02

GLOBAL ECONOMY: RISK OF OVERBURDENING MONETARY POLICY

This is a translated version of the original German-language chapter "Internationale Konjunktur: Geldpolitik nicht überfordern", which is the sole authoritative text. Please cite the original German-language chapter if any reference is made to this text.

SUMMARY

While the **global economy** is currently only experiencing **subdued growth**, the growth rates are not especially low by long-term standards. Following the strong growth rates and exaggerations prior to the global financial crisis in 2008, growth appears to be rather normalising again. Nonetheless, global development is characterised by **three problematic issues**: productivity growth is low, investment activity is weak and world trade is growing at a far slower pace than before the crisis.

The economic recovery continued in **advanced economies** in 2016. While the surprise Brexit vote in the United Kingdom was temporarily cause for increased uncertainty on the financial markets, the effects on the real economy have been limited so far. The outlook has brightened again somewhat for **emerging market economies**. Despite the turmoil at the start of the year, China has managed to transform its economy without any major slowdowns in growth so far.

The fact that growth is largely driven by monetary policy is problematic. **Monetary policy stimuli are strong**, particularly in the major advanced economies. While the Federal Reserve is delaying the tightening of monetary policy in the United States, the Bank of Japan and the European Central Bank have opted for a policy of negative interest rates and the expansion of their bond purchase programmes. Even though monetary policy can manage to deliver short-term increases in growth with this approach, it is not up to the challenge of improving growth rates on the long term.

Therefore, it is doubtful whether the euro area economic recovery, on the back of monetary policy stimuli, is self-sustaining. True, GDP growth rates are roughly twice as high as potential growth, with underutilisation declining steadily since 2013. Also, unemployment is decreasing and employment is increasing. However, the **processes of structural adjustment** following the crisis, particularly debt reduction, are not **yet completed**. In addition, essential reforms still need to be implemented. Fiscal consolidation has been largely discontinued and political ambition behind reforms to boost efficiency has waned.

The future development of the global economy currently faces **numerous risks**, including continued geopolitical risks, particularly a critical culmination of political uncertainty in Europe, the resurgence of the euro crisis, the unanticipated deterioration of the economic situation in China and possible turmoil on the international financial markets.

Overall, the German Council of Economic Experts expects the **moderate growth** of the global economy to **continue**. It forecasts world GDP growth of 2.5% and 2.8% respectively for 2016 and 2017. After the temporary soft patch in the first half of 2016, the United States is likely to return to stronger growth. The recovery will likely continue in Japan and the euro area. However, the pace of growth will probably slacken again as the effects of monetary policy and of the fall in oil prices on real income peter out. With oil prices creeping back up, inflation will also increase again. Once again, no abrupt slowdown in China's economic performance is expected, and the process of stabilisation that has begun in the remaining emerging market economies is likely to continue.

I. GLOBAL ECONOMY: SUBDUED GROWTH WITH NUMEROUS RISKS

115. The turmoil on international financial markets at the start of 2016 and the unexpected outcome of the UK referendum in the summer of 2016 have not had a lasting dampening effect on the pace of expansion of the global economy. It remains in a **moderate phase of growth**. While the momentum slowed in major advanced economies owing to weaker development in the United States, production capacity utilisation continued to increase. At the same time, the situation in emerging market economies stabilised, due in large part to the strengthening of the Chinese economy. The stabilisation of the oil price is likely to have had a positive effect in commodity-exporting emerging economies.
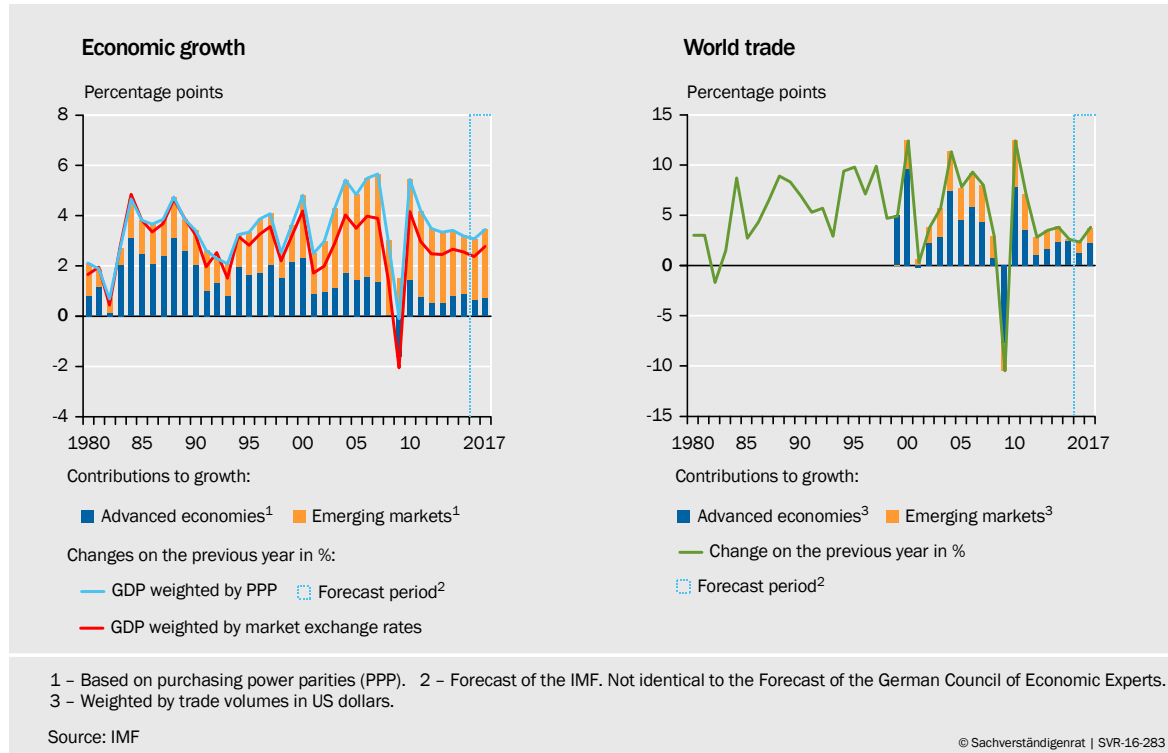
1. Economic situation

116. In recent years, virtually every organisation had to continuously revise downwards their growth forecasts for the global economy. In reality, growth mostly lagged behind forecasts and the global economy was unable to regain its pre-crisis momentum. While **global GDP at market exchange rates** still grew on average by around 3 % per year in the period from 1980 to 2008, growth has stood at only 2.6 % since 2011. ↘ CHART 6 LEFT At the same time, the rate of expansion of global trade has fallen sharply. ↘ CHART 6 RIGHT

117. This situation is put in perspective, however, when the difference in purchasing power between economies is factored in. The growth rates of **global GDP in purchasing power parity terms** have been roughly around the long-term average since 2011. This can be explained by the higher weight of the economic performance of emerging markets in purchasing power parity terms. While emerging markets have a roughly 40 % share in the global economy in terms of market exchange rates, they have a roughly 60 % share in purchasing power parity terms. Their higher rate of growth compensates for the lower growth contributions of advanced economies. ↘ CHART 6 LEFT Added to this, the working population is growing at a slower pace than in previous years. Thus, **GDP growth per person of working age** is currently even slightly above the long-term average (BIS, 2016).

Overall, when growth is compared over a multi-year period, it is clear that the pace of growth has slowed in advanced economies in particular. To some extent, however, this can be considered a normalisation following the extraordinarily strong and unsustainable growth rates in the period between 2004 and 2007. Ultimately, enormous debt and misguided investments were an integral part of the boom experienced before the global financial crisis hit.

118. Advanced economies are in a **period of economic recovery**. The level of underutilisation on the product and labour markets continued to decline in most **advanced economies** in the first half of the year 2016. In the euro area and

↘ CHART 6

Development of the global economy

Economic growth

Percentage points

World trade

Percentage points

Contributions to growth:

■ Advanced economies[1]   ■ Emerging markets[1]

Changes on the previous year in %:

— GDP weighted by PPP   ⬚ Forecast period[2]

— GDP weighted by market exchange rates

Contributions to growth:

■ Advanced economies[3]   ■ Emerging markets[3]

— Change on the previous year in %

⬚ Forecast period[2]

1 – Based on purchasing power parities (PPP).   2 – Forecast of the IMF. Not identical to the Forecast of the German Council of Economic Experts.
3 – Weighted by trade volumes in US dollars.

Source: IMF

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Japan, in particular, economic output increased at a faster pace than estimated potential output. In contrast, growth in the United States lagged slightly behind expectations in the first half of 2016. ↘ ITEM 131 Benchmarked against the second half of 2015, this reduced the annualised GDP growth rate in advanced economies in the first half to 1.4 %. Capacity utilisation in the US economy is likely to be close to normal, however, and the labour market is in good shape. In most advanced economies, increasing levels of employment - with the resulting income gains - contribute to the economic recovery being largely driven by the domestic economy.

119. The economic situation in **emerging market economies** stabilised in the first half of 2016. Despite the turbulences at the start of the year, the Chinese economy showed robust expansion. In addition, the pace of growth in India remained high. With rates close to 7.5 %, India is experiencing the strongest growth in economic performance of all the major emerging market economies. A likely contributing factor here is that India - in contrast to many other emerging economies - is an importer of commodities. By comparison, the situation continues to be less favourable in the other major emerging market economies. However, there are at least signs of an **end to the recessions** in Russia and Latin America, with the stabilisation of commodity prices likely playing a decisive role here.

Neither Russia nor the emerging market economies of Latin America can, however, expect to return to the high growth rates of the past. This is due to the major structural problems which Russia and the Latin American economies are facing (2015 Annual Report Items 119 ff.) and the negative impact of the downward trend in capital inflows to emerging markets since 2011. On balance, more capi-

tal has exited emerging markets than entered them since the first quarter of 2014 (ECB, 2016a).

120. All things considered, the global economy is in a period of moderate recovery in autumn 2016. However, a return to the high pre-crisis growth rates does not appear likely for a number of reasons. Growth up to 2008 was primarily debt-financed and therefore is the wrong benchmark. In addition, the current **growth in productivity** is predominantly lower than in the 1990s and 2000s. This is also associated with comparatively **low levels of investment**. The weak development of productivity in the major advanced economies is particularly striking (2015 Annual Report Items 593 ff.). In the 1990s, the boom of information and communication technologies (ICT) in the United States was probably a strong driver of productivity. Globalisation and the deepening of value chains may also have encouraged productivity. Today's more protectionist tendencies and the lack of ambition to implement reforms that would boost efficiency mean that no major progress can be expected in this area for the time being.

121. On the one hand, the **lower rates of growth in global trade** can be explained by the weaker growth in the global economy. ⬂ BOX 5 On the other hand, the regional shift of economic growth to less open emerging economies, structural adjustments by large economies such as China, and a provisional end to the deepening of the international division of labour also play a role. While protectionism in the wake of the global crisis did not rise to the same extent as it did following the Great Depression of 1929, many countries are showing a tendency to shield their economies from competition from abroad.

⬂ BOX 5

Weak growth in global trade

In the years since the global crisis of 2009, **global trade has grown at a slower pace** than in the two preceding decades. While global trade increased on average by 6.7 % per annum in the period spanning 1990 to 2008, average growth between 2011 and 2015 only stood at 3.9 %. This is attributable, on the one hand, to slower global economic growth (2.6 % instead of 2.9 %). On the other hand, there has been a decline in the elasticity of global trade in relation to economic performance, i.e. the ratio of the growth rate of global trade to the growth rate of GDP (2014 Annual Report Item 101; 2015 Annual Report Items 126 ff.). The Elasticity dropped from an average of 2.2 to 1.5 in the periods indicated ⬂ CHART 7 LEFT. This observation has triggered a broad discussion on the causes and on whether this should be seen as a cyclical or a structural phenomenon.
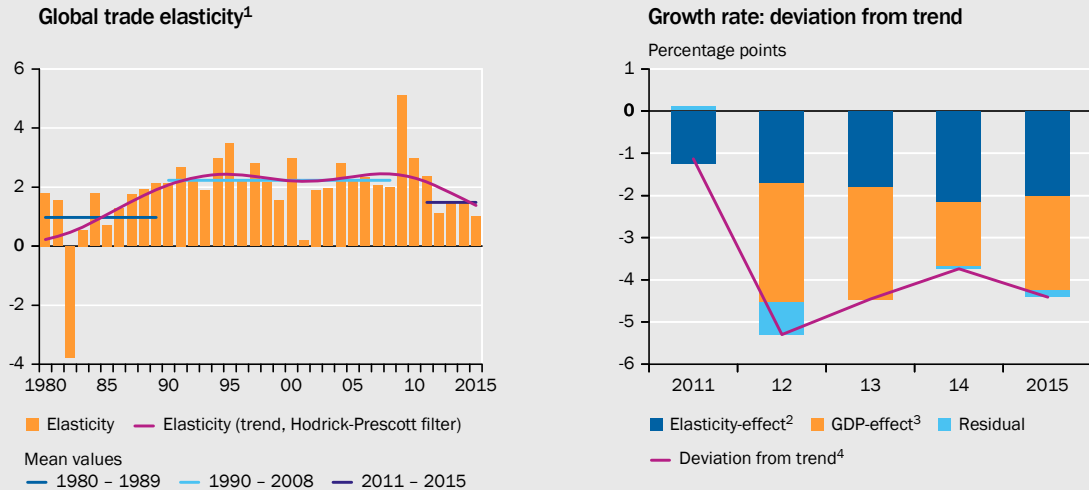
Using a simple econometric estimation, the decline in the rates of growth in global trade can be divided into an elasticity effect and an effect that derives from weaker GDP growth. Here, quarterly data are used to estimate a linear equation that explains the growth in world trade through the growth in global production. **Changes in elasticity** are factored in by a dummy variable. According to this estimate, around 44 % of the gap between the annual growth rate of global trade and its pre-crisis trend in the 2012-2015 period is attributable to the change in elasticity. ⬂ CHART 7 RIGHT

Two important **compositional effects** can be identified as possible reasons for the reduced elasticity between global trade and world output. The first relates to the geographical distribution of growth between various countries. In recent years, **contributions to global GDP growth** have shifted from advanced economies to emerging market economies. Therefore there has been an increase in the rela–

tive contribution of those countries with lower trade elasticity. Global trade elasticity contracts as a result of this shift in economic growth. Assuming country-level elasticities are constant, calculations by the Deutsche Bundesbank (2016a) indicate that the effect of this shift can explain roughly half of the contraction in trade elasticity.

