.3	8.4	10.0	7.6	3.2	-11.5	9.9	6.2	2.4	2.4	2.7	3.4	4.6
Switzerland	9.7	6.7	6.4	12.4	1.1	2.4	5.3	9.6	7.3	9.4	7.2	2.1	-10.9	12.1	6.2	1.8	2.5	3.4	4.4	5.2
Turkey	9.7	6.5	3.7	10.8	4.2	3.2	5.5	10.3	9.2	10.4	11.7	5.9	-10.6	8.7	6.2	3.8	3.1	2.8	3.0	4.6
United Kingdom	11.0	9.5	6.8	13.2	1.5	2.2	3.9	9.3	7.8	8.6	7.8	2.0	-10.6	10.0	5.6	2.5	2.5	4.1	4.4	5.3
United States	10.9	3.7	5.8	12.5	-0.4	3.2	6.1	10.8	8.5	9.2	8.3	4.2	-10.6	14.3	7.5	4.0	3.4	3.1	3.6	5.1
Total OECD	10.4	6.3	6.1	12.6	0.8	3.2	5.6	10.4	7.9	9.3	7.7	2.8	-10.8	12.3	6.7	2.6	3.0	3.3	4.1	5.3
China	8.9	2.2	4.8	13.2	-0.7	3.8	6.1	12.0	8.0	8.7	7.5	3.7	-12.1	13.4	7.0	3.5	2.5	2.7	3.7	5.5
Other industrialised Asia[1]	8.7	0.2	4.3	14.1	-0.2	5.8	8.6	13.8	9.0	9.5	8.5	4.4	-9.1	14.6	7.6	4.4	4.1	3.6	4.4	5.6
Russia	10.3	6.0	5.1	11.8	1.3	3.6	6.0	10.0	8.0	9.7	9.0	3.5	-10.6	11.1	6.9	2.3	2.9	3.1	3.9	5.2
Brazil	11.9	4.9	2.5	10.9	0.4	-0.2	9.3	14.0	10.0	10.5	10.8	5.5	-10.2	14.4	9.3	3.4	4.0	1.9	3.3	5.2
Other oil producers	8.6	2.5	5.6	13.0	0.3	5.0	7.6	12.2	9.1	9.8	8.1	4.8	-10.1	13.4	8.0	4.2	2.5	3.2	4.3	5.5
Rest of the world	10.3	5.6	3.3	11.9	2.0	3.6	6.6	11.5	9.1	10.5	10.3	5.2	-11.6	12.4	7.9	3.5	3.2	2.1	2.8	5.1

Note: Regional aggregates are calculated inclusive of intra-regional trade.

1. Chinese Taipei; Hong Kong, China; Malaysia; Philippines; Singapore; Vietnam; Thailand; India and Indonesia.

Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933223057

Annex Table 54. **Import penetration**

Goods and services import volume as a percentage of total final expenditure, constant prices

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Australia	10.5	10.6	11.0	11.4	10.7	11.3	12.0	13.1	13.6	14.3	15.2	16.2	14.7	16.3	17.4	17.7	17.2	16.6	16.2	16.1
Austria	26.9	27.3	27.4	28.6	29.5	29.3	29.8	30.9	31.5	31.9	32.4	32.2	30.3	32.2	33.0	33.0	33.0	33.5	34.4	35.2
Belgium	37.2	37.8	37.8	40.0	39.5	39.4	39.5	40.2	41.3	41.8	42.4	43.0	41.5	43.2	44.6	45.0	45.4	46.1	46.4	47.2
Brazil	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Canada	21.4	21.6	22.1	22.6	21.5	21.3	21.7	22.6	23.2	23.7	24.4	24.3	22.5	24.2	24.9	25.2	25.1	24.9	25.0	25.5
Chile	20.7	21.0	19.4	20.1	20.2	20.0	20.8	22.4	24.2	25.2	26.8	28.3	25.1	28.6	30.6	30.5	29.9	27.9	27.2	27.3
China	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Colombia	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Czech Republic	23.9	24.8	25.4	27.1	28.5	29.1	30.0	33.8	35.1	36.1	37.6	37.6	36.1	38.8	39.9	40.7	40.9	42.7	43.9	44.7
Denmark	22.4	23.3	23.2	24.8	25.1	26.2	25.9	26.7	28.3	30.2	31.2	32.2	30.5	30.4	31.6	31.9	32.4	32.9	33.2	33.6
Estonia	29.6	30.4	29.3	32.1	33.5	34.9	35.9	37.9	39.5	41.7	42.7	42.3	37.0	40.7	43.5	45.9	46.6	46.1	46.0	46.4
Finland	21.6	21.9	21.8	23.3	23.2	23.7	24.2	24.9	26.4	26.9	27.3	28.6	26.7	27.2	27.9	28.5	28.4	28.2	28.3	28.7
France	16.1	17.2	17.6	19.2	19.3	19.4	19.4	19.9	20.6	21.1	21.7	21.9	20.7	21.8	22.5	22.6	22.8	23.4	24.2	24.7
Germany	18.4	19.5	20.5	21.7	21.6	21.2	22.2	23.3	24.2	25.5	26.1	26.3	25.5	27.0	27.7	27.7	28.3	28.6	29.4	30.2
Greece	18.7	20.3	22.3	25.2	24.2	23.0	22.9	23.1	23.2	24.4	26.1	26.6	23.4	23.4	23.7	23.2	23.3	24.4	25.1	25.4
Hungary	25.9	28.8	30.6	33.9	34.2	35.0	36.2	38.7	39.5	42.0	45.1	46.3	44.0	46.4	47.0	46.5	47.6	49.2	49.9	50.6
Iceland	24.1	26.6	26.5	27.1	24.3	23.7	24.9	25.9	29.7	30.9	28.6	24.1	20.8	21.9	22.6	23.1	22.5	23.7	24.4	25.0
India	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Indonesia	0.2	0.2	0.1	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Ireland	38.8	42.8	43.1	45.5	45.6	44.5	43.0	44.1	44.7	45.2	45.9	45.8	44.7	45.5	44.1	46.0	46.1	47.9	48.8	49.4
Israel	24.7	24.3	26.3	26.8	25.7	25.5	25.2	26.4	26.2	25.8	26.6	26.3	23.3	24.8	26.0	25.9	25.2	25.2	25.4	25.8
Italy	16.5	17.5	17.8	18.8	18.9	19.0	19.1	19.5	20.0	20.9	21.4	21.0	19.7	21.3	21.4	20.4	20.3	20.7	21.0	21.3
Japan	9.8	9.3	9.6	10.4	10.4	10.4	10.6	11.1	11.4	11.7	11.7	11.9	10.8	11.3	12.0	12.3	12.5	13.2	13.7	14.1
Korea	24.9	21.0	23.0	25.0	23.5	24.8	26.2	27.6	28.4	29.8	31.1	31.1	29.6	31.6	33.8	33.8	33.5	33.3	33.2	33.7
Latvia	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Luxembourg	51.9	53.1	54.3	54.8	55.9	55.0	55.9	57.3	57.5	59.1	59.3	61.2	59.0	60.0	61.0	61.9	62.8	62.3	62.6	62.8
Mexico	14.8	16.0	17.3	19.5	19.6	19.8	20.2	20.6	21.4	22.2	22.6	23.0	20.9	23.2	23.8	23.6	24.0	24.6	25.1	25.7
Netherlands	31.9	32.7	33.6	34.8	35.0	35.1	35.3	36.2	36.9	37.8	38.3	38.3	37.2	38.8	39.3	40.3	40.7	41.4	41.3	42.0
New Zealand	19.0	18.8	19.9	19.2	19.2	19.9	20.5	22.3	22.9	22.0	22.9	23.7	20.9	22.3	23.2	23.2	23.9	24.7	25.1	25.3
Norway	17.7	18.4	18.0	17.8	17.7	17.6	17.6	18.3	19.0	20.0	21.0	21.5	20.0	21.1	21.6	21.7	22.3	22.2	22.2	22.2
Poland	21.8	24.0	23.4	24.9	24.0	24.2	25.3	25.8	26.3	28.4	30.0	31.1	27.8	29.7	29.9	29.4	29.4	30.5	31.3	32.2
Portugal	22.9	24.5	25.4	25.7	25.5	25.4	25.5	26.5	26.8	28.0	28.5	29.0	27.5	28.7	27.8	27.3	28.4	29.5	30.2	30.8
Russian Federation	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Slovak Republic	35.1	34.1	33.4	34.5	37.7	37.9	38.5	41.9	43.9	46.4	46.1	45.5	41.6	43.8	45.4	45.7	46.2	46.8	46.7	47.2
Slovenia	32.3	33.7	34.4	34.9	35.1	35.5	36.3	38.4	39.2	40.8	43.0	43.1	39.9	41.3	42.4	42.0	42.6	42.9	43.0	43.7
South Africa	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Spain	17.3	18.6	19.9	20.5	20.5	20.6	21.0	22.1	22.6	23.3	24.1	22.8	20.1	21.2	21.1	20.4	20.5	21.5	22.0	22.6
Sweden	23.2	24.4	24.5	25.7	25.1	24.5	24.7	25.1	25.8	26.5	27.3	28.1	26.2	27.4	28.3	28.5	28.1	28.9	29.4	29.8
Switzerland	30.7	31.1	31.5	32.3	32.2	31.7	31.7	32.0	33.4	33.2	33.6	34.1	33.7	34.9	36.5	35.6	38.0	35.1	34.7	34.7
Turkey	16.9	16.8	16.7	18.6	15.4	17.2	19.6	21.2	21.8	21.8	22.8	22.0	20.1	22.0	22.3	21.8	22.6	22.1	22.4	22.6
United Kingdom	19.7	20.5	21.2	22.1	22.4	22.9	22.7	23.5	24.2	25.4	24.8	24.5	23.4	24.6	24.4	24.9	24.8	24.7	25.1	25.2
United States	10.2	10.8	11.3	12.1	11.7	11.9	12.1	12.9	13.2	13.6	13.7	13.4	12.1	13.1	13.6	13.6	13.4	13.6	14.1	14.6
Total OECD	15.9	16.5	17.1	18.2	18.0	18.1	18.4	19.2	19.8	20.6	21.0	21.1	19.6	20.9	21.5	21.5	21.6	21.9	22.4	22.9