↘ CHART 7
Development of world trade

Global trade elasticity[1]

Elasticity — Elasticity (trend, Hodrick-Prescott filter)
Mean values
— 1980 – 1989 — 1990 – 2008 — 2011 – 2015

Growth rate: deviation from trend
Percentage points

■ Elasticity-effect[2] ■ GDP-effect[3] ■ Residual
— Deviation from trend[4]

1 – Ratio between the growth rates of world trade and world GDP (based on market exchange rates). 2 – Deviation which results from new elasticity, given trend growth of GDP. 3 – Deviation which, given the new elasticity, results additionally from the weaker actual GDP growth. 4 – Difference between the actual growth rate of the world trade volume and the growth rate which would result given GDP growth at trend rate and the old elasticity.

Sources: CPB, IMF, own calculations

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The second compositional effect concerns the demand components of GDP. A look at developments since the crisis reveals a **relative weakness in investment.** Given that investment has a particularly rich import content compared with other expenditure components, this results in a relative decline in demand for imports (Bussière et al., 2013). While weak investment in many national economies is cyclical in nature, country-specific developments - such as the processes of change in the Chinese economy - point to a structural decline in demand for capital goods. ↘ ITEM 959

Apart from these two effects, there are also other reasons that can partly explain a lower growth in global trade. For one, an **expansion of restrictive trade measures** has been observed in the years since the crisis (Evenett and Fritz, 2016; OECD, 2016a). In addition, increasing domestic production of crude oil in the United States has a dampening effect on global trade.

One key factor that caused trade intensity to expand in the years prior to the crisis was the deepening of **global value chains**. A number of indicators suggest that this development is coming to an end. After slackening during the crisis, the degree of global division of labour initially recovered to some extent. However, the level observed in 2008 has not been reached again. The export share of exports linked to global value chains had already began to stagnate in emerging markets before the crisis hit (IRC Trade Task Force, 2016). One reason for this could be increasing uncertainty surrounding the stability of greatly expanded value chains. Protectionist measures that necessitate local production also probably play a role. Currently, an indicator constructed by the OECD and based on the share of intermediate products in domestic demand points to a further weakening (OECD, 2016a). In contrast to global GDP, figures for global trade also reflect intermediate products. For this reason, the development of global value chains is of particular importance for the global elasticity of trade.

When assessing the relatively weak development in global trade and forecasting future developments, the question is whether the elasticity of trade in the years from 1990 to 2008 acts as a suitable **reference value** for anticipated developments. The period since 1990 is characterized by a se–

ries of **historic landmark events** which triggered an expansion in world trade: former socialist states were included in world trade, new countries were formed (and with that new potential for foreign trade), the European single market was established, the World Trade Organisation (WTO) was founded and China opened its doors increasingly to world trade. All these events helped trigger a particularly strong surge in the volume of global trade during this time. In addition to the removal of trade barriers such as tariffs within the WTO framework, this development was also driven by a further reduction in trade costs resulting, for example, from the increasing use of containers. If these growth effects now begin to wane and there are **no new stimuli** for more global trade, a return to such high levels of the trade elasticity is unlikely in the foreseeable future.

Trade is potentially a significant factor for **productivity growth.** The expansion of global trade and global chains of production enables, inter alia, the better allocation of resources, international specialisation and the effects of scale from larger product markets. The weak growth in world trade is therefore a possible reason for the weak growth in productivity observed worldwide in recent years. Trade facilitation measures could encourage a return to stronger productivity growth (OECD, 2016a). The implementation of the CETA, TTIP and TTP free trade agreements are fitting approaches in this context.

122. Global economic growth is mainly driven by **very expansionary monetary policies**. Interest rate are exceptionally low in advanced and emerging economies and below the levels that would be considered appropriate according to simple Taylor rules. ⬊ CHART 8 LEFT In recent years, the major central banks in advanced economies have also engaged in extensive quantitative easing to bolster aggregate demand. Central bank balance sheets have expanded dramatically in relation to global GDP. ⬊ CHART 8 RIGHT
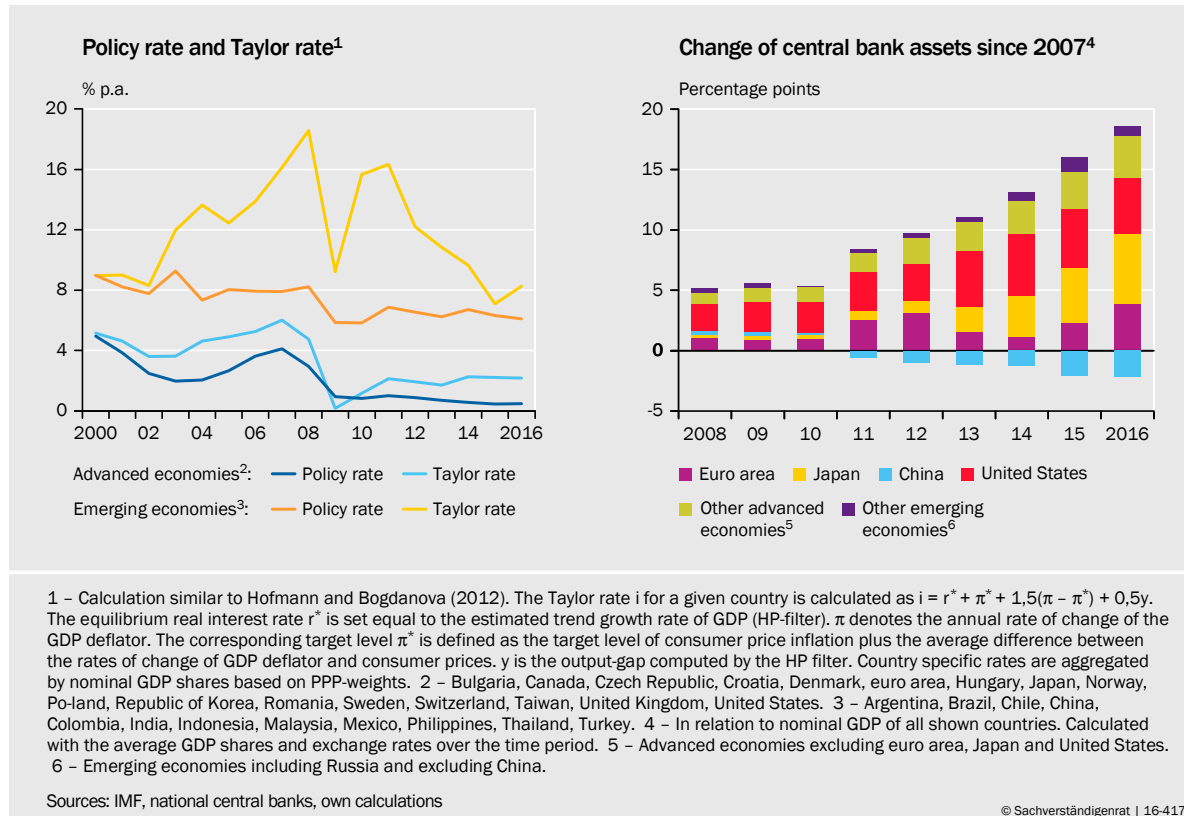
While the US Federal Reserve (Fed) has since stopped enlarging its balance sheet, the balance sheets of the European Central Bank (ECB) and the Bank of Japan (BoJ) continue to expand significantly. As a result of the large-scale purchasing of government bonds and other securities, the balance sheet total of the BoJ is edging close to the level of the Japanese GDP. While the Bank of England (BoE) had already discontinued its quantitative easing measures, it loosened monetary policy again following the Brexit vote and is prepared to introduce additional measures in the event of negative developments.

123. The expansionary stance of monetary policy around the world is associated with several problems. In all likelihood, the current **growth** of the global economy is not **sustainable**. Permanently higher growth rates cannot be achieved through monetary policy measures. A sustainably stronger expansion of the economy is only possible by increasing productivity and competitiveness in individual countries. By contrast, the role of monetary policy is to stabilise prices and economic activity. Its expansionary effects only influence economic performance temporarily.

Furthermore, the present situation in which all the major central banks are engaging in extremely expansionary monetary policies produces the **wrong incentive to maintain the loose monetary policy for too long**. This is because the central bank that is the first to end its expansionary monetary policy because the economic situation has improved runs the risk of sharp currency

↘ CHART 8

Policy rate and Taylor rate as well as central bank assets for selected countries and country groups

Policy rate and Taylor rate[1]

Change of central bank assets since 2007[4]

1 – Calculation similar to Hofmann and Bogdanova (2012). The Taylor rate i for a given country is calculated as $i = r^* + \pi^* + 1{,}5(\pi - \pi^*) + 0{,}5y$. The equilibrium real interest rate r^* is set equal to the estimated trend growth rate of GDP (HP-filter). π denotes the annual rate of change of the GDP deflator. The corresponding target level π^* is defined as the target level of consumer price inflation plus the average difference between the rates of change of GDP deflator and consumer prices. y is the output-gap computed by the HP filter. Country specific rates are aggregated by nominal GDP shares based on PPP-weights. 2 – Bulgaria, Canada, Czech Republic, Croatia, Denmark, euro area, Hungary, Japan, Norway, Po-land, Republic of Korea, Romania, Sweden, Switzerland, Taiwan, United Kingdom, United States. 3 – Argentina, Brazil, Chile, China, Colombia, India, Indonesia, Malaysia, Mexico, Philippines, Thailand, Turkey. 4 – In relation to nominal GDP of all shown countries. Calculated with the average GDP shares and exchange rates over the time period. 5 – Advanced economies excluding euro area, Japan and United States. 6 – Emerging economies including Russia and excluding China.

Sources: IMF, national central banks, own calculations

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appreciation. This would negatively impact export trade, as recently witnessed in the United States. The result is something of a prisoner's dilemma where the best approach for everyone would be to end expansionary monetary policy at the same time. Alone, however, each central bank has the incentive to continue its expansionary path.
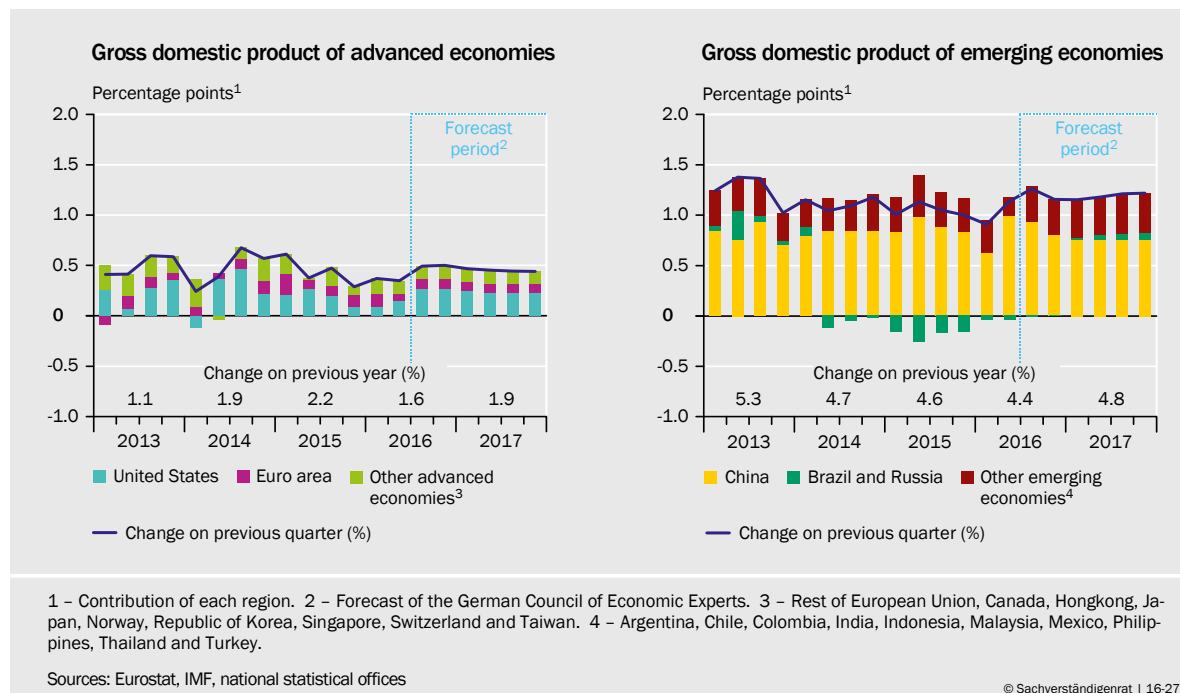
2. Outlook

124. The moderate upswing is expected to continue in advanced economies for the forecast horizon. ↘ CHART 9 LEFT On the back of the good labour market developments, the **United States** economy is likely to expand further in the second half of 2016 and can expect stronger growth for 2017. ↘ ITEMS 131 FF. Given the continued expansionary stance of Japanese monetary and fiscal policy, the upturn is also expected to continue in **Japan**. However, high growth rates cannot be expected here due to the low potential growth deriving, above all, from demographic developments. ↘ ITEMS 147 FF.