Note: The OECD aggregate is calculated inclusive of intra-regional trade as the sum of import volumes expressed in 2010 $ divided by the sum of total final expenditure expressed in 2010 $.
Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933223065

Annex Table 55. **Quarterly demand and output projections**

Percentage change from previous period, seasonally adjusted at annual rates, volume

	2014	2015	2016	2014	2015	2016					2014	2015	2016
				Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q4 / Q4		
Private consumption															
Canada	2.7	2.1	2.3	2.1	0.4	3.1	2.4	2.4	2.3	2.2	2.2	2.2	2.6	2.1	2.2
France	0.7	1.6	1.7	0.6	3.2	1.2	1.3	1.4	1.7	2.1	2.2	2.3	0.6	1.7	2.1
Germany	1.2	2.3	2.0	2.8	2.4	2.1	2.1	2.0	2.0	1.9	1.8	1.8	2.2	2.2	1.9
Italy	0.3	0.4	1.1	0.3	-0.4	0.6	0.9	1.1	1.2	1.2	1.2	1.2	0.5	0.6	1.2
Japan	-1.3	0.3	2.0	1.5	1.4	2.2	2.1	2.0	2.0	2.0	2.0	2.0	-2.4	1.9	2.0
United Kingdom	2.5	2.5	2.3	2.5	1.9	2.5	2.5	2.4	2.2	2.2	2.1	2.0	3.0	2.3	2.1
United States	2.5	3.0	3.0	4.4	1.8	3.0	3.5	3.2	3.1	2.9	2.7	2.6	2.9	2.9	2.8
Euro area	1.0	1.8	1.8	1.7	2.1	1.7	1.7	1.7	1.8	1.8	1.8	1.8	1.5	1.8	1.8
Total OECD	1.7	2.4	2.6	3.1	1.9	2.5	2.7	2.6	2.6	2.5	2.5	2.4	1.9	2.4	2.5
Public consumption															
Canada	0.2	0.1	1.0	1.0	-0.8	0.0	0.5	0.7	1.2	1.2	1.5	1.5	0.4	0.1	1.3
France	1.5	1.2	0.3	1.9	1.7	0.3	0.3	0.3	0.3	0.3	0.3	0.3	1.6	0.6	0.3
Germany	1.2	2.2	1.8	1.3	2.7	2.1	2.0	1.8	1.7	1.7	1.7	1.7	1.7	2.2	1.7
Italy	-0.9	-0.5	-0.9	1.7	0.4	-2.4	-2.4	-2.0	-1.2	0.0	0.8	2.0	-0.3	-1.6	0.4
Japan	0.3	0.9	0.1	1.1	0.4	0.6	0.7	2.9	1.0	-1.7	-2.9	-1.1	0.6	1.1	-1.2
United Kingdom	1.7	1.3	-0.7	-0.9	2.3	0.5	0.5	0.5	-1.5	-1.5	-1.5	-1.5	2.1	1.0	-1.5
United States	0.4	0.5	0.5	-3.3	0.9	1.4	0.1	0.2	0.5	0.5	0.5	0.6	1.1	0.6	0.5
Euro area	0.6	0.7	0.4	0.6	1.6	0.1	0.2	0.2	0.3	0.6	0.7	0.9	0.8	0.5	0.6
Total OECD	1.0	0.9	0.7	-0.3	1.0	0.9	0.6	1.0	0.8	0.5	0.5	0.8	1.2	0.9	0.6
Business investment															
Canada	-0.1	-4.7	3.4	0.1	-16.3	-6.0	2.0	3.0	4.5	5.0	5.0	5.0	0.3	-4.6	4.9
France	2.2	0.7	2.7	-0.6	0.4	0.7	1.6	2.4	2.8	3.2	3.4	3.6	0.7	1.3	3.2
Germany	4.0	3.4	4.9	1.0	8.5	4.0	4.6	5.0	5.0	5.1	5.1	5.1	2.1	5.5	5.1
Japan	3.9	0.8	4.0	0.0	1.4	5.4	5.4	2.3	4.0	4.4	4.5	3.0	0.6	3.6	4.0
United Kingdom	7.5	4.6	6.4	-3.7	7.0	9.0	6.0	6.1	6.2	6.3	6.4	6.4	3.7	7.0	6.3
United States	6.3	3.3	5.1	4.7	-2.8	2.7	5.2	5.3	5.1	5.3	5.5	5.5	6.2	2.5	5.3
Total investment															
Canada	0.3	-1.5	0.9	1.0	-7.1	-3.8	0.5	1.0	1.3	1.5	1.2	1.3	1.5	-2.4	1.3
France	-1.2	-0.6	1.8	-1.5	-0.8	0.1	1.1	1.6	1.9	2.1	2.3	2.5	-2.1	0.5	2.2
Germany	3.3	2.5	4.3	3.4	6.0	3.3	4.1	4.4	4.4	4.5	4.5	4.5	0.9	4.4	4.5
Italy	-3.2	1.6	1.9	0.7	6.1	1.6	1.8	1.9	1.9	1.9	2.0	2.0	-3.0	2.9	2.0
Japan	2.6	-0.6	0.1	-0.2	0.6	3.2	2.1	-1.7	-1.0	-0.4	1.6	1.8	-1.6	1.0	0.5
United Kingdom	7.8	4.7	6.2	-2.4	6.1	8.1	5.6	5.8	6.1	6.2	6.3	6.4	5.1	6.4	6.2
United States	3.9	3.0	5.4	4.5	-2.7	2.9	4.9	5.3	5.5	5.7	6.2	6.2	4.4	2.5	5.9
Euro area	1.2	2.0	3.5	1.8	3.4	1.9	3.0	3.4	3.6	3.8	3.9	4.0	0.6	2.9	3.8
Total OECD	2.7	2.3	3.9	2.0	1.1	2.7	3.8	3.6	3.9	4.2	4.6	4.7	2.2	2.8	4.3

Note: The adoption of national accounts systems has been proceeding at an uneven pace among OECD member countries, both with respect to variables and the time period covered. As a consequence, there are breaks in many national series. For further information, see table "National Accounts Reporting Systems, base years and latest data updates" at the beginning of the Statistical Annex.

Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933223076

Annex Table 55. **Quarterly demand and output projections *(cont'd)***

Percentage change from previous period, seasonally adjusted at annual rates, volume

	2014	2015	2016	2014 Q4	2015 Q1	2016 Q2	2016 Q3	2016 Q4	2016 Q1	2016 Q2	2016 Q3	2016 Q4	2014 Q4 / Q4	2015 Q4 / Q4	2016 Q4 / Q4
Total domestic demand															
Canada	1.4	1.1	1.7	3.5	-0.9	0.4	1.6	1.7	1.9	1.8	1.8	1.8	1.4	0.7	1.8
France	0.7	1.3	1.3	-0.8	4.0	0.1	1.0	1.2	1.4	1.7	1.7	1.8	0.4	1.6	1.7
Germany	1.3	2.0	2.5	4.2	2.0	2.4	2.5	2.5	2.5	2.4	2.4	2.4	1.3	2.4	2.4
Italy	-0.6	0.4	0.9	-1.7	2.7	0.2	0.4	0.6	0.9	1.1	1.3	1.5	-1.1	1.0	1.2
Japan	-0.1	0.5	1.2	0.0	3.0	2.1	1.8	1.4	1.1	0.7	0.9	1.3	-1.8	2.1	1.0
United Kingdom	3.4	2.8	2.4	-0.5	4.4	3.1	2.6	2.6	2.1	2.2	2.1	2.1	2.4	3.2	2.1
United States	2.5	2.7	3.1	3.2	1.2	2.4	3.3	3.2	3.2	3.1	3.1	3.0	2.9	2.5	3.1
Euro area	0.9	1.5	1.8	1.3	2.5	1.1	1.6	1.7	1.9	2.0	2.0	2.1	0.9	1.8	2.0
Total OECD	1.8	2.2	2.5	2.1	2.3	2.0	2.6	2.5	2.6	2.5	2.6	2.6	1.8	2.3	2.6
Exports of goods and services															
Canada	5.4	3.4	6.9	-1.7	-1.1	4.3	5.4	6.5	7.3	7.5	7.8	7.8	6.4	3.7	7.6
France	2.4	4.9	5.3	10.3	3.5	4.0	4.3	5.1	5.5	5.8	5.9	6.0	4.0	4.2	5.8
Germany	3.7	3.9	5.2	4.1	3.3	3.0	4.1	4.8	5.4	5.8	6.1	6.3	3.5	3.8	5.9
Italy	2.4	3.4	5.1	6.4	0.0	4.5	4.5	4.8	5.0	5.5	5.7	5.7	3.8	3.4	5.5
Japan	8.4	7.2	5.8	13.4	9.9	3.5	4.5	5.0	5.6	6.9	7.1	7.0	11.2	5.7	6.7
United Kingdom	0.6	3.8	3.0	19.9	-1.2	2.0	2.4	3.1	3.1	3.3	3.4	3.5	5.6	1.6	3.3
United States	3.2	1.7	4.9	4.5	-7.6	4.0	5.0	5.0	5.0	5.0	5.0	5.0	2.4	1.5	5.0
Total OECD[1]	3.9	3.9	5.4	6.3	1.0	4.0	4.6	5.2	5.6	5.9	6.1	6.2	4.6	3.7	5.9
Imports of goods and services															
Canada	1.7	2.0	4.8	1.6	-1.5	1.1	3.5	5.0	5.2	5.3	5.4	5.4	2.6	2.0	5.3
France	3.9	5.5	4.2	6.3	9.5	0.9	3.2	3.8	4.5	4.8	5.0	5.2	5.0	4.3	4.9
Germany	3.4	5.4	6.0	7.6	6.0	4.6	5.4	5.9	6.2	6.4	6.5	6.5	3.6	5.5	6.4
Italy	1.6	2.9	3.3	1.2	5.7	1.0	2.2	2.5	3.0	4.0	5.0	5.5	2.0	2.8	4.4
Japan	7.4	4.9	4.6	5.8	12.0	4.9	5.0	4.0	4.6	4.7	4.9	5.4	3.6	6.4	4.9
United Kingdom	2.2	4.8	3.1	6.6	9.5	2.0	2.4	3.2	3.1	3.3	3.4	3.5	3.0	4.2	3.3
United States	4.0	6.4	6.7	10.4	5.6	6.0	8.0	7.0	6.5	6.5	6.5	6.5	5.6	6.6	6.5
Total OECD[1]	3.8	4.8	5.4	7.4	4.9	3.5	4.8	5.1	5.6	5.9	6.1	6.2	4.6	4.6	5.9
GDP															
Canada	2.4	1.5	2.3	2.2	-0.6	1.4	2.1	2.1	2.4	2.4	2.5	2.5	2.5	1.2	2.4
France	0.2	1.1	1.7	0.1	2.2	1.0	1.2	1.5	1.7	1.9	2.0	2.1	0.0	1.5	1.9
Germany	1.6	1.6	2.3	2.8	1.1	1.8	2.1	2.2	2.4	2.4	2.5	2.6	1.5	1.8	2.5
Italy	-0.4	0.6	1.5	-0.1	1.1	1.2	1.2	1.4	1.6	1.7	1.7	1.8	-0.5	1.2	1.7
Japan	-0.1	0.7	1.4	1.1	2.4	1.8	1.7	1.5	1.3	1.1	1.3	1.6	-0.8	1.9	1.3
United Kingdom	2.8	2.4	2.3	2.5	1.2	3.1	2.7	2.6	2.1	2.1	2.1	2.1	3.0	2.4	2.1
United States	2.4	2.0	2.8	2.2	-0.7	2.0	2.8	2.8	2.9	2.8	2.8	2.7	2.4	1.7	2.8
Euro area	0.9	1.4	2.1	1.4	1.6	1.7	1.8	2.0	2.1	2.2	2.2	2.3	0.8	1.8	2.2
Total OECD	1.8	1.9	2.5	2.0	1.0	2.1	2.5	2.6	2.6	2.5	2.6	2.6	1.8	2.1	2.6

Note: The adoption of national accounts systems has been proceeding at an uneven pace among OECD member countries, both with respect to variables and the time period covered. As a consequence, there are breaks in many national series. For further information, see table "National Accounts Reporting Systems, base years and latest data updates" at the beginning of the Statistical Annex.

1. Includes intra-regional trade.

Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933223076

Annex Table 56. **Quarterly price, cost and unemployment projections**

Percentage change from previous period, seasonally adjusted at annual rates

	2014	2015	2016	2014 Q4	2015 Q1	2016 Q2	2016 Q3	2016 Q4	2016 Q1	2016 Q2	2016 Q3	2016 Q4	2014 Q4 / Q4	2015 Q4 / Q4	2016 Q4 / Q4
Consumer price index[1]															
Canada	1.9	1.0	2.0	0.0	-0.1	1.9	1.9	1.9	2.0	2.0	2.1	2.1	1.9	1.4	2.0
France	0.6	0.1	1.1	-0.4	-1.4	1.5	0.9	0.9	1.0	1.1	1.2	1.2	0.3	0.5	1.1
Germany	0.8	0.2	1.8	-0.7	-1.7	1.4	1.5	1.8	1.9	1.9	2.0	2.1	0.4	0.7	2.0
Italy	0.2	0.2	1.3	0.6	-0.7	0.6	1.0	1.2	1.4	1.4	1.6	1.6	0.1	0.5	1.5
Japan	2.7	0.7	1.1	-0.6	-0.3	0.2	0.4	0.8	1.1	1.3	1.5	1.7	2.5	0.3	1.4
United Kingdom	1.5	0.0	1.7	-0.6	-1.7	0.2	1.1	1.5	1.9	2.1	2.1	2.1	0.9	0.3	2.0
United States	1.6	0.0	1.8	-0.9	-3.1	2.0	1.6	1.7	1.8	1.9	2.0	2.1	1.2	0.5	1.9
Euro area	0.4	0.0	1.3	-0.6	-1.5	1.2	1.1	1.3	1.3	1.4	1.5	1.5	0.1	0.5	1.4
GDP deflator															
Canada	1.8	-0.4	1.9	-1.6	-2.1	0.2	1.7	1.8	2.0	2.1	2.1	2.1	1.3	0.4	2.1
France	0.6	1.0	0.8	1.5	1.6	0.5	0.6	0.7	0.8	0.9	0.9	1.0	0.9	0.9	0.9
Germany	1.7	1.8	1.5	1.7	3.2	1.5	1.5	1.5	1.4	1.4	1.5	1.7	1.6	1.9	1.5
Italy	0.8	0.5	0.9	1.1	0.3	0.3	0.5	0.6	1.1	1.1	1.3	1.3	0.6	0.4	1.2
Japan	1.7	2.2	1.1	1.6	5.1	0.4	0.7	1.0	1.2	1.3	1.5	1.7	2.4	1.8	1.4
United Kingdom	1.7	0.4	1.2	1.0	-0.9	0.1	0.7	1.0	1.2	1.4	1.6	1.7	1.4	0.2	1.5
United States	1.5	1.1	1.8	0.2	0.0	2.7	1.5	1.5	1.7	1.8	1.9	2.0	1.3	1.4	1.8
Euro area	0.9	1.1	1.1	0.7	1.7	0.9	1.0	1.1	1.1	1.1	1.2	1.3	0.9	1.2	1.2
Total OECD	1.6	1.3	1.7	0.8	1.1	1.8	1.6	1.5	1.6	1.7	1.8	1.9	1.5	1.5	1.8
Unit labour costs (total economy)															
Canada	1.1	1.9	1.7	-0.1	5.0	1.6	1.7	1.8	1.6	1.7	1.8	1.8	0.8	2.5	1.7
France	1.5	0.7	1.0	1.2	-0.7	1.2	1.3	1.2	1.0	0.9	0.8	0.8	1.6	0.7	0.9
Germany	2.1	2.4	1.4	0.7	4.0	2.1	1.5	1.1	1.3	1.5	1.7	1.6	2.2	2.2	1.5
Italy	1.3	0.6	-0.1	0.8	-1.0	-0.6	2.0	2.0	-2.3	-1.7	1.1	1.0	1.7	0.6	-0.5
Japan	1.6	1.2	1.6	-0.5	-1.9	2.3	0.5	1.1	1.8	2.2	1.9	1.5	2.5	0.5	1.8
United Kingdom	0.4	2.3	2.0	2.0	3.4	0.8	1.4	1.6	2.1	2.3	2.5	2.6	1.2	1.8	2.4
United States	1.8	2.6	1.3	2.5	6.6	2.4	1.1	1.2	1.2	1.4	1.3	1.5	2.3	2.8	1.4
Euro area	1.2	0.8	0.5	0.6	0.2	0.5	0.9	0.8	0.2	0.2	0.8	0.8	1.5	0.6	0.5
Total OECD	1.5	1.6	1.2	1.1	2.5	1.6	1.0	1.1	1.1	1.2	1.4	1.4	1.8	1.5	1.3
Unemployment							Per cent of labour force								
Canada	6.9	6.7	6.5	6.7	6.7	6.8	6.7	6.7	6.6	6.6	6.5	6.5			
France	9.8	10.1	10.0	10.0	10.1	10.2	10.1	10.1	10.1	10.1	10.0	10.0			
Germany	5.0	4.7	4.5	4.9	4.7	4.7	4.7	4.6	4.5	4.5	4.4	4.4			
Italy	12.7	12.7	12.1	13.0	12.9	12.8	12.6	12.4	12.3	12.1	12.0	11.9			
Japan	3.6	3.5	3.3	3.5	3.5	3.5	3.5	3.5	3.4	3.3	3.3	3.3			
United Kingdom	6.2	5.4	5.1	5.7	5.5	5.4	5.3	5.2	5.2	5.1	5.1	5.0			
United States	6.2	5.5	5.2	5.7	5.6	5.6	5.5	5.4	5.3	5.2	5.1	5.1			
Euro area	11.5	11.1	10.5	11.4	11.3	11.2	11.0	10.8	10.7	10.6	10.4	10.3			
Total OECD	7.3	6.9	6.6	7.1	7.0	7.0	6.9	6.8	6.7	6.7	6.6	6.5			