Despite the Brexit vote in June 2016, the **United Kingdom** economy is not expected to experience an economic slump. ↘ ITEMS 153 FF. The German Council of Economic Experts (GCEE) expects the recovery to continue in the **euro area**. However, this recovery continues to be mainly driven by expansionary monetary policy and covers over unresolved structural problems. ↘ ITEMS 157 FF.

125. The GCEE expects growth rates to rise in **emerging market economies**. ↘ CHART 9 RIGHT Even though the Chinese economic growth has slowed down,

Expected economic development of advanced and emerging economies

Gross domestic product of advanced economies

Percentage points[1]

Change on previous year (%)
1.1   1.9   2.2   1.6   1.9
2013 2014 2015 2016 2017

■ United States   ■ Euro area   ■ Other advanced economies[3]
— Change on previous quarter (%)

Gross domestic product of emerging economies

Percentage points[1]

Change on previous year (%)
5.3   4.7   4.6   4.4   4.8
2013 2014 2015 2016 2017

■ China   ■ Brazil and Russia   ■ Other emerging economies[4]
— Change on previous quarter (%)

1 – Contribution of each region. 2 – Forecast of the German Council of Economic Experts. 3 – Rest of European Union, Canada, Hongkong, Japan, Norway, Republic of Korea, Singapore, Switzerland and Taiwan. 4 – Argentina, Chile, Colombia, India, Indonesia, Malaysia, Mexico, Philippines, Thailand and Turkey.

Sources: Eurostat, IMF, national statistical offices

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growth rates of over 6 % can still be expected in China in the forecast period ↘ ITEMS 141 FF. In addition, India's strong growth will continue. With commodity prices stabilising, many emerging markets can expect their economies to pick up.

All in all, the GCEE expects **global output** to grow by 2.5 % in 2016. Growth of 2.8 % is expected for 2017. In line with this forecast, global trade, as measured by the Netherlands Bureau for Economic Policy Analysis (CPB), is projected to increase by 0.3 % and 2.7 % in 2016 and 2017 respectively. ↘ TABLE 1

3. Opportunities and risks

126. The development of the global economy is fraught with many **risks,** including continued geopolitical crises, increasing political uncertainty in the United States and Europe, an unanticipated weakening of the economic situation in China and possible turmoil on the international financial markets. The forecast is based on the assumption that none of these risks will materialise. Alongside these risks, there are also **opportunities** for stronger growth. For example, better-than-expected performance in the United States appears plausible, deriving, for example, from a more dynamic recovery of the housing market. In addition, the stabilisation of commodity prices could encourage a stronger recovery in emerging market economies.

127. Particular attention must be paid to political developments in Europe. One central factor is the unclear political and economic relationship between the **United Kingdom** and the EU. So far, the **referendum** has not had serious consequences for the real economy. This suggests that the majority are expecting a solution that will limit the damage to the economy. If the two sides fail to reconcile

their positions, investment, trade and employment in the United Kingdom will be far more deeply affected.

128. Political risks in Europe are not limited to the uncertainty surrounding the Brexit vote. The popularity of parties at the extremes of the political spectrum in many Member States is a worrying development. The **centrifugal forces within Europe** are strong and Europe's political future is unclear. Some Mem-

↘ TABLE 1

Gross domestic product and consumer prices of selected countries

Country/country group	Weight in %[1]	Gross domestic product			Consumer prices		
		change on previous year in %					
		2015	2016[2]	2017[2]	2015	2016[2]	2017[2]
Europe	**29.8**	**1.8**	**1.6**	**1.6**	**1.4**	**1.1**	**2.0**
Euro area	17.8	2.0	1.6	1.4	0.0	0.2	1.3
United Kingdom	4.4	2.2	1.9	1.4	0.0	0.7	2.4
Russia	2.0	– 3.7	– 1.4	1.2	15.5	7.2	6.3
Middle- and Eastern Europe[3]	1.7	3.6	3.0	3.3	– 0.4	– 0.3	0.9
Turkey	1.1	4.0	3.2	3.4	7.7	8.0	8.3
other countries[4]	2.8	1.8	1.8	1.9	0.3	0.9	1.3
America	**36.8**	**2.0**	**1.1**	**2.1**	**1.9**	**3.1**	**3.4**
United States	27.7	2.6	1.5	2.3	0.1	1.1	2.2
Latin America[5]	3.9	2.5	0.5	1.9	9.7	13.5	10.0
Brazil	2.7	– 3.9	– 3.3	0.2	9.0	9.0	7.0
Canada	2.4	1.1	1.0	1.5	1.1	1.5	1.9
Asia	**33.4**	**5.1**	**4.9**	**4.8**	**1.7**	**2.0**	**2.2**
China	17.2	6.9	6.6	6.3	1.4	2.4	2.3
Japan	6.3	0.5	0.6	0.7	0.8	– 0.3	0.4
Asian advanced economies[6]	3.8	2.1	2.1	2.4	0.6	1.0	1.4
India	3.2	7.6	7.3	7.4	4.9	5.3	5.2
Southeast Asian emerging economies[7]	2.8	4.6	4.8	4.9	3.3	2.3	3.1
Total	**100**	**3.0**	**2.5**	**2.8**	**1.7**	**2.1**	**2.6**
Advanced economies[8]	67.0	2.2	1.6	1.9	0.2	0.7	1.7
Emerging economies[9]	33.0	4.7	4.4	4.8	4.6	5.0	4.4
memorandum:							
weighted by exports[10]	100	2.3	2.1	2.3	.	.	.
following IMF concept[11]	100	3.1	3.0	3.4	.	.	.
World trade[12]		2.5	0.3	2.7	.	.	.

1 – Nominal GDP (US dollar) of the named countries or country groups in 2015 as a percentage of total nominal GDP. 2 – Forecast of the German Council of Economic Experts. 3 – Bulgaria, Croatia, Czech Republic, Hungary, Poland, Romania. 4 – Denmark, Norway, Sweden, Switzerland. 5 – Argentina, Chile, Colombia, Mexico. 6 – Hong Kong, Republic of Korea, Singapore, Taiwan. 7 – Indonesia, Malaysia, Philippines, Thailand. 8 – Asian advanced economies, euro area, Middle- and Eastern Europe, Canada, Denmark, Japan, Norway, Sweden, Switzerland, United Kingdom, United States. 9 – Latin America, Southeast Asian emerging economies, Brazil, China, India, Russia, Turkey. 10 – Total of all named countries. Weighted by the respective shares of german exports in 2015. 11 – Weights according to purchasing power parities and extrapolated to the countries covered by the IMF. 12 – As measured by the CPB.

Sources: CPB, Eurostat, IMF, national statistical offices, OECD

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ber States have unstable governments. Italy, for example, is poised for a referendum on constitutional reform. The political implications this will have are impossible to predict at present.

129. Last but not least, there is still the risk of the **euro crisis reigniting**. The situation in Portugal, for example, gives cause for concern. With the exception of the Canadian ratings agency DBRS, all the relevant ratings agencies have since downgraded Portuguese government bonds to below "Investment Grade". If DBRS were to follow suit, Portuguese government bonds would no longer be eligible for the ECB asset purchase programme and could no longer be used by Portuguese banks as part of their refinancing operations with the ECB. If this happened, a new assistance programme for Portugal could not be ruled out. In addition, unresolved problems in the banking sector, particularly limited capitalisation and the still high numbers of non-performing loans, such as in Italy and Portugal, also pose potential risks for the euro area. ↘ ITEMS 478 FF., 514 FF.

130. The hesitancy of the Fed to tighten the monetary policy in the United States entails risks for the **stability of international financial markets**. Calling a timely end to loose monetary policy would be essential to keep the pace of interest rate moderate. For the time being, however, the Fed appears to be postponing this exit. ↘ ITEM 136 This could make more aggressive tightening necessary later on, triggering the risk of an abrupt turn in international capital flows and a sharp depreciation of the currencies of some emerging market economies. This poses a particular risk for emerging market economies with a high level of foreign currency debt.

II. THE ECONOMIC SITUATION OUTSIDE THE EURO AREA

1. United States: Global conditions weaken corporate investment

131. Economic indicators for the United States are currently sending **mixed signals**. On the one hand, the labour market is in good shape, while on the other hand GDP growth rates have decreased considerably since the third quarter of last year. The annualised growth rate was only 1.0 % in the first half of 2016 relative to the previous half-year. By comparison, the economy managed to grow by 2.6 % in the entire year 2015.

Corporate investment has shown especially weak development. A **drop in investment activity** in the oil industry, in particular, could be observed. ↘ CHART 10 TOP LEFT Furthermore, the investment climate of export-oriented businesses has deteriorated. This is due to the strong, effective appreciation of the US dollar in previous years, which was one factor causing demand for exports to virtually stagnate. A decline in investment in housing construction was also ob-
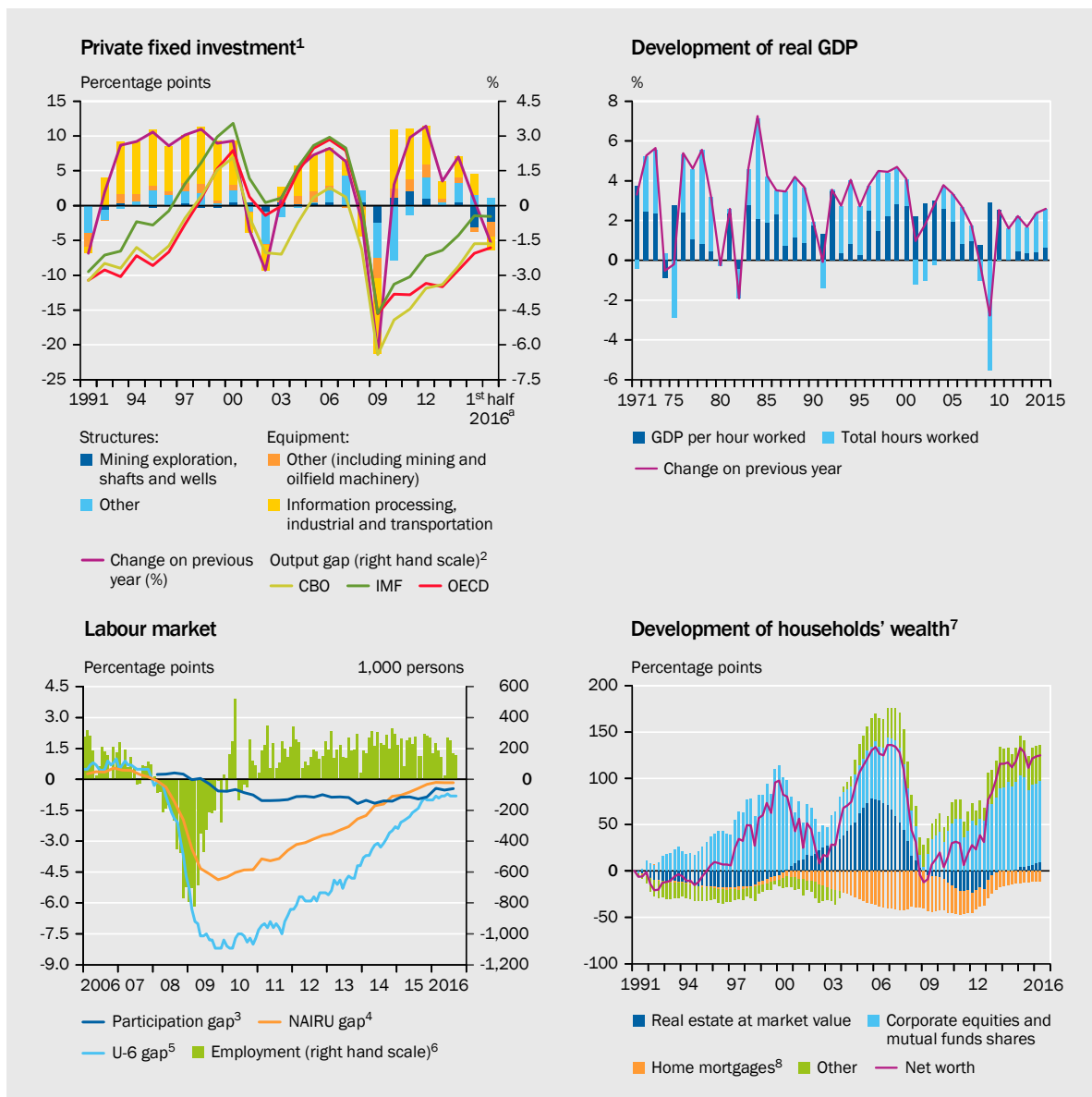
served in the second quarter. Private consumption continued to expand strongly in the first half of 2016 at an annualised rate of 2.4 %, albeit at a slower pace than in the entire year 2015 when growth stood at 3.2 %.

132. Economic development since the 2008 financial crisis is characterised by **historically weak growth in productivity**. The vast majority of the production increase in the period from 2011 to 2015 can be explained by an increase in the volume of work. ↘ CHART 10 TOP RIGHT By contrast, improvements in labour productivity account for only 0.4 percentage points of the annual average growth rate of 2.1 % of GDP. In addition to compositional effects on the labour market – deriving from the re-employment of low-skilled workers – the weaker increase in labour productivity is in all likelihood chiefly attributable to structural factors (Gordon, 2012; Fernald, 2015; IMF, 2015a). The effects of ICT innovation, which are abating, are one example here. Therefore, labour productivity is not expected to provide major impetus for growth in potential output in the coming years.