Note: The adoption of national accounts systems has been proceeding at an uneven pace among OECD member countries, both with respect to variables and the time period covered. As a consequence, there are breaks in many national series. For further information, see table "National Accounts Reporting Systems, base years and latest data updates" at the beginning of the Statistical Annex.

1. For the United Kingdom, the euro area countries and the euro area aggregate, the Harmonised Index of Consumer Prices (HICP) is used.

Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933223096

Annex Table 57. **Contributions to changes in real GDP in OECD countries**

	2013	2014	2015	2016		2013	2014	2015	2016
Australia					**France**				
Final domestic demand	0.4	1.2	1.4	2.2	Final domestic demand	0.6	0.5	1.1	1.4
Stockbuilding	-0.4	0.0	0.0	0.0	Stockbuilding	0.2	0.2	0.3	0.0
Net exports	1.6	1.8	1.2	0.7	Net exports	0.0	-0.5	-0.3	0.3
GDP	2.0	2.7	2.3	2.9	GDP	0.7	0.2	1.1	1.7
Austria					**Germany**				
Final domestic demand	-0.3	0.4	0.2	1.4	Final domestic demand	0.6	1.5	2.2	2.3
Stockbuilding	-0.7	-0.2	0.5	-0.1	Stockbuilding	0.1	-0.3	-0.3	0.0
Net exports	0.8	-0.2	-0.3	0.5	Net exports	-0.5	0.3	-0.3	0.0
GDP	0.1	0.4	0.6	1.7	GDP	0.2	1.6	1.6	2.3
Belgium					**Greece**				
Final domestic demand	0.0	1.9	1.0	1.4	Final domestic demand	-3.7	1.2	0.3	1.2
Stockbuilding	-0.8	-1.0	0.1	0.0	Stockbuilding	-1.2	-0.6	-0.5	0.0
Net exports	1.0	0.2	0.5	0.5	Net exports	1.4	0.2	-0.5	1.1
GDP	0.3	1.1	1.3	1.8	GDP	-4.0	0.7	0.1	2.3
Canada					**Hungary**				
Final domestic demand	1.5	1.6	0.9	1.8	Final domestic demand	1.6	3.6	2.4	1.4
Stockbuilding	0.4	-0.2	0.2	0.0	Stockbuilding	-0.5	0.4	-0.3	0.0
Net exports	0.2	1.1	0.4	0.5	Net exports	0.4	-0.4	1.0	0.9
GDP	2.0	2.4	1.5	2.3	GDP	1.7	3.6	3.0	2.2
Chile					**Iceland**				
Final domestic demand	4.6	0.5	2.6	3.0	Final domestic demand	0.3	4.5	4.4	4.2
Stockbuilding	-0.9	-1.1	2.0	0.0	Stockbuilding	0.0	0.0	-0.2	0.0
Net exports	0.6	2.5	0.4	0.7	Net exports	3.7	-3.0	-1.5	-1.4
GDP	4.3	1.8	2.9	3.7	GDP	3.6	1.9	3.7	2.9
Czech Republic					**Ireland**				
Final domestic demand	-0.5	2.4	2.6	2.5	Final domestic demand	-0.5	2.4	2.8	2.8
Stockbuilding	-0.2	-0.4	0.2	-0.6	Stockbuilding	0.3	0.7	0.0	0.0
Net exports	0.0	-0.1	0.2	0.6	Net exports	0.6	2.2	0.8	1.3
GDP	-0.7	2.0	3.1	2.5	GDP	0.2	4.8	3.5	3.3
Denmark					**Israel**				
Final domestic demand	0.0	1.3	1.8	1.8	Final domestic demand	3.0	2.7	3.8	3.4
Stockbuilding	-0.2	0.3	0.0	0.0	Stockbuilding	-0.2	0.4	0.0	0.0
Net exports	-0.3	-0.5	0.1	0.5	Net exports	0.6	-0.4	-0.3	0.0
GDP	-0.5	1.1	1.9	2.3	GDP	3.4	2.8	3.4	3.5
Estonia					**Italy**				
Final domestic demand	3.1	2.1	2.2	3.6	Final domestic demand	-2.8	-0.5	0.4	0.8
Stockbuilding	-2.2	2.7	0.7	0.0	Stockbuilding	0.3	-0.1	-0.1	0.0
Net exports	-0.7	0.0	-0.3	-0.2	Net exports	0.8	0.3	0.3	0.7
GDP	1.6	2.1	2.1	3.3	GDP	-1.7	-0.4	0.6	1.5
Finland					**Japan**				
Final domestic demand	-1.3	-1.1	0.3	1.2	Final domestic demand	2.3	-0.1	0.2	1.2
Stockbuilding	0.0	0.3	0.0	0.0	Stockbuilding	-0.4	0.1	0.3	0.0
Net exports	0.4	0.4	0.2	0.1	Net exports	-0.3	0.0	0.3	0.2
GDP	-1.3	-0.1	0.4	1.3	GDP	1.6	-0.1	0.7	1.4

Note: The adoption of national accounts systems has been proceeding at an uneven pace among OECD member countries, both with respect to variables and the time period covered. As a consequence, there are breaks in many national series. For further information, see table "National Accounts Reporting Systems, base years and latest data updates" at the beginning of the Statistical Annex. Totals may not add up due to rounding and/or statistical discrepancy.

Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933223102

Annex Table 57. **Contributions to changes in real GDP in OECD countries *(cont'd)***