133. The labour market continues to show dynamic development. So far this year, employment has continued to increase significantly by an average of 178,000 people per month. ↘ CHART 10 BOTTOM LEFT Estimates of the Congressional Budget Office (CBO), however, suggest that the labour market is still slightly below capacity (CBO, 2016). For example, the current unemployment rate of 5.0 % in September 2016 is slightly higher than the natural rate of unemployment of 4.7 % estimated by the CBO. In addition, according to the CBO the participation rate is slightly short of its potential level. However, there is some uncertainty surrounding estimates for the natural unemployment rate and the potential participation rate. For example, the OECD (2016b) sets the equilibrium unemployment rate at 4.9 %. Benchmarked against this value, the labour market would have even been slightly above capacity at times during the year. Previous academic studies also suggest far higher values for the natural rate of unemployment NAIRU (Weidner and Williams, 2011; Daly et al., 2012). The fact that there has been a stronger increase in nominal wages recently also points to a favourable situation on the labour market.

134. The good situation on the labour market was coupled with a strong increase in real disposable income and private consumption expenditure. The **improved wealth situation of private households** is likely to have positively influenced consumption demand (wealth effect). The rise in share prices and real estate prices were contributing factors here. It can be assumed that if net worth increases by 1 % in the United States, private consumption increases by around 0.1 % (Iacoviello and Neri, 2010; Joint Economic Forecast Project Team, 2013). In relation to disposable income, net worth has increased strongly since the lows in the aftermath of the crisis and has now almost regained their pre-crisis level.

The better net wealth situation coincided with a **drop in the debt ratio** of private households. The nominal volume of outstanding mortgage loans is currently even around 10 % below the pre-crisis level. Accordingly, the ratio of mortgage loans in relation to available income has declined by 31 percentage points since the highest level in 2007. ↘ CHART 10 BOTTOM RIGHT

135. The recovery on the **real estate market** has slowed down recently. After some-times substantial increases in investment in residential construction, a decline in construction activities was registered around the middle of 2016. Overall, it can be assumed that residential investment still has to make up some ground, as suggested by indicators such as construction permits, completed construction work or the relatively low residential construction investment ratio. House prices have risen further since last year. In nominal terms the house price index of the Federal Housing Finance Agency (FHFA) has been above the pre-recession peaks since the end of 2015. Adjusted for consumer price inflation, however, house prices are still well off the historic highs of 2007.

↘ CHART 10
Economic indicators for the United States

1 – Excluding residential investment and investment in intellectual property products. 2 – Real GDP less potential GDP relative to potential GDP. 3 – Difference between actual and potential participation rate (own calculations using estimates by CBO, 2016). 4 – Natural rate of un-employment (CBO, 2016) less actual rate of unemployment. 5 – Pre-crisis average of U-6 unemployment rate (8,9 % for the time-span from 1994 to 2007) less the actual U-6 unemployment rate (total unemployed, plus all persons marginally attached to the labour force, plus total employed part time for economic reasons, as a percent of the civilian labour force plus all persons marginally attached to the labour force). 6 – Change to the previous month. 7 – As a percentage of disposable personal income; Change of the ratio compared to the first quarter of 1991; including non profit organizations. 8 – Negative value denotes an increase. a – Investment: annualized growth relative to previous half-year. Output Gap: Estimates for the full year 2016.

Sources: BEA, BLS, CBO, European Commission, Fed, IMF, OECD, own calculations

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136. At the end of 2015, the **US Central Bank (Fed)** raised its interest rates for the first time since June 2006. Since then, however, the Fed has left interest rates unchanged. In December 2015, median projections by the Federal Open Market Committee members (FOMC) for the rates of increase in consumer prices and GDP in 2016 stood at 1.6 % and 2.4 % respectively. On the basis of these projections, it was assumed that interest rates would be increased further so that a rate of 1.4 % would have been reached by the end of 2016.

So far, however, these projections had to be revised downward over the course of 2016. For example, the **price increase** for personal consumption expenditure (PCE) is far **below the target** of 2 %, averaging 0.9 % compared to the same month the previous year. The drop in energy prices and the appreciation of the US dollar were major contributing factors here. By contrast, core inflation is far higher, standing at 1.7 % for the PCE price index in August 2016 and even at 2.3 % for the consumer price index. The weak growth in **corporate investment** was also a likely contributing factor in the Fed's decision to delay the interest rate increase. In addition, it can be assumed that the direction of monetary policy in other regions of the world plays a role. A tighter monetary policy on the part of the Fed could result in the further appreciation of the US dollar, with a dampening effect on the economy and price developments in the United States.

137. **Fiscal policy** is not likely to provide stimulus for the economy in 2016. In recent years, net public borrowing was primarily reduced by the far stronger growth in revenue than expenditure. Compared against a deficit of 2.5 % in the 2015 fiscal year, the CBO is expecting the deficit to increase to 3.2 % in 2016. The suspension of the legal debt ceiling, agreed in 2015, comes to an end in March 2017. The extent to which this will trigger renewed political uncertainty primarily hinges on the outcome of the **presidential election** on 8 November 2016.

138. In terms of fiscal policy, the two strongest candidates, Clinton and Trump, both plan to expand public investment. Clinton's election platform includes additional expenditure to fund third-level education. Her **increases in expenditure** are met with an increase in taxes on higher income earners. Trump, on the other hand, is in favour of a significant, broad-based lowering of taxes. However, this would entail a considerable loss of tax revenues and a significant increase in the national debt (Nunns et al., 2016).

139. Both candidates reject the negotiated Trans-Pacific Partnership (TPP). Further to this, Trump has expressed criticism of existing US trade deals, such as the North American Free Trade Agreement (NAFTA) and has repeatedly called for high import tariffs on countries like China and Mexico (Noland et al., 2016). Overall, neither candidate can be expected to **provide any impetus for further liberalisation of trade**. If Trump's demands are met, this would be a serious setback for free trade.

140. Stronger expansion of the US economy is again expected in the second half of 2016, as suggested by leading indicators and the good developments on the labour market. In addition, capacity adjustments in the oil industry and inventory reduction are likely to come to an end. GDP is expected to increase by 1.5 % and

2.3 % respectively in 2016 and 2017. The growth rates are moderate considering the substantial increase in the working age population. This is mainly a result of the continued moderate growth in productivity and weak demand for exports from key sales markets such as the euro area or China.
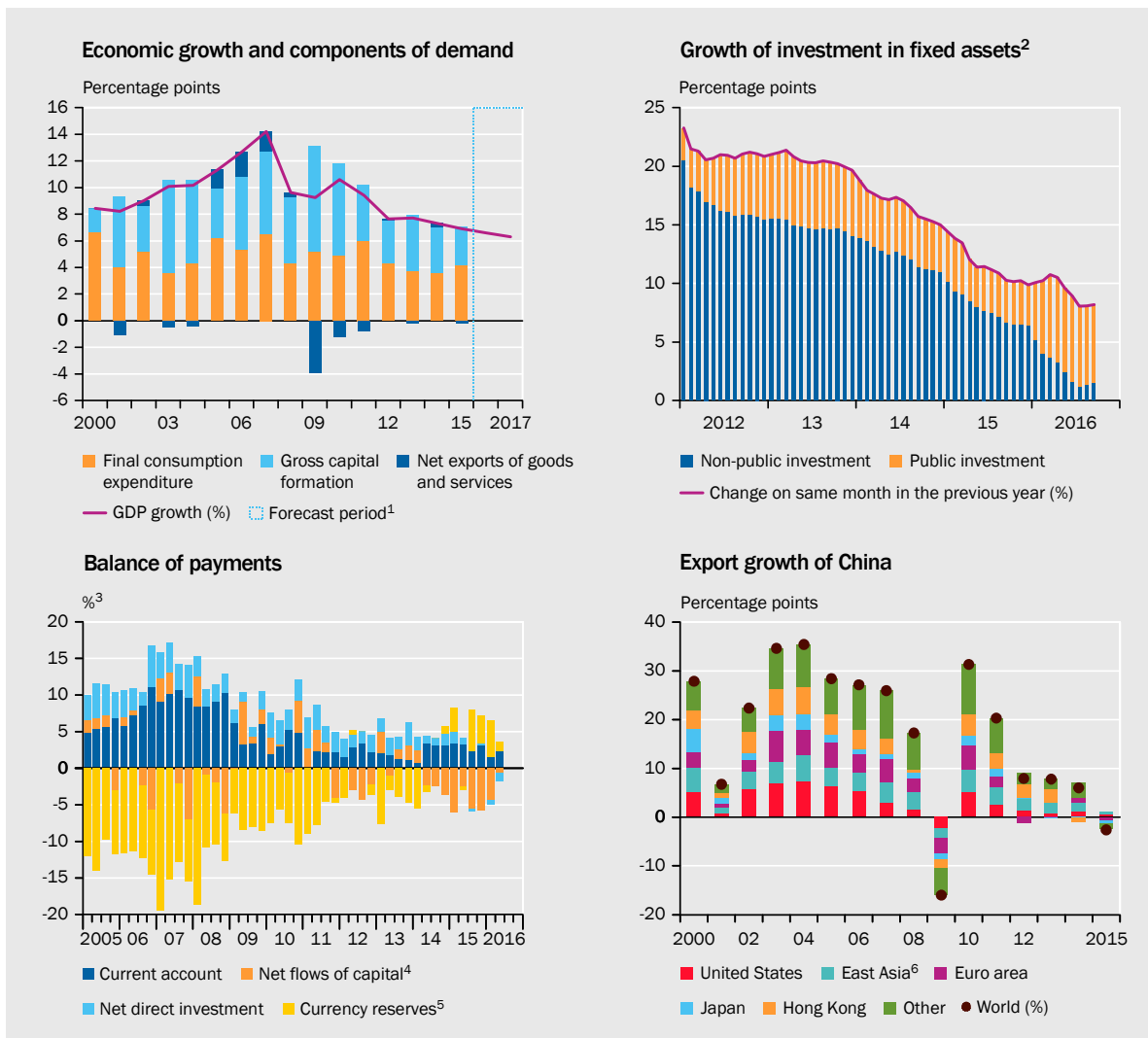
2. China: Growth according to plan

141. Over the past two decades China's annual average GDP growth rate has stood at roughly 10 %. Since 2007, however, growth has been on a downward trend to recently stand at only 6.9 % in 2015. ↘ CHART 11 TOP LEFT In the first half of 2016, annualised production growth was even lower still at around 6 %. However, a significant revival could be observed in the second quarter.

142. **Investment** is making an increasingly smaller contribution to growth. ↘ CHART 11 TOP LEFT While investment contributed 6.3 percentage points on average to economic growth in the period from 2006 to 2010, its contribution shrunk to just 3.6 percentage points in the last five years. Growth in non-government gross fixed capital formation has declined continuously and virtually came to a standstill most recently. ↘ CHART 11 TOP RIGHT

143. In the past, the Chinese administration has made extensive use of the scope afforded by economic policy to achieve the goals of its five-year plans. **Fiscal policy** is therefore already very expansionary. The government structural deficit stood at 2.4 % in 2015 (IMF, 2016a). This does not include extra-budgetary expenditure, e.g. of regional governments, which in China can account for up to 8.4 % of GDP (2014 Annual Report, Item 115). ↘ CHART 129 Since the start of 2016, the state has also increased its efforts to offset the decline in growth in gross fixed capital formation with public investment. ↘ CHART 11 TOP RIGHT Alongside this, with expansionary measures **monetary policy** has kept short-term real interest rates just barely above zero.

144. The contribution of foreign trade to GDP growth is minimal. ↘ CHART 11 Chinese exports even declined in 2015. The **weak export performance** is attributable, in part, to the effective appreciation of the renminbi since the change of year 2014/15 (2015 Annual Report, Item 149). Regionally, there has been a marked decline in recent years in the contribution of the United States, Hong Kong and the euro area, in particular, to the growth of Chinese exports. ↘ CHART 11 BOTTOM RIGHT

In August 2015, the government approved a depreciation of the renminbi. Since 2014, China has reduced its foreign exchange reserves by almost 20 % in order to prop up its currency and control the depreciation. However, the country's foreign currency reserves are still very high. Since November 2015, the Chinese Central Bank has moved the currency reference away from the US dollar and towards a currency basket, consisting of 13 currencies. This is linked to the strategy to establish the renminbi as an international reserve currency and create a more flexible exchange rate system that is determined by the market. The renminbi has been part of the IMF currency basket since October 2016 (special

drawing rights, SDR). In addition, China has long been engaged in the cautious liberalisation of the financial system.

145. The financial flows behind the Chinese **current account surplus** have shifted since 2014. While previously net capital outflows were chiefly the result of an increase in foreign exchange reserves, they now primarily reflect private net capital outflows. ↘ CHART 11 CENTRE RIGHT This is often associated with capital flight. According to the IMF (2016b), however, the vast majority of the capital outflow comprises foreign debt repayments and dividend payments to foreign investors.

146. A declining potential growth rate is expected in China for the coming years. However, a sharp decline in growth is not anticipated given China's still **low per-capita income**, which stands at around 25 % of that of the United States. While growth in this range did slow in other former emerging market econo-

↘ CHART 11
Economic indicators for China

Economic growth and components of demand

Percentage points

Final consumption expenditure | Gross capital formation | Net exports of goods and services
GDP growth (%) | Forecast period[1]

Growth of investment in fixed assets[2]

Percentage points

Non-public investment | Public investment
Change on same month in the previous year (%)

Balance of payments

%[3]

Current account | Net flows of capital[4]
Net direct investment | Currency reserves[5]

Export growth of China

Percentage points

United States | East Asia[6] | Euro area
Japan | Hong Kong | Other | World (%)

1 – Forecast of the German Council of Economic Experts. 2 – Cumulative investment in the respective year up to the respective month („year-to-date") relative to the same month in the previous year. Values for January are interpolated linearly. At the beginning of the year 2016 a major reclassification of non-state-owned and state-owned enterprises took place, caused by the bail-out by the government in the year 2015. There was an increase in the categories „LLC: State Sole Proprietor" and „LLC: Other", whereas the categories „Collective Enterprise", „Other Enterprise" and „Private Enterprise" declined strongly. 3 – In relation to the nominal GDP. 4 – Without direct investment and currency reserves. 5 – Including gold, SDR and deposits at the IMF. 6 – East Asia and Pacific excluding Hong Kong and Japan.

Sources: IMF, National Bureau of Statistics of China

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mies, such as Japan, Korea and Taiwan, it remained well over 5 % on average until far higher income levels were reached. Factoring in current economic developments, in its forecast the GCEE assumes that GDP growth in China will stand at 6.6 % and 6.3 % respectively in 2016 and 2017.

3. Japan: Upturn despite low growth rates

147. The Japanese economy is **on the upturn with low potential growth**. With GDP having increased by 0.5 % in the entire year 2015, the annualised rate of growth for the first half of 2016 stood at 0.8 % compared with the second half of last year. The drivers of growth have shifted over time: while last year the expansion of the economy could largely be explained by net exports, this year has seen a particular increase in consumer spending. Therefore, the weakness in private consumption following the VAT hike in 2014 did not continue. In contrast, external demand has been on a downward trend since the end of 2015, primarily triggered by weaker demand from China and the significant effective appreciation of the Yen in real terms by over 20 % since mid-2015.

148. Despite the moderate growth rates, the situation on the **labour market** has improved continuously. ↘ CHART 12 TOP LEFT Since the start of 2013, 1.34 million more people are in active employment, with around 380,000 people finding work since the start of 2016. As a parallel development, unemployment had decreased to 3.1 % by August 2016. At the same time, the economically active population grew, a fact which is due, in particular, to the increasing labour force participation rate among women and older workers. The good development on the labour market is expected to continue. A **steady increase in the number of vacant posts** has been observed to date. However, the upturn on the labour market is not coupled with a strong increase in nominal wages. As a result, core inflation in August 2016 only stood at 0.2 % compared with the same month in 2015. Consumer price inflation was recently even in the negative owing to declining commodity prices and currency appreciation.

149. The low level of unemployment is attributable to two factors. For one, **monetary and fiscal policy** have strong expansionary effects on the economy. For example, the VAT increase which was initially delayed from 2015 to 2017 has now been postponed again until 2019. Instead, the government is planning additional spending in 2016 and 2017, totalling roughly 1.5 % of GDP. The BoJ introduced negative interest rates on bank reserves at the start of 2016 and significantly expanded its asset purchase programmes in July. In September it decided to control the yield curve in future with more flexible bond purchases so that long-term interest rates are aligned to a set target. In addition, the BoJ announced that it would allow inflation to overshoot the inflation target until inflation rates stay above the target in a stable manner. Any judgement on the effectiveness of these measures is fraught with much uncertainty.

150. Secondly, **demographic change** has a major impact on the supply of labour. The Japanese population is aging fast. The number of people over 64 compared to the number of people of working age between 15 and 64 has increased from
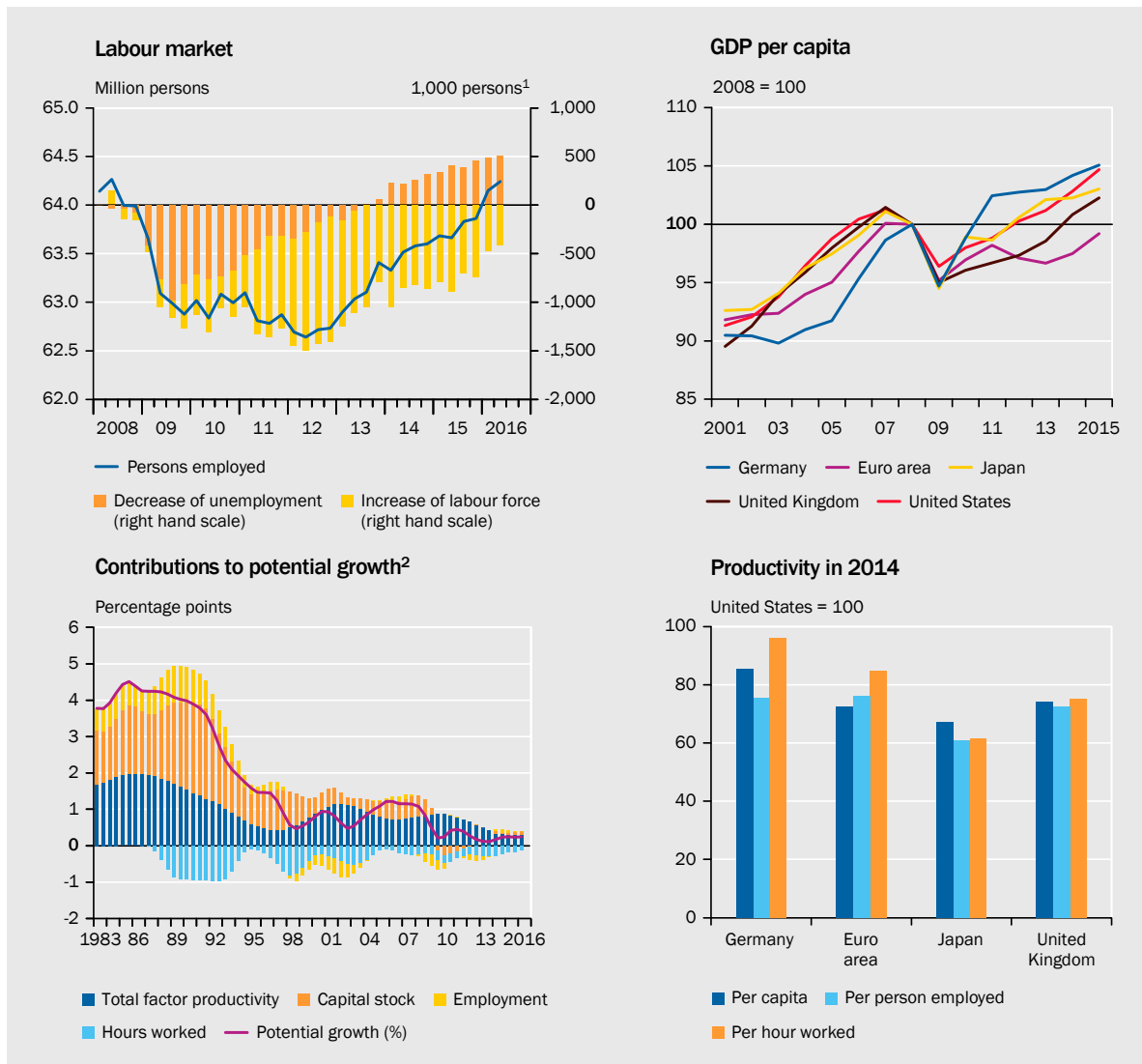
36 % in 2010 to 45 % in 2016. In light of Japan's restrictive immigration policy, even an increase in the participation rate and a drop in the numbers of unemployed can only serve to lessen this aging effect. With a given business demand for labour, the decline in the labour supply deriving from demographic developments leads to tightening labour market conditions. In addition, the development of GDP per capita is also interesting given the population decline. GDP per capita in Japan has increased as much as in the United Kingdom since 2008.
↘ CHART 12 TOP RIGHT

151. However, the weak **growth in potential output** - currently around 0.2 % - is not only due to the dampening effect of demographic change on the labour supply. ↘ CHART 12 BOTTOM LEFT The Japanese economy is also characterised by weak productivity growth. A comparison with other developed economies demonstrates that progress can still be made here, with Japanese hourly productivity only around 60 % of the level of US productivity. ↘ CHART 12 BOTTOM RIGHT One rea-

↘ CHART 12
Economic indicators for Japan

1 – Change from level in 2008Q1. 2 – Estimates of BoJ.

Sources: BoJ, European Commission, Ministry of Internal Affairs & Communication, OECD, own calculations

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son for this could be the fact that the Japanese labour market is very segmented and relatively rigid in large parts.

152. For the **forecast period,** the GCEE expects the upturn in the Japanese economy to continue. Given the low potential growth, production capacities are therefore likely to show higher utilisation and contribute to a slight increase in inflation rates. Overall it can be assumed that GDP growth will reach 0.7 % in 2017, following growth of 0.6 % in 2016.

4. United Kingdom: Clouded outlook after Brexit vote

153. The UK economy saw strong expansion up until the second quarter of 2016. ↘ CHART 13 TOP LEFT In the first half of 2016, GDP grew by 2.2 % on an annualised basis relative to the previous half-year. The surprising result of **the referendum** on 23 June 2016, however, sent shock waves through the financial and foreign exchange markets. In the immediate aftermath, share prices fell heavily and the British pound fell by around 9 % against the euro in the first week. In addition, political uncertainty has heightened significantly. At the same time, business and consumer confidence deteriorated. ↘ ITEM 299 Many analysts responded with major downward revisions of Britain's economic outlook. ↘ CHART 13 TOP RIGHT

154. In the initial weeks following the referendum, hardly any indicators were available to reliably gauge the response of the real economy to the referendum. Added to that, there is **no past experience to draw on**. Therefore, simulation studies that were conducted before the referendum (such as Baker et al., 2016; OECD, 2016c) often served as the basis for the first forecasts after the referendum. The actual developments of recent months have since demonstrated that many of the assumptions of these earlier simulations have not materialised. For example, despite all the political uncertainty, volatility indices do not indicate a continued rise in uncertainty on the financial markets. ↘ CHART 37

155. The GCEE bases its short-term forecast for the United Kingdom on an econometric analysis of available monthly indicators. The first step of this analysis involves the computation of a large number of individual forecasts for the development of GDP through to the end of 2016. In the next step the distribution of the individual forecasts is determined and the point forecast for GDP is derived from this. Overall, the indicators do not suggest an economic slump. ↘ CHART 13 BOTTOM Rather, the results of the model indicate that positive growth rates of around 0.3 % to 0.5 % can be expected in the third and fourth quarter. It is worth noting, however, that the distribution of the forecasts is skewed to the left. This is an indicator of the **predominance of negative risks for this forecast**.
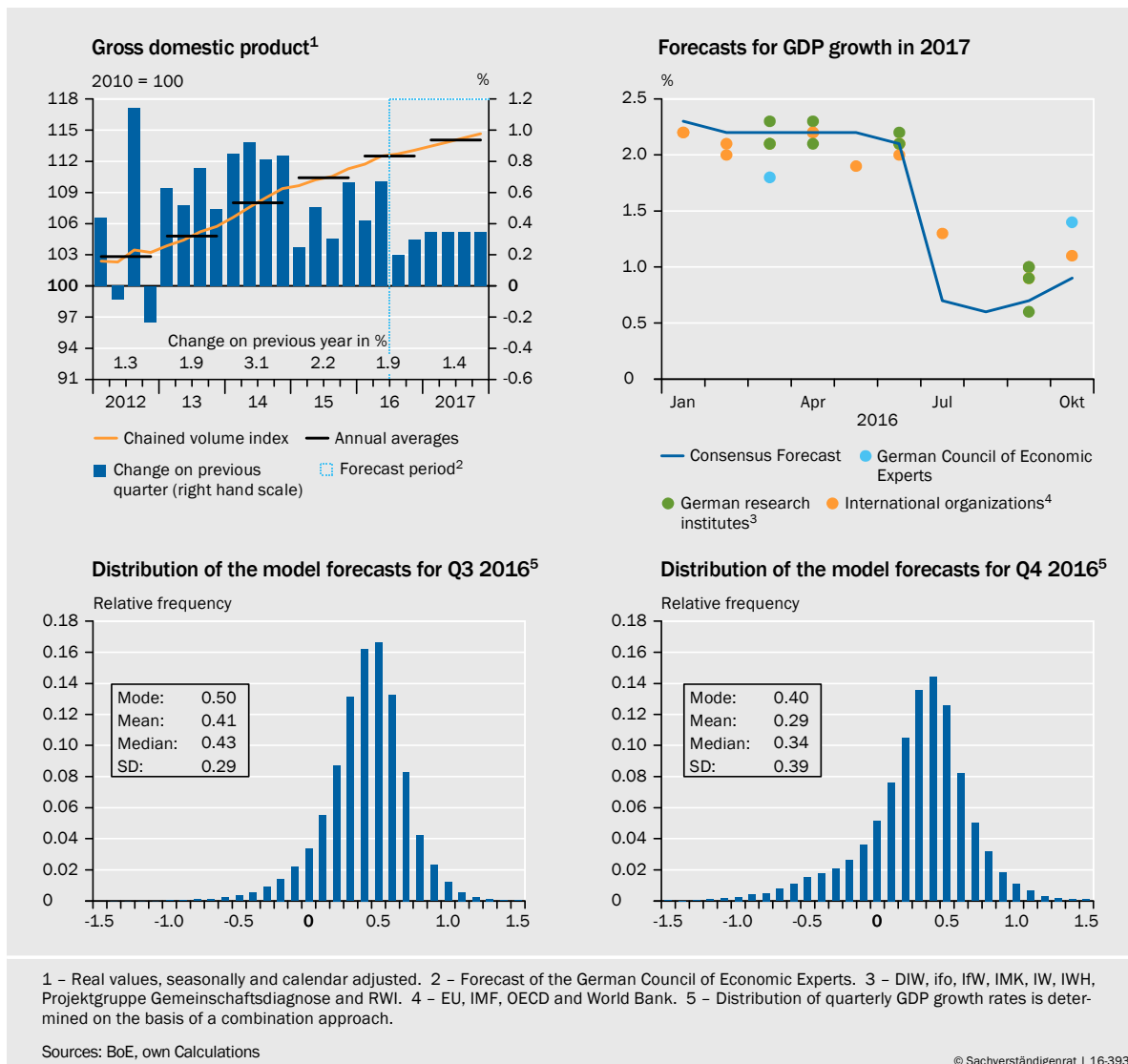
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From a technical perspective, this forecast is based on roughly 40 economic indicators that cover all the major areas of the British economy. Examples include indices of production for various sectors of the economy, retail sales, labour market indicators, new orders, financial market variables, foreign trade data, uncertainty indicators and sentiment indicators. Using simple econometric equations, GDP forecasts are derived from each individual indicator and

from combinations of up to four indicators. In addition, the specifications of the equation are varied. In total, this results in a number of around 89,000 individual forecasts for the development of GDP in the third and fourth quarter of 2016. The approach selected here is similar to the approaches used by several research institutes for short-term forecasts (Carstensen et al., 2009; IWH, 2011; RWI, 2011) and is applied in the GCEE forecast for all major advanced economies.