	2013	2014	2015	2016		2013	2014	2015	2016
Korea					**Slovenia**				
Final domestic demand	2.4	2.3	2.8	3.3	Final domestic demand	-2.0	1.0	0.6	0.6
Stockbuilding	-1.0	0.5	0.5	0.0	Stockbuilding	0.1	-0.2	0.2	-0.1
Net exports	1.5	0.5	-0.3	0.4	Net exports	1.0	1.9	1.9	1.4
GDP	2.9	3.3	3.0	3.6	GDP	-1.0	2.6	2.1	1.9
Luxembourg					**Spain**				
Final domestic demand	0.5	2.3	2.0	1.4	Final domestic demand	-2.7	2.1	3.1	2.8
Stockbuilding	-0.1	-0.8	-0.2	0.0	Stockbuilding	0.0	0.2	-0.1	0.0
Net exports	1.6	1.5	0.7	1.5	Net exports	1.4	-0.8	-0.1	0.1
GDP	2.0	3.0	2.7	2.9	GDP	-1.2	1.4	2.9	2.8
Mexico					**Sweden**				
Final domestic demand	1.5	2.1	2.9	3.2	Final domestic demand	1.1	3.1	2.9	2.9
Stockbuilding	-0.1	0.3	-0.1	0.0	Stockbuilding	0.1	0.2	-0.1	0.0
Net exports	-0.3	0.2	0.6	0.3	Net exports	0.2	-1.0	-0.1	0.1
GDP	1.7	2.1	2.9	3.5	GDP	1.3	2.3	2.8	3.0
Netherlands					**Switzerland**				
Final domestic demand	-1.5	0.6	2.0	1.4	Final domestic demand	1.7	1.0	1.4	1.3
Stockbuilding	-0.2	-0.1	-1.0	0.0	Stockbuilding	-2.4	0.5	-2.6	0.0
Net exports	1.1	0.4	1.1	0.8	Net exports	2.6	0.5	1.9	0.4
GDP	-0.7	0.9	2.0	2.2	GDP	1.9	2.0	0.8	1.7
New Zealand					**Turkey**				
Final domestic demand	3.9	4.4	4.1	3.1	Final domestic demand	5.4	1.3	3.0	4.1
Stockbuilding	0.1	0.2	0.0	0.0	Stockbuilding	1.4	0.0	0.6	0.0
Net exports	-1.5	-1.4	-0.7	-0.1	Net exports	-2.9	1.8	-0.8	-0.2
GDP	2.5	3.1	3.4	3.0	GDP	4.2	2.9	3.1	3.9
Norway					**United Kingdom**				
Final domestic demand	2.7	1.5	0.4	1.4	Final domestic demand	1.6	3.3	2.7	2.4
Stockbuilding	0.5	0.2	0.6	-0.1	Stockbuilding	0.2	0.2	0.1	0.0
Net exports	-2.4	0.5	0.3	0.3	Net exports	0.0	-0.5	-0.4	-0.1
GDP	0.7	2.2	1.2	1.5	GDP	1.7	2.8	2.4	2.3
Poland					**United States**				
Final domestic demand	1.2	4.1	3.9	3.8	Final domestic demand	1.9	2.5	2.7	3.2
Stockbuilding	-0.9	0.4	0.1	0.0	Stockbuilding	0.1	0.1	0.1	0.0
Net exports	1.4	-1.3	-0.6	-0.1	Net exports	0.2	-0.2	-0.8	-0.4
GDP	1.7	3.4	3.5	3.7	GDP	2.2	2.4	2.0	2.8
Portugal					**Euro area**				
Final domestic demand	-2.5	1.7	1.5	1.5	Final domestic demand	-0.7	0.9	1.6	1.7
Stockbuilding	0.0	0.4	-0.5	0.0	Stockbuilding	0.0	-0.1	-0.1	0.0
Net exports	0.9	-1.1	0.6	0.3	Net exports	0.4	0.0	0.0	0.3
GDP	-1.6	0.9	1.6	1.8	GDP	-0.3	0.9	1.4	2.1
Slovak Republic					**Total OECD**				
Final domestic demand	-0.6	3.2	3.1	2.7	Final domestic demand	1.3	1.8	2.1	2.5
Stockbuilding	0.5	-0.4	-0.2	0.0	Stockbuilding	0.0	0.0	0.1	0.0
Net exports	1.4	-0.2	0.2	0.7	Net exports	0.2	0.0	-0.2	0.0
GDP	1.4	2.4	3.0	3.4	GDP	1.4	1.8	1.9	2.5

Note: The adoption of national accounts systems has been proceeding at an uneven pace among OECD member countries, both with respect to variables and the time period covered. As a consequence, there are breaks in many national series. For further information, see table "National Accounts Reporting Systems, base years and latest data updates" at the beginning of the Statistical Annex. Totals may not add up due to rounding and/or statistical discrepancy.

Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933223102

Annex Table 58. **Household wealth and indebtedness**

Per cent of nominal disposable income

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Canada												
Net wealth	591.5	599.3	642.9	668.0	675.5	600.3	636.2	660.2	656.4	678.0	716.3	744.7
Net financial wealth	265.8	269.0	297.3	307.0	304.6	236.1	262.2	280.9	271.4	287.0	314.3	332.6
Non-financial assets	325.7	330.3	345.6	361.0	370.9	364.2	374.0	379.3	385.1	391.0	402.0	412.1
Financial assets	384.5	393.6	429.3	441.9	448.0	384.7	419.7	441.3	433.1	450.1	478.0	498.2
of which: Equities	45.7	50.4	64.1	67.0	79.5	59.8	76.0	87.6	78.4	83.1	88.3	89.0
Liabilities	118.7	124.6	132.0	134.9	143.4	148.6	157.5	160.4	161.8	163.1	163.7	165.6
of which: Mortgages	71.8	75.6	79.7	82.0	88.0	91.5	95.9	99.6	101.8	103.3	104.3	106.0
France												
Net wealth	614.2	671.1	743.1	790.4	797.8	724.1	734.2	772.8	779.7	788.3	794.2	..
Net financial wealth	198.3	202.7	212.6	228.1	226.0	192.7	208.4	216.7	213.2	232.3	245.4	..
Non-financial assets	416.0	468.4	530.6	562.3	571.8	531.4	525.8	556.1	566.6	556.0	548.8	..
Financial assets	278.4	283.6	299.9	320.6	321.5	290.3	311.5	322.9	318.8	334.5	348.1	..
of which: Equities	80.4	84.5	91.4	105.5	104.2	73.8	81.0	84.1	78.4	91.1	98.8	..
Liabilities	80.1	80.9	87.3	92.5	95.6	97.6	103.0	106.2	105.7	102.2	102.8	..
of which: Long-term loans	55.2	58.3	63.4	67.7	71.6	74.8	78.7	81.2	83.9	85.3	86.6	..
Germany												
Net wealth	552.5	564.6	578.9	579.9	606.3	594.2	619.2	622.6	616.6	630.1	644.8	..
Net financial wealth	159.8	168.3	181.6	179.9	194.7	180.2	193.7	200.3	195.2	204.9	212.6	..
Non-financial assets	392.7	396.3	397.3	400.0	411.6	414.0	425.5	422.3	421.4	425.2	432.3	..
Financial assets	271.7	278.9	289.8	285.7	297.5	279.9	294.3	298.6	291.0	299.8	306.5	..
of which: Equities	63.8	64.0	71.4	67.6	70.9	50.5	54.0	55.3	49.7	53.1	56.3	..
Liabilities	112.0	110.6	108.2	105.8	102.8	99.7	100.6	98.4	95.8	94.9	93.9	..
of which: Mortgages	72.8	72.4	71.6	71.5	69.6	67.5	68.4	67.0	65.2	65.1	0.0	..
Italy												
Net wealth	759.4	782.4	817.2	834.4	825.1	830.0	848.2	856.1	826.2	0.0	..	..
Net financial wealth	294.1	302.6	314.0	310.1	283.3	280.2	276.5	276.6	253.1	284.8	292.9	..
Non-financial assets	465.4	479.8	503.2	524.3	541.8	549.7	571.7	579.5	573.1	0.0	..	..
Financial assets	345.0	357.1	373.3	374.3	351.7	349.8	350.7	354.3	330.7	364.4	371.3	..
of which: Equities	131.5	133.2	141.8	141.7	121.3	111.9	105.2	108.4	89.3	110.0	119.8	..
Liabilities	50.9	54.5	59.3	64.2	68.4	69.5	74.2	77.8	77.6	79.6	78.4	..
of which: Medium and long-term loans	36.4	40.6	45.6	50.2	54.2	55.4	59.9	63.2	63.0	64.2	63.1	..
Japan												
Net wealth	787.6	780.2	805.8	812.8	808.7	776.8	779.5	772.3	762.9	778.0	808.6	..
Net financial wealth	379.1	385.5	417.2	419.2	408.7	381.4	396.4	399.4	398.6	419.0	450.4	..
Non-financial assets	408.5	394.7	388.5	393.6	400.0	395.4	383.1	372.9	364.3	359.0	358.2	..
Financial assets	513.0	519.1	551.4	554.1	538.1	510.3	524.9	526.9	523.0	542.2	574.9	..
of which: Equities	41.9	48.9	77.3	77.0	55.6	34.5	34.9	36.0	33.3	39.8	57.9	..
Liabilities	133.9	133.6	134.1	134.9	129.4	128.9	128.5	127.4	124.3	123.2	124.5	..
of which: Mortgages[1]	64.1	64.4	64.8	66.0	65.3	65.7	66.2	66.6	67.4	67.7	68.1	..
United Kingdom												
Net wealth	748.9	790.5	809.3	827.5	838.5	732.2	744.1	761.4	789.3	793.5	799.7	0.0
Net financial wealth	324.9	329.0	350.6	339.8	327.9	284.6	300.2	314.8	344.6	348.2	342.1	395.3
Non-financial assets	424.1	461.5	458.7	487.7	510.6	447.6	443.8	446.6	444.7	445.2	457.6	0.0
Financial assets	474.8	492.7	516.7	517.8	510.5	463.4	469.8	475.4	504.9	504.6	496.5	552.3
of which: Equities	69.0	73.1	77.6	79.1	75.6	48.0	64.6	70.6	61.2	54.5	62.4	70.2
Liabilities	150.0	163.7	166.0	177.9	182.6	178.8	169.6	160.6	160.4	156.4	154.4	157.0
of which: Mortgages	105.2	116.8	119.1	127.9	133.5	132.0	127.3	121.3	120.0	118.0	117.1	117.3
United States												
Net wealth	577.8	621.5	657.8	660.9	635.3	514.0	532.3	555.7	539.5	561.3	630.5	638.5
Net financial wealth	319.3	343.7	354.3	367.0	367.1	288.5	315.7	347.9	341.4	358.8	409.1	414.6
Non-financial assets	258.4	277.8	303.5	293.9	268.2	225.5	216.6	207.8	198.1	202.5	221.4	223.9
Financial assets	435.2	466.0	483.7	501.2	504.1	418.4	444.3	470.6	456.4	469.0	519.4	523.6
of which: Equities	112.0	118.8	122.8	141.5	138.0	82.0	103.8	118.4	111.1	123.5	156.3	163.0
Liabilities	115.9	122.2	129.4	134.1	137.0	129.9	128.5	122.6	115.0	110.2	110.3	109.0
of which: Mortgages	83.3	89.1	96.6	100.6	103.0	98.1	97.1	90.1	83.9	78.3	76.8	73.9