156. Against this backdrop, the GCEE does not expect a **dramatic slowdown** in the UK economy. The economy is likely to visibly weaken, however. Dampening effects on employment growth and investment activity can be expected. Only a moderate effect on private household consumption is expected. However, it must be noted that consumption growth in the current upswing so far has been financed, in part, by a decline in the savings ratio (2015 Annual Report, Items 161 ff.). A further decline in the savings ratio is not expected given the uncertainty of the political situation. All things considered, the GCEE forecasts GDP growth rates of 1.9 % and 1.4 % respectively for 2016 and 2017.

↘ CHART 13

Economic forecast for the United Kingdom

1 – Real values, seasonally and calendar adjusted. 2 – Forecast of the German Council of Economic Experts. 3 – DIW, ifo, IfW, IMK, IW, IWH, Projektgruppe Gemeinschaftsdiagnose and RWI. 4 – EU, IMF, OECD and World Bank. 5 – Distribution of quarterly GDP growth rates is determined on the basis of a combination approach.

Sources: BoE, own Calculations

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III. EURO AREA – RECOVERY WITHOUT SUFFI-CIENT STRUCTURAL PROGRESS

157. The **economic recovery** in the euro area has continued in the year to date 2016. For the past three years, overall economic output has been rising steadily. In most quarters, growth rates were well above the growth potential estimated by the European Commission. In the first half of 2016, GDP showed an annualised increase of 1.8 % on the previous half-year, thereby exceeding potential growth of 0.8 % by one percentage point. Nevertheless, the problem remains that a significant portion of this growth is attributable to the expansionary monetary policy. At the same time, the governments of the member states are failing to take sufficient advantage of the unusually favourable situation in order to sustainably improve government budgets and implement market-oriented structural reforms.

1. Economic situation

158. In the course of the economic recovery, the economic output of the euro area has improved to the extent that it now surpasses the pre-crisis level of 2008, although there are significant disparities between the individual member states in the euro area. In addition, the **output gap** has **markedly reduced** and the labour market continues to improve. ↘ CHART 14 TOP AND BOTTOM RIGHT Employment has perceptibly increased over recent years, and the unemployment rate is now at 10.1 %, its lowest level since 2011. The economic recovery is being driven above all by domestic demand. The **consumer demand** of private households in particular is growing consistently. ↘ CHART 14 BOTTOM LEFT This reflects the rises in income resulting from the turnaround in the labour market. Furthermore, falling oil prices have contributed to an increase in real disposable income. ↘ CHART 15 RIGHT Up until the first quarter of 2016, net exports provided rather little growth stimulus. However, in the second quarter of 2016, net exports compensated for a temporary decline in domestic demand.

159. Demand-side growth stimulus also came from **investment** in the first half of 2016. The rise in investment that began in the middle of 2013 has thus continued its upward trajectory. In 2015, investments increased by 3.1 %, with investment in machinery and equipment showing particularly strong growth. Overall, the figures indicate that corporate sales prospects are gradually improving and that the reduction of surplus capacities is slowly coming to an end. Nevertheless, the current rates of growth in investment are still low. Companies remain cautious and do not appear to be anticipating a strong, sustained upturn. In addition, the volume of investment is well below pre-crisis values in most member states. ↘ CHART 15 LEFT Investment ratios remain low despite the recent vitalisation.
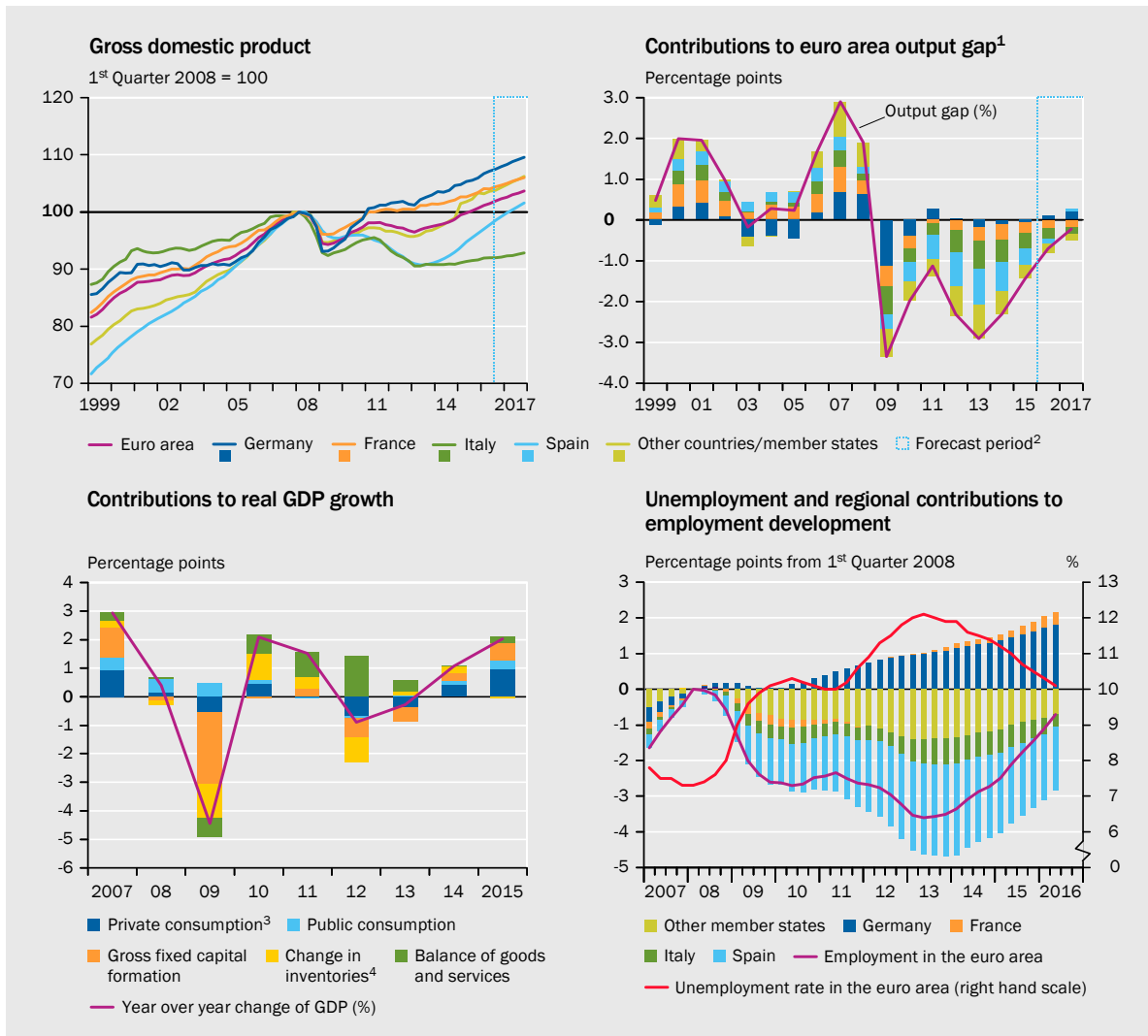
160. The economic recovery in the euro area as a whole is characterised by **considerable disparities** between the individual member states. These can be divided into three groups based on their current economic situation. ↘ TABLE 4 ANNEX

The first group comprises member states where economic output largely exceeds pre-crisis levels, where capacity utilisation is relatively high and where the labour market is in good shape. This group includes Germany. In 2015, Germany's GDP was already 6.3 % above its 2008 value, and production capacities have been more than fully utilised since the start of 2016 ⌐ ITEM 219 The group also includes the three Baltic member states, as well as the previously crisis-ridden Ireland, Malta and Slovakia.

161. The second group could be described as those member states that are currently **mid-table performers** in the currency union. This block of countries includes those where production capacities are still significantly underutilised but where development has been quite positive in recent times. This is true for Spain, Luxembourg, the Netherlands and Slovenia, for example, where production is approaching its potential level at a relatively fast pace. This group also incorporates member states with moderately underutilised capacities that are experiencing relatively slow growth. These include France, Austria and Belgium.

⌐ CHART 14

Gross domestic product, output gap and labour market of the euro area
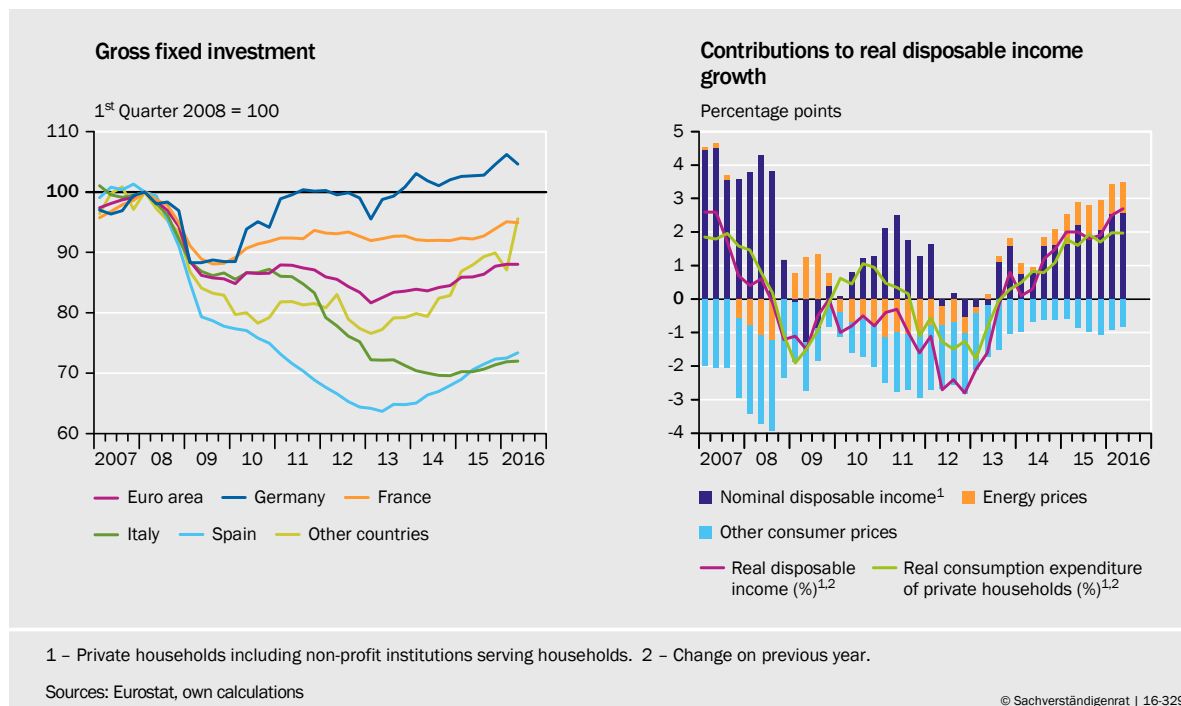

1 – Real GDP less potential GDP relative to potential GDP. 2 – Forecast of the German Council of Economic Experts. 3 – Households and Non-profit institutions serving households. 4 – Including net acquisition of valuables.

Sources: European Commission, Eurostat, own calculations

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Investment and disposable income in the euro area

Gross fixed investment

1st Quarter 2008 = 100

— Euro area — Germany — France
— Italy — Spain — Other countries

Contributions to real disposable income growth

Percentage points

■ Nominal disposable income[1]   ■ Energy prices
■ Other consumer prices

— Real disposable income (%)[1,2]   — Real consumption expenditure of private households (%)[1,2]

1 – Private households including non-profit institutions serving households. 2 – Change on previous year.

Sources: Eurostat, own calculations

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162. The **third group** represents the member states whose economic development must be regarded critically. Most of these countries can be characterised by the fact that their economies have experienced weak economic recovery following the crisis, their capacities continue to be significantly underutilised, and potential growth is very low or even negative. This description applies to Italy and Greece, where GDP is currently 8 % and 26 % below the 2008 value respectively. The group also includes Portugal, Cyprus and Finland.

163. The recent recovery observed in the euro area is being driven primarily by monetary policy stimuli. Thanks to the ECB's bundle of unconventional measures, the general economic conditions in the euro area have clearly improved. The euro exchange rate is low and the financing conditions for companies and households are improving. Additional stimuli, albeit on a much smaller scale, are provided by fiscal policy. In many member states, governments have failed to undertake any additional fiscal consolidation measures despite high levels of public debt. On the contrary, the fiscal policy stance in the euro area was expansionary in 2015 and remains so in 2016. ↘ ITEMS 172 FF.

164. Without the **monetary policy stimuli** generated by the ECB since the middle of 2014, growth rates would be significantly lower. The euro area's potential growth remains low, reflecting a persistent lack of competitiveness among many member states. This is compounded by problems with the reduction of high levels of public and private debt.