Note: Assets and liabilities are amounts outstanding at the end of the period, in per cent of nominal disposable income. For a more detailed description of the variables, see Sources & Methods of the *OECD Economic Outlook (http://www.oecd.org/eco/sources-and-methods.htm).*

1. Fiscal year data.

Source: Canada: Statistics Canada; France: INSEE; Germany: Deutsche Bundesbank, Federal Statistical Office (Destatis); Italy: Banca d'Italia; Japan: Economic Planning Agency; United Kingdom: Office for National Statistics; United States: Federal Reserve.

StatLink http://dx.doi.org/10.1787/888933223127

Annex Table 59. **House prices**

Percentage change from previous year

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Nominal																
Australia	7.3	8.3	11.2	18.7	18.1	6.5	1.5	7.8	11.3	4.4	3.4	12.1	-2.6	-0.7	6.9	9.4
Austria	..	..	0.8	0.6	0.3	-1.9	5.0	4.1	4.7	1.1	3.9	6.2	4.2	12.4	4.7	3.4
Belgium	7.1	5.4	4.8	6.4	6.9	8.7	12.7	11.8	9.3	4.9	-0.3	5.4	3.1	2.5	1.7	0.6
Canada	2.8	4.3	4.7	8.1	8.3	8.2	8.0	11.7	11.6	5.5	-2.8	8.9	5.0	4.8	2.6	4.9
Czech Republic	..	..	..	..	..	..	..	..	..	..	-3.8	-1.8	0.0	-1.4	0.0	2.6
Denmark	6.7	6.5	5.8	3.6	3.2	8.9	17.6	21.6	4.6	-4.5	-12.0	2.8	-2.8	-3.3	2.7	3.4
Estonia	..	..	..	..	..	..	..	49.5	20.8	-9.6	-37.2	5.7	8.5	7.3	10.7	13.7
Finland	7.1	3.9	-1.4	6.0	6.3	8.2	8.1	6.4	5.5	0.6	-0.3	8.7	2.7	1.6	1.6	-0.6
France	6.9	8.7	7.9	8.6	11.9	15.1	15.4	12.0	6.5	0.9	-7.1	5.1	6.0	-0.5	-2.2	-1.8
Germany	0.1	0.5	-0.1	-0.7	-1.4	-1.4	-0.9	0.1	0.9	0.6	0.6	2.8	5.8	6.2	6.2	5.1
Greece	8.9	10.6	14.4	13.9	5.4	2.3	10.9	13.0	6.2	1.5	-4.3	-4.4	-5.5	-11.8	-10.9	-8.0
Hungary	..	..	..	..	..	..	..	..	..	2.4	-5.2	-2.4	-3.4	-3.7	-2.6	3.4
Iceland	..	..	..	..	..	..	..	16.8	9.4	6.2	-9.7	-3.0	4.6	6.9	5.8	8.4
Ireland	21.5	20.6	12.4	7.0	14.2	11.2	8.1	14.5	8.5	-5.9	-18.3	-13.1	-13.2	-12.8	1.4	12.3
Israel	4.2	-4.8	-3.5	5.3	-5.7	-0.7	0.2	0.5	-1.6	7.6	13.7	17.6	10.5	3.2	9.1	6.4
Italy	5.6	8.3	8.2	9.6	10.3	9.9	7.5	6.4	5.2	1.7	-3.7	-1.0	0.7	-2.8	-5.8	-4.2
Japan	-3.1	-3.8	-4.4	-5.3	-6.2	-6.1	-4.9	-3.0	-1.0	0.7	-5.8	1.4	0.1	-0.9	1.6	1.6
Korea	-1.3	1.8	3.9	16.6	9.0	1.1	0.8	6.2	9.0	4.0	0.2	2.4	5.3	2.9	-0.5	1.5
Luxembourg	..	..	..	..	..	..	..	..	..	3.3	-1.1	5.4	3.7	4.2	5.0	4.5
Netherlands	16.4	18.2	11.1	6.4	3.6	4.3	3.9	4.6	4.2	3.0	-3.4	-2.3	-2.4	-6.5	-6.6	0.9
New Zealand	2.2	-0.4	1.8	10.2	19.6	16.9	14.5	10.5	10.9	-4.4	-1.6	1.9	1.2	4.7	9.1	6.5
Norway	11.2	15.7	7.0	4.9	1.7	10.1	8.2	13.7	12.6	-1.1	1.9	8.3	8.0	6.7	4.1	2.7
Portugal	9.0	7.7	5.4	0.6	1.1	0.6	2.3	2.1	0.5	-6.3	-1.4	0.3	-5.1	-6.1	-3.4	1.2
Slovak Republic	..	..	..	..	..	..	..	16.8	23.9	22.1	-11.1	-3.9	-3.1	-1.1	-0.9	-0.8
Slovenia	..	..	..	..	..	..	..	..	..	7.0	-9.5	0.1	2.7	-6.9	-5.2	-6.6
Spain	7.0	7.5	9.5	17.0	20.0	18.3	14.6	10.0	5.5	0.2	-7.6	-3.6	-6.1	-8.9	-6.4	-2.5
Sweden	9.4	11.2	7.9	6.3	6.6	9.3	9.0	12.2	10.4	3.3	1.6	7.8	0.7	-1.4	3.1	7.3
Switzerland	-0.1	0.9	1.9	4.6	3.0	2.4	1.1	2.5	2.1	2.7	5.0	4.7	4.1	3.7	4.7	1.3
Turkey	..	..	..	..	..	..	..	..	..	..	..	..	10.2	11.7	12.7	14.5
United Kingdom	10.9	14.9	8.1	16.2	15.7	11.9	5.5	6.3	10.9	-0.9	-7.8	7.2	-1.0	1.6	3.5	10.0
United States	6.1	6.7	6.9	7.1	7.7	9.5	10.5	6.0	0.1	-7.9	-5.7	-3.0	-4.1	3.2	7.5	5.5
Euro area	5.5	6.5	5.8	6.6	7.2	7.5	7.4	6.6	4.6	1.1	-3.8	1.1	1.7	-0.6	-1.0	0.3
Total OECD	4.7	5.5	5.0	6.4	6.4	6.6	6.6	5.6	3.4	-2.0	-4.0	0.9	-0.2	1.8	3.7	4.0

Source: OECD, House prices database.

StatLink http://dx.doi.org/10.1787/888933223132

Annex Table 59. **House prices *(cont'd)***

Percentage change from previous year

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Real[1]																
Australia	6.2	4.7	7.5	15.5	15.5	5.0	-0.7	4.0	7.9	1.2	0.8	9.7	-5.1	-3.2	4.1	7.0
Austria	..	..	-1.5	-0.4	-1.2	-3.7	2.4	2.0	2.1	-1.1	3.4	4.4	0.9	9.8	2.4	1.7
Belgium	6.4	2.2	2.8	5.1	5.3	6.3	9.8	8.5	6.1	1.6	0.2	3.6	0.0	0.3	0.5	-0.2
Canada	1.2	2.0	2.7	6.0	6.6	6.5	6.2	10.2	9.8	3.8	-3.0	7.5	2.8	3.4	1.3	3.0
Czech Republic	..	..	..	..	..	..	..	..	..	..	-4.7	-2.3	-1.6	-3.9	-1.0	2.8
Denmark	4.8	3.6	3.4	1.7	1.9	7.7	15.6	19.0	2.8	-7.2	-13.1	0.3	-5.0	-5.7	1.6	2.7
Estonia	..	..	..	..	..	..	..	40.9	12.3	-16.6	-37.1	2.1	3.1	3.7	7.3	12.9
Finland	5.5	0.8	-4.0	4.3	5.3	7.8	7.0	5.0	3.5	-2.7	-2.1	7.1	-0.5	-1.2	-0.9	-2.1
France	7.4	6.3	5.8	7.7	10.0	12.7	13.3	9.7	4.3	-1.8	-5.8	4.0	4.1	-1.9	-3.0	-1.8
Germany	-0.3	-0.3	-1.7	-1.9	-3.2	-2.3	-2.5	-1.0	-0.7	-1.0	1.0	0.7	3.8	4.7	4.9	4.1
Greece	6.2	6.9	11.2	11.3	2.3	-0.6	7.9	9.3	2.7	-2.7	-5.2	-7.7	-7.8	-12.5	-9.5	-6.0
Hungary	..	..	..	..	..	..	..	..	..	-2.9	-8.9	-5.9	-6.8	-9.5	-5.0	2.6
Iceland	..	..	..	..	..	..	..	8.2	4.6	-6.4	-18.2	-5.1	1.0	1.2	2.3	5.6
Ireland	20.7	15.1	7.5	1.6	9.8	9.3	6.4	11.7	5.4	-7.4	-12.7	-11.2	-15.1	-13.8	0.0	10.5
Israel	-1.2	-6.5	-4.2	1.0	-6.0	-1.1	-1.3	-2.2	-2.6	1.7	11.9	13.9	7.1	1.1	6.8	5.9
Italy	3.6	4.7	5.4	6.5	7.2	7.3	5.3	3.7	2.8	-1.4	-3.3	-2.4	-2.1	-5.3	-6.8	-4.3
Japan	-2.4	-3.1	-3.4	-4.0	-5.2	-5.4	-4.3	-2.7	-0.3	0.4	-3.4	3.2	0.9	0.0	1.9	-0.4
Korea	-3.8	-2.5	-0.5	13.1	5.6	-2.0	-1.4	4.5	6.9	-0.5	-2.3	-0.1	1.5	0.6	-1.4	0.4
Luxembourg	..	..	..	..	..	..	..	..	..	1.1	-1.7	4.4	1.1	2.3	4.7	4.7
Netherlands	14.5	14.3	7.6	3.0	1.6	2.4	2.5	2.0	2.0	0.8	-2.4	-3.2	-4.4	-7.7	-8.3	-0.4
New Zealand	1.4	-2.4	-0.4	8.0	19.0	15.4	12.4	7.3	9.3	-7.6	-4.1	0.7	-1.7	4.0	8.5	5.6
Norway	9.0	12.5	4.8	3.5	-1.1	8.8	7.0	11.6	11.2	-4.4	-0.6	6.0	6.8	5.6	1.2	0.4
Portugal	6.3	3.9	1.6	-2.8	-2.4	-1.6	-1.5	-1.4	-2.8	-8.9	0.5	-1.5	-6.7	-7.8	-4.4	0.5
Slovak Republic	..	..	..	..	..	..	..	11.3	20.7	16.9	-11.2	-4.8	-6.7	-4.4	-2.2	-0.7
Slovenia	..	..	..	..	..	..	..	..	..	1.3	-10.2	-1.3	1.0	-8.2	-5.8	-6.9
Spain	4.8	3.3	5.8	13.8	16.3	14.2	10.9	6.2	2.1	-3.2	-6.8	-5.5	-8.6	-11.0	-7.3	-2.4
Sweden	7.8	10.1	5.6	4.8	4.9	8.5	7.8	10.9	8.8	0.2	-0.7	6.3	-0.9	-1.9	2.4	6.4
Switzerland	-0.5	-0.5	1.3	5.0	2.1	1.6	0.0	1.2	0.7	0.7	5.6	4.2	4.1	4.7	5.1	1.4
Turkey	..	..	..	..	..	..	..	..	..	..	..	..	1.2	3.2	6.2	7.0
United Kingdom	9.9	14.0	7.6	15.0	14.1	9.5	3.0	3.6	7.9	-4.6	-9.3	2.7	-4.2	-0.4	1.6	8.3
United States	4.6	4.1	4.9	5.7	5.6	6.9	7.4	3.2	-2.3	-10.7	-5.7	-4.6	-6.4	1.4	6.2	4.1
Euro area	4.5	3.9	3.3	4.5	4.8	5.4	5.2	4.2	2.2	-1.5	-3.1	-0.5	-0.6	-2.4	-2.1	-0.2
Total OECD	3.6	3.4	3.2	5.0	4.6	4.7	4.5	3.3	1.2	-4.7	-4.1	-0.7	-2.5	0.0	2.3	2.5

1. Nominal house prices deflated by the private consumption deflator.

Source: OECD, House prices database.