2. Short-term stimuli without long-term solutions
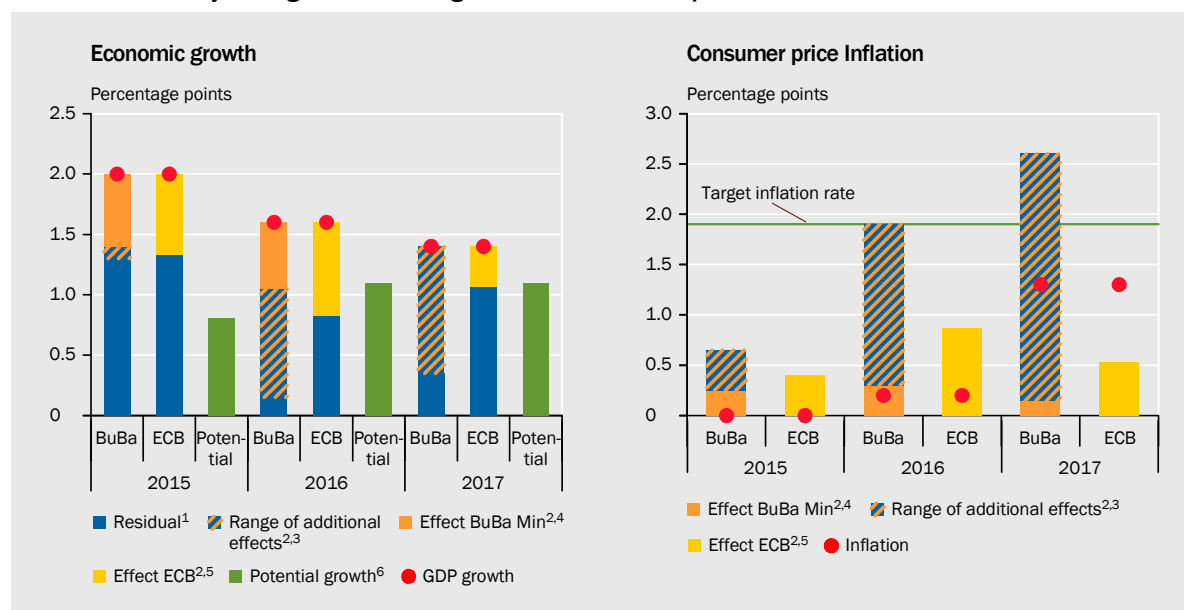
Monetary policy keeping growth above potential

165. The GDP growth rates in the euro area must be viewed in the context of the markedly loose monetary policy being pursued by the ECB. Given that the recent positive economic development is driven to a large extent by monetary policy, it cannot be seen as indicative of a self-sustaining economic recovery.

166. According to the GCEE, **the ECB's monetary policy** is not appropriate for the euro area at the present time. ↘ ITEMS 454 FF. In particular, the large number of unconventional measures is difficult to reconcile with current economic data. In light of the continuing positive potential growth, there is little evidence in favour of a dramatically decreased or even negative equilibrium real interest rate. Furthermore, consumer price inflation – which has fallen largely as a result of the drop in oil prices – at its current rate of 0.2 % as well as the current output gap of approximately -1.4 % are not in a range that would justify the direction that monetary policy is taking at present. ↘ ITEMS 407 FF. Most of the ECB's easing measures since mid-2014 have thus served to act in the same way as a discretionary monetary policy stimulus on aggregate demand. However, the dynamics set in motion by these measures are only short-lived, and their impact is set to weaken within the forecast period. In addition, they also incur the risk of misallocation due to a distortion of market prices.

167. The ECB has significantly loosened its monetary policy over recent years. ↘ ITEMS 377 FF. For example, the main refinancing rate was reduced to 0 % and the deposit rate to −0.4 %. Moreover, with its long-term refinancing operations the ECB has supplied banks with liquidity of almost €500 billion to date at extremely favourable financing conditions. Finally, the ECB has expanded its central bank balance sheet by more than €1,300 billion (around 12 % of GDP) through its purchase programmes for covered bonds, asset-backed securities, government bonds and, more recently, even corporate bonds.

168. The ECB's **easing measures** have had a dramatic effect on economic conditions within the euro area. They have caused the yield curve to shift down to such an extent that the long-term interest rates on government bonds with high credit ratings became negative. They also played their part in the significant drop in interest rates for corporate loans, the sharp rise in asset prices and a strong devaluation of the euro. In seeking to assess the overall economic situation, the question thus arises of just how large a role these monetary policy effects have played in the recovery.

169. Concerning the **macroeconomic effects of the current monetary policy**, estimates by the ECB (Praet, 2016) and the Deutsche Bundesbank (2016b) are available. Based on models that are not explained in detail, the ECB assumes that the effect on growth of its easing measures in 2015 and 2016 could be in the region of 0.7 and 0.9 percentage points respectively. These calculations take account of the measures adopted up to March 2016 (Expanded Asset Purchase Programme (EAPP), reduction of the deposit rate and longer-term refinancing

operations). For the year 2015, the Deutsche Bundesbank estimates a growth effect in the region of 0.5 to 0.6 percentage points, while the range specified for 2016 is 0.5 to 1.5 percentage points. The Deutsche Bundesbank's estimates are based on two structural models, and only take account of the measures within the EAPP according to the plans from January 2015. ↘ CHART 16 LEFT AND RIGHT According to the estimates by the ECB and Deutsche Bundesbank, monetary policy has also succeeded in having the desired **positive effect on consumer price inflation**. ↘ CHART 16 RIGHT

170. The estimates of the ECB (Praet, 2016) and the Deutsche Bundesbank (2016b) indicate that the **effects of quantitative easing are significant**. The Deutsche Bundesbank assumes that its estimates more or less reflect the range of effects of quantitative easing, at least for the class of DSGE models. However, it points out that, at their upper limit, the effects could be regarded as being excessively optimistic and that the estimates are associated with a high degree of uncertainty. Neither the ECB nor the Deutsche Bundesbank specify precise values, which means that the values cited may be subject to reading errors.

171. Due to the discretionary nature of most of the measures adopted by the ECB since the middle of 2014, the estimates can be interpreted as indicating that approximately one third of current economic growth is attributable to monetary policy. If actual growth of around 2 % is compared with the potential growth of less than 1 % estimated by the European Commission (2016a), it becomes clear that the upturn in the euro area is largely due to the discretionary measures adopted as part of monetary policy over the past two years. In other words, without the effects of quantitative easing, the underlying dynamic of economic

↘ CHART 16

Effects of monetary easing on economic growth and consumer price inflation in the euro area

1 – Difference between actual or expected GDP growth and estimated effects of monetary policy. 2 – Values are read from the figures of the respective publication. 3 – Range of additional effects reflects the range of effects as estimated by Deutsche Bundesbank (2016b). 4 – Lower bound of the effects of the expanded asset purchase programme (EAPP) in Deutsche Bundesbank (2016b). EAPP as announced in January 2015. 5 – Aggregate effect of the EAPP, the cut of the deposit facility rate (DFR) and the targeted longer-term refinancing operations (TLTRO) as estimated by the ECB (Praet, 2016). 6 – According to the European Commission.

Sources: Deutsche Bundesbank, ECB, European Commission

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growth is probably significantly weaker than current growth rates suggest. (2015 Annual Report, Items 172 ff.)

Expansionary stimuli from fiscal policy

172. The economy of the euro area receives additional **expansionary stimuli from fiscal policy**. However, member states have actually some room for consolidation at present with regard to structural balances, resulting from the lower financing costs and increased aggregate demand generated by monetary policy. At the same time, however, the ECB is reducing the disciplinary function of the markets by influencing government bond yields. Even countries with high levels of debt can secure more favourable refinancing rates. This produces incentives to postpone the consolidation of public budgets, which is a less attractive approach from a political point of view. It is difficult to prove empirically that these incentives play a crucial role in determining the behaviour of member states. However the development of their structural primary balances demonstrates that **consolidation has now ground to a standstill**.

173. At present, **structural primary balances** are best suited to mapping fiscal policy direction in the individual member states. This is because they do not incorporate the effects of monetary policy-driven economic recovery or the lower long-term interest rates on public budgets. Improvements in the structural primary balances can be interpreted as consolidation. In recent years, clear improvements after the euro crisis, were followed by a deterioration in the structural primary balance of the euro area by around 0.2 percentage points of GDP in 2015. ⬊ CHART 17 RIGHT
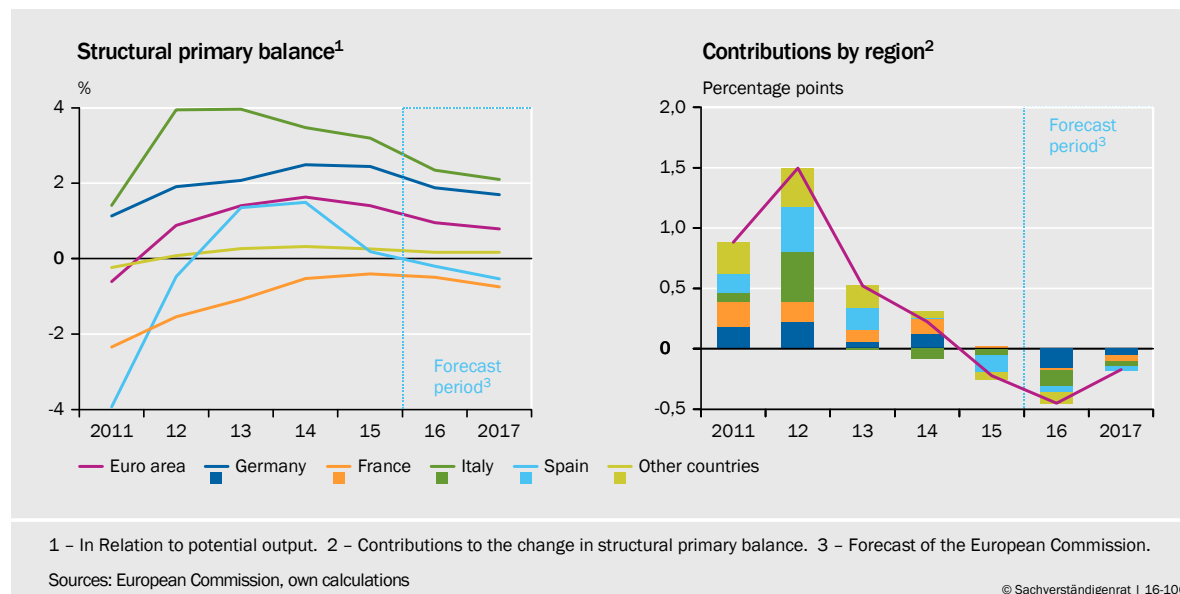
The European Commission predicts further deterioration for the years 2016 and 2017. This means that a consolidation is no longer ascertainable. It is also worthy of note that Spain and France are even showing structural primary deficit – in other words, their budgets wouldn't be balanced even in case of normal capacity utilisation in their economies and in the absence of interest payments. ⬊ CHART 17 LEFT

174. The **ceasing of efforts at consolidation** is **problematic** for several reasons. Firstly, it is striking that even member states that, right to the end, failed to meet the criterion of a maximum **budget deficit of 3 %**, have now ended consolidation efforts. ⬊ TABLE 3 ANNEX In light of the economic and interest-rate-lowering effects of monetary policy, it is noteworthy that four member states – Greece, France, Spain and Portugal – are not bringing their actual fiscal balances into line with the common regulatory framework, even in this environment. An Economic Adjustment Programme for Greece is still on-going. Due to deficit violations, the other three member states have been subject to the **corrective arm of the stability and growth pact** for at least six years continuously.

175. France managed to consistently secure revised targets and deadline extensions in its deficit procedure by means of adjusted consolidation plans. So far, **no sanctions have been imposed**. In contrast, the European Commission officially ruled that Spain and Portugal had breached guidelines (European Com-

Change in the structural primary balance in the euro area and contributions of the member states

Structural primary balance[1]

Contributions by region[2]

1 – In Relation to potential output. 2 – Contributions to the change in structural primary balance. 3 – Forecast of the European Commission.

Sources: European Commission, own calculations

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mission, 2016b, 2016c). The foreseen penalty of 0.2 % of GDP, however, was subsequently cancelled by the ECOFIN Council as a result of the consolidation progress already achieved and the reforms that have been implemented (Council of the European Union, 2016a, 2016b). The **sanctioning of deficit violations** thus continues to be far below the levels provided for by law.

176. The ceasing of consolidation is also problematic because it slows down the urgently needed reduction of burdens from the past and blocks the **creation of crisis buffers.** Debt ratios remain high. ↘ TABLE 3 ANNEX Indeed, in all but five small member states, the debt ratio exceeds the upper threshold of 60 % of GDP. Furthermore, many member states in the euro area are straying from the path of debt reduction in accordance with the benchmark of one-twentieth per year as set out in the reformed Stability and Growth Pact. The Fiscal Compact ratified in 2013 similarly seems to have had very little binding effect in practice. Although interest expenditure has been reduced by low interest rates, the structural balance of most member states is clearly below the lower limit of a structural deficit of 0.5 % of GDP. Overall, the **fiscal policy direction** in the euro area can be classified as **expansionary**. In the short term, it reinforces the existing effects of monetary policy and is not geared towards future challenges.

Adjustment processes incomplete

177. The question arises as to why the member states of the euro area continue to have so much difficulty achieving a self-sustaining economic upturn. Compared with previous economic cycles, this persistent phase of under-utilisation is unusually long. The European Commission estimates that the euro area is now in the **eighth consecutive year** of **economic underutilisation**.