StatLink http://dx.doi.org/10.1787/888933223132

Annex Table 60. **House price ratios**

Long-term average = 100

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Price-to-rent ratio																
Australia	86.8	91.2	98.4	114.0	132.2	137.4	136.4	142.4	150.3	145.7	141.0	151.6	141.2	134.6	139.2	148.6
Austria	..	102.5	99.7	98.6	97.1	93.0	94.9	96.5	97.1	95.6	95.2	98.3	99.7	108.7	111.1	112.1
Belgium	91.0	94.5	97.2	100.9	105.5	112.5	124.4	135.1	144.8	148.9	145.4	151.5	154.4	155.9	156.5	154.1
Canada	82.6	85.2	87.8	93.1	99.3	106.4	113.9	126.1	138.5	143.6	137.5	147.9	153.6	158.7	160.2	165.7
Denmark	98.0	101.7	104.8	105.8	106.4	112.7	129.3	154.1	157.9	147.1	125.7	125.6	118.5	111.5	112.0	113.6
Finland	101.4	99.5	94.6	100.8	107.8	115.5	121.4	123.7	123.1	118.7	122.7	132.6	130.6	130.7	133.5	131.5
France	74.8	81.5	87.6	92.8	101.0	113.1	126.0	136.4	141.0	139.2	126.7	131.0	137.2	134.4	129.4	125.8
Germany	89.1	88.5	87.5	85.7	83.6	81.9	80.3	79.5	79.4	78.9	78.5	79.8	83.3	87.5	91.7	95.0
Greece	85.4	90.9	100.0	108.5	108.7	105.6	112.3	121.6	123.5	120.7	111.4	104.0	97.5	87.8	83.9	83.6
Ireland	135.6	146.4	135.9	148.8	180.4	195.3	194.3	181.5	149.8	125.5	153.9	130.8	99.4	89.2	91.1	103.1
Israel	107.3	104.4	94.8	88.9	90.5	93.8	94.2	92.7	92.6	98.1	95.5	104.3	108.4	106.5	109.2	109.9
Italy	78.1	82.5	87.3	93.5	100.3	107.3	112.9	117.2	120.5	119.7	111.5	108.2	107.3	102.1	94.9	91.3
Japan	102.4	98.4	93.9	88.9	83.5	78.6	74.8	72.6	72.0	72.4	68.3	69.6	69.8	69.4	70.8	71.9
Korea	80.9	82.5	82.6	91.6	96.4	95.3	95.8	100.8	107.7	109.0	107.3	107.9	109.3	107.8	104.0	103.0
Netherlands	106.5	122.6	132.7	137.3	138.0	139.6	141.5	144.6	147.7	149.6	141.2	134.9	129.5	118.4	106.6	103.0
New Zealand	80.1	79.6	89.5	96.7	112.2	127.2	142.1	153.6	165.6	153.6	148.9	149.6	148.7	152.2	162.5	169.4
Norway	92.8	103.3	106.4	107.0	104.6	113.0	119.8	133.2	147.2	141.4	139.2	146.6	154.8	162.1	163.6	163.7
Portugal	107.8	112.1	113.7	109.4	107.0	104.5	103.7	103.0	100.9	92.1	88.4	86.9	81.6	75.2	71.8	69.9
Spain	87.6	90.7	95.3	106.8	122.9	139.7	153.5	161.9	163.6	157.4	141.1	134.4	124.9	113.2	106.1	104.2
Sweden	74.5	82.5	87.5	91.1	94.6	100.3	106.8	118.8	129.1	130.1	128.0	135.8	133.7	128.5	129.6	136.7
Switzerland	81.1	80.6	79.9	82.7	85.0	85.9	85.7	86.1	85.9	86.1	88.2	91.3	93.8	96.8	100.8	100.9
United Kingdom	79.3	88.2	92.4	104.5	119.1	130.4	132.9	137.0	147.3	141.2	127.8	135.2	130.7	128.5	129.8	139.5
United States	94.5	97.7	100.7	103.9	109.3	116.4	125.4	128.4	124.1	111.4	103.9	101.2	95.7	96.8	101.7	104.4
Euro area	87.5	91.4	94.6	98.5	103.2	108.2	113.3	117.3	119.0	117.3	111.3	110.8	110.9	108.7	106.5	105.9
Total of the above	91.4	94.3	96.5	99.9	104.2	108.7	113.5	116.7	117.3	112.2	106.0	106.1	104.2	104.1	106.0	108.0
Price-to-income ratio																
Australia	91.6	94.2	97.0	112.1	126.4	125.9	121.4	124.6	126.6	124.1	121.9	132.0	121.4	117.4	122.5	131.0
Austria	..	101.9	101.4	100.6	97.9	92.9	92.1	91.9	92.2	90.9	94.5	99.3	101.6	109.9	115.5	117.3
Belgium	91.4	91.8	92.2	97.8	103.5	110.6	121.0	129.2	135.5	135.9	134.6	141.9	144.1	145.9	148.0	148.3
Canada	89.3	88.2	89.4	93.5	98.1	102.0	106.2	111.3	119.2	120.6	116.3	123.6	125.4	127.6	127.1	130.0
Denmark	103.6	107.3	107.5	106.3	106.2	111.8	126.2	147.2	153.3	144.5	122.9	119.4	112.8	107.3	111.1	115.8
Finland	96.0	95.7	90.2	91.5	92.9	96.2	101.9	104.8	105.2	100.7	97.9	102.4	101.4	100.9	100.6	98.4
France	78.0	80.7	83.3	87.5	96.3	107.0	121.3	131.1	133.6	131.8	122.7	126.5	132.1	131.3	128.1	124.3
Germany	94.4	93.6	89.5	88.7	85.2	82.7	80.4	78.7	78.1	76.8	77.9	77.8	79.3	82.8	86.7	89.1
Greece	88.0	94.6	101.7	110.2	107.7	104.2	107.5	112.2	108.0	107.8	103.0	106.3	108.7	106.2	95.6	84.8
Ireland	100.1	110.3	109.0	121.7	132.4	139.9	141.2	155.3	159.3	140.5	123.5	112.9	100.3	87.4	88.1	96.5
Italy	81.9	85.3	88.2	93.3	99.6	105.6	111.8	115.4	118.0	119.0	118.7	118.4	117.0	117.5	110.9	106.4
Japan	99.4	97.2	95.7	91.1	86.5	81.1	77.0	74.4	73.5	74.6	71.0	71.9	71.9	71.2	71.9	72.0
Korea	67.2	65.3	64.4	70.5	72.3	68.4	65.8	67.0	70.0	69.2	67.1	65.1	65.3	65.0	61.9	60.8
Netherlands	106.0	119.8	121.5	125.8	131.2	135.8	140.2	143.3	142.9	145.0	140.1	140.0	133.2	125.9	116.8	116.2
New Zealand	86.7	88.5	85.0	93.1	103.4	114.9	126.8	131.7	138.7	131.3	124.9	121.9	119.8	120.5	129.4	130.8
Norway	91.3	99.6	104.9	101.2	96.1	102.0	101.9	122.5	129.4	120.5	116.5	121.6	125.9	130.4	130.0	123.4
Portugal	109.8	112.2	113.0	109.2	108.7	104.3	102.2	101.0	96.9	87.6	86.8	84.7	83.6	81.1	79.6	79.5
Spain	87.2	86.3	89.3	100.3	114.4	129.8	143.2	151.8	157.2	151.9	136.6	136.3	125.7	118.1	110.2	105.6
Sweden	89.1	93.3	92.8	94.6	98.9	106.0	112.2	120.2	124.9	123.5	120.6	127.2	122.0	116.2	117.4	122.7
Switzerland	78.4	76.2	75.5	80.1	82.9	83.7	82.8	81.6	79.8	80.5	84.4	87.8	90.9	93.8	96.7	96.1
United Kingdom	78.7	84.5	87.4	98.9	110.6	121.1	123.3	127.0	135.2	129.4	115.1	118.0	116.2	114.6	117.4	127.8
United States	93.7	93.9	96.8	100.2	103.8	108.1	115.4	115.7	111.8	99.3	94.8	90.3	83.0	82.3	88.3	90.3
Euro area	89.7	91.8	92.4	96.1	100.2	104.6	109.7	113.1	114.5	112.9	109.3	110.2	110.1	110.1	108.3	107.1
Total OECD	91.4	92.2	93.6	97.0	100.3	103.2	106.9	108.5	108.3	102.8	98.4	97.5	94.2	93.6	96.0	97.2

Source: OECD, House prices database.

StatLink http://dx.doi.org/10.1787/888933223150

Annex Table 61. **Maastricht definition of general government gross public debt**

As a percentage of nominal GDP

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Austria	66.5	66.3	65.5	64.9	68.4	67.0	64.8	68.6	79.8	82.5	82.1	81.4	80.9	84.5	85.7	85.9
Belgium	107.8	104.9	101.2	96.6	94.7	90.7	86.9	92.2	99.2	99.5	102.0	103.9	104.4	106.6	107.2	105.7
Czech Republic	22.8	25.9	28.1	28.5	28.0	27.9	27.8	28.7	34.0	38.2	39.9	44.6	45.0	42.6	40.6	40.4
Denmark	48.5	49.1	46.2	44.2	37.4	31.5	27.3	33.4	40.4	42.9	46.4	45.6	45.0	45.2	40.7	39.8
Estonia	4.8	5.7	5.6	5.1	4.5	4.4	3.7	4.5	7.0	6.5	6.0	9.7	10.1	10.6	9.2	7.7
Finland	41.0	40.2	42.8	42.7	40.0	38.2	34.0	32.7	41.7	47.1	48.5	52.9	55.8	59.3	61.6	64.1
France	58.1	60.0	64.2	65.8	67.3	64.4	64.4	68.1	79.0	81.7	85.2	89.6	92.2	95.5	97.0	97.9
Germany	57.7	59.3	63.1	65.1	67.2	66.5	63.6	65.2	72.7	80.7	78.0	79.2	77.0	74.6	71.0	67.2
Greece	99.8	98.1	94.1	94.8	98.1	102.9	102.8	108.8	126.2	145.3	171.2	156.8	175.1	177.4	180.0	178.1
Hungary	51.5	54.7	57.5	58.7	60.8	64.5	65.4	71.7	77.8	80.6	80.7	78.2	76.8	76.5	76.2	75.0
Ireland	33.4	30.7	30.1	28.3	26.2	23.8	24.0	42.6	62.3	87.5	111.2	121.8	123.2	109.7	107.7	104.6
Italy	104.7	101.9	100.4	100.2	101.9	102.4	99.7	102.4	112.5	115.4	116.4	123.2	128.6	132.0	133.2	132.0
Luxembourg	6.6	6.5	6.4	6.5	6.3	7.0	7.2	14.4	15.5	19.7	18.5	21.4	23.6	25.1	27.0	28.5
Netherlands	48.8	48.3	49.4	50.0	49.4	44.9	42.7	54.8	56.5	59.1	61.3	66.5	68.6	68.8	68.6	68.2
Poland	..	..	..	..	..	..	..	..	..	53.6	54.8	54.4	55.7	50.2	51.2	51.2
Portugal	53.4	56.2	58.7	62.0	67.4	69.2	68.4	71.7	83.6	96.2	111.1	125.8	129.7	130.2	127.7	124.2
Slovak Republic	48.3	42.8	41.5	40.6	33.8	30.7	29.8	28.2	36.0	40.9	43.4	52.1	54.6	53.6	53.5	53.5
Slovenia	26.1	27.3	26.7	26.8	26.3	26.0	22.7	21.6	34.5	38.2	46.5	53.7	70.3	80.9	83.0	85.1
Spain	54.2	51.3	47.6	45.3	42.3	38.9	35.5	39.4	52.7	60.1	69.2	84.4	92.1	97.7	98.9	99.1
Sweden	51.7	49.8	48.9	47.9	48.3	43.1	38.2	36.8	40.3	36.9	36.2	36.5	38.7	43.8	44.3	43.0
United Kingdom	36.2	35.9	37.3	40.2	41.6	42.5	43.6	51.8	65.8	76.4	81.8	85.8	87.3	89.3	91.3	91.1
Euro area	67.0	66.9	68.1	68.6	69.3	67.6	65.2	69.0	78.7	84.3	86.8	91.4	93.5	94.6	94.1	92.7

Note: For the period before 2014, gross debt figures are provided by Eurostat, the Statistical Office of the European Communities, unless more recent data are available, while GDP figures are provided by national authorities.This explains why these ratios can differ significantly from the ones published by Eurostat. For the projection period, debt ratios are in line with the OECD projections for general government gross financial liabilities and GDP.

Source: OECD Economic Outlook 97 database.

StatLink http://dx.doi.org/10.1787/888933223160

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(12 2015 01 1) ISBN 978-92-64-22020-1 – 2015

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Volume 2015/1
No. 97, June

OECD*publishing*
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ISBN 978-92-64-22020-1
12 2015 01 1 P