178. Before the euro crisis, some additional production capacities were developed for which there was no longer any demand after the crisis occurred. This is reflected in the current underutilisation of production capacities. The basis for this de-

mand was a debt-financed expansion in private consumption, construction investment and the public sector. Some of the production structures resulting from this demand were rendered obsolete as a result of the crisis, and **reallocation processes** became necessary. One key reason for the persistent underutilisation could be the two main elements that comprise the legacy of the euro crisis, i.e. high levels of private debt and the misallocation of production factors.
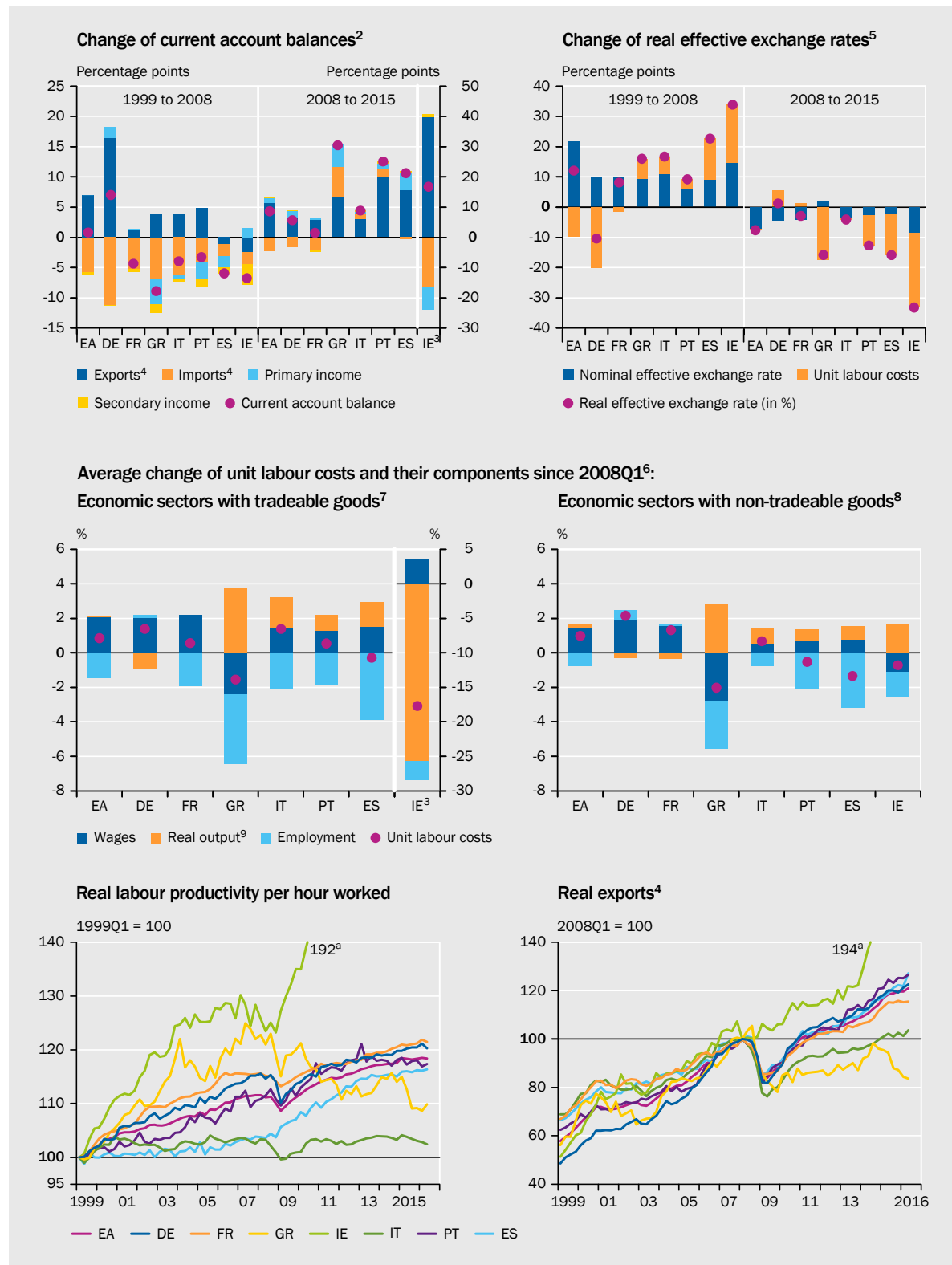
179. A recovery in **price competitiveness** would be an important factor in achieving a self-sustaining upturn. Most member states have seen a dramatic fall in price competitiveness since the start of the currency union ↘ CHART 18 TOP RIGHT Disproportionate wage increases reduced the potential sales of domestically produced goods abroad, and allowed foreign goods to become relatively cheap. This resulted in massive current account deteriorations. ↘ CHART 18 TOP LEFT

180. This negative development was largely reversed after 2008, and most member states now have a positive current account balance. At the same time, particularly the small crisis countries managed to significantly improve their **unit labour costs** and real effective exchange rates. ↘ CHART 18 TOP RIGHT In France and Italy, however, progress has been much less substantial. Price competitiveness has seen virtually no improvement in either country since 2008, and the slight improvements made are entirely due to the devaluation of the euro.

181. The reversal of current account deficits and the reduction in unit labour costs do not, in and of themselves, constitute proof of an adequate correction of negative macroeconomic developments. It is the underlying driving forces that are crucially important. While the **reversal of current account deficits** can primarily be attributed to a rise in exports relative to GDP, ↘ CHART 18 TOP LEFT an examination of export levels alone reveals that they have been on a flatter growth path since the crisis. ↘ CHART 18 BOTTOM RIGHT Thus, the average growth in exports in Spain and Portugal over the past four years has been 0.8 percentage points and 3.5 percentage points respectively below the average growth in exports in the four years prior to 2008.

Furthermore, it is evident that imports in some states, such as Italy and Portugal, have not experienced a structural decline, but have merely decreased in tandem with GDP. In these states, the ratio between imports and GDP has remained almost constant since 2008. ↘ CHART 18 TOP LEFT Looking to the future, this raises concerns that progress towards economic recovery will be accompanied by a return to current account deficits. Some economies, including France and Italy, have already witnessed a return to a negative growth contribution of net exports to GDP in 2015.

182. As with the reversal of current account deficits, the question arises which driving forces are behind the reduction in **unit labour costs** and in which sectors the improvement in price competitiveness has been achieved. ↘ CHART 18 CENTRE A detailed analysis yields two findings. Firstly, a significant portion of nominal unit labour cost reduction has been achieved by means of the **decrease in the level of employment**. For example, layoffs of less productive workers in the manufacturing sector in Spain resulted, statistically speaking, in an average annual reduction in unit labour costs of 4 % since the beginning of 2008. Only in Greece

International competitiveness of the euro area and selected member states[1]

Change of current account balances[2]

Change of real effective exchange rates[5]

Legend:
- Exports[4]
- Imports[4]
- Primary income
- Secondary income
- Current account balance
- Nominal effective exchange rate
- Unit labour costs
- Real effective exchange rate (in %)

Average change of unit labour costs and their components since 2008Q1[6]:

Economic sectors with tradeable goods[7]

Economic sectors with non-tradeable goods[8]

Legend:
- Wages
- Real output[9]
- Employment
- Unit labour costs

Real labour productivity per hour worked

1999Q1 = 100

Real exports[4]

2008Q1 = 100

Legend: EA, DE, FR, GR, IE, IT, PT, ES

1 – EA-Euro area, DE-Germany, FR-France, GR-Greece, IE-Ireland, IT-Italy, PT-Portugal, ES-Spain. 2 – In Relation to nominal GDP. 3 – Right hand scale. 4 – Goods and services. 5 – Relative to a group of 37 industrial countries, based on unit labour costs. 6 – 2008Q1 to 2016Q2. 7 – Manufacturing. 8 – Construction, wholesale and retail trade, transport, accomodation and food service activities, financial and insurance activities, real estate activities. 9 – Negative value shows an increase of real gross value added.
a – Values of Ireland larger than a scaling of 140 are not shown for a better readability; Concerning labour productivity: peak in 2016Q2, concerning exports: peak in 2015Q4.

Sources: European Commission, Eurostat, own calculations

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were unit labour costs reduced by actual wage reductions. In the remaining states, wages in the manufacturing sector increased at average growth rates of 1 % to 2 %.

183. Secondly, there is no evidence of **any significant reallocation** from domestically-oriented sectors of the economy (non-tradable goods) to export-oriented sectors (tradable goods). The actual development in the individual economic sectors since 2008 largely indicates that the decreases in production in the area of tradable goods was disproportionately high across all member states, that wage increases were greater, and that the decline in employment was especially high. Recently, some member states such as Spain experienced a disproportionate increase in employment in the construction industry. While employment in Spain was up by around 2.5 % in total in 2015, it increased by almost 6 % in the construction industry alone. This could be due to the fact that monetary policy has greater expansionary effects on construction than on tradable goods sectors. As a result, it could unintentionally contribute to a prevention of the necessary reallocation of production factors within the national economies.

184. The insufficient reallocation of production factors is reflected in **labour productivity**. ↘ CHART 18 BOTTOM LEFT In Greece, hourly productivity has decreased by an average of more than 1 % per year since 2008, while, in Italy, it has been stagnating for around 15 years. At first glance, Spain and Portugal appear to be doing somewhat better on this score. However, the increase in productivity in these countries can be attributed to the layoff of less productive workers. The fall-off in employment levels and in hourly productivity are not limited to the construction sector, which became bloated during the construction boom. These trends are also being felt in the area of tradable goods. Therefore, it is difficult to rate the adjustment processes to date as an overall success.

Lending experiencing a sluggish recovery

185. Financing conditions in the euro area are extremely favourable. In recent years, the expansionary monetary policy has led to sharply declining **borrowing costs**. Since the start of 2012, interest rates for corporate loans have halved to a figure of less than 2 %. ↘ CHART 48 In addition, the Bank Lending Survey reveals that banks have eased lending standards for companies and households (ECB, 2016b).

186. In this context, **lending volume** in the euro area is only making a tentative recovery. Since 2015 the growth in adjusted unsecured loans to non-financial corporations compared with the previous year has been positive. This figure recently rose to just under 2 % in August 2016. A similar trend is to be observed in loans to private households. However, in light of the favourable financing conditions, the recovery of lending must be interpreted as being rather sluggish. Regional differences are also significant. For example, aggregated lending in the former crisis countries of Greece, Ireland, Italy, Portal and Spain was still in decline up to the summer of 2016.

187. On the demand side, the subdued growth of lending may be connected with the continuing high levels of **private debt**. While significant progress has been made in reducing this debt over recent years, many member states still have a private debt ratio that exceeds the level in existence when the upturn began at the start of the 2000s. This is one aspect that could explain the weak growth in investment and restrained demand for loans. Based on panel analyses, the IMF (2016c) concludes that the average business investment ratio turns out to be three percentage points lower when the leverage ratio rises by ten percentage points.

The expansionary monetary policy might be delaying the necessary structural adjustment processes in the corporate sector and thereby may be acting as an obstacle to the reduction of private debt. Thus, the risk arises in the current low-interest phase that the **capital markets** will be unable to adequately fulfil their **selection function**. In this scenario, companies with little future potential will be kept in the market (zombification). ↘ ITEM 518

188. Moreover, this weak growth in lending may be associated with supply-side problems in some member states. In the case of Italy, Portugal and Greece in particular, **non-performing loans** continue to place a strain on bank balances and hinder lending. ↘ ITEM 514 FF. It can be assumed that demand for credit will continue to recover in the next two years. A strong recovery of loans and investments is only expected when balance sheet adjustments in the private sector have made more progress.

Member states have lost their appetite for reform

189. Alongside the improvement in price competitiveness and the reallocation of production factors, **structural reforms**, which enhance potential output by boosting market and competition, are essential to a self-sustaining economic recovery. Greater competition leads to a more efficient use of labour and capital. Employment increases, as does growth. In the long term, there are therefore positive effects on economic activity (Forni et al., 2010; Gomes et al., 2013; Gerali et al., 2015; IMF, 2015b). In the short term, the relationship is less clear. However, the anticipation of positive effects on employment and income may have the short-term effect of stimulating demand (2015 Annual Report Item 348). Product market reforms in particular may yield positive results in the short term (Gal and Hijzen, 2016; IMF, 2016d).

190. Several recent analyses have shown that the **appetite for reform** in the euro area has **noticeably waned** following the measures implemented in the period 2011 to 2013 (OECD, 2016d; IMF, 2016c; ECB, 2016c). This is particularly problematic because the overall economic conditions in many member states continue to be less competitive than they should be. For example, an analysis by the ECB (2016c) based on Worldwide Governance Indicators demonstrates that the quality of the institutions in the euro area is significantly poorer than in other industrialised countries. Among the member states in the euro area, Italy and Spain compare particularly badly with other large nations. Broader indicators such as the World Bank's Global Competitiveness Indicator confirm this view. If

the economic prospects of the euro area are to improve, it is therefore important that the member states once again make greater efforts to improve economic framework conditions.

3. Outlook

191. The prerequisites for a self-sustaining upturn in the euro area remain unfulfilled despite some progress being made. Many member states are experiencing **structural problems** due to an insufficient degree of competitiveness and inadequate reallocation of production factors to productive sectors of the economy. The outlook is also clouded by persistently high levels of public and private debt and by a lack of political will to implement the reforms necessary to promote productivity and competition. The transition to a stable, self-sustaining economic recovery will only be possible when the outstanding commitments that are the legacy of the crisis are further reduced and when greater progress is made in terms of structural adjustments.

192. Nevertheless, the economic output of the entire euro area is forecast to continue expanding at rates exceeding its potential in the **second half of 2016**. According to the GCEE, monetary policy will remain the key driving force behind this growth. It can be assumed that monetary policy will continue to pursue an expansionary course into 2017. However, the influence of discretionary measures on economic output is likely to lessen as the forecast period progresses, provided that no further measures are adopted. In addition, the positive effects of the drop in oil prices on real income and the export-promoting effects of devaluation will peter out. In 2017, one can therefore expect structural problems to come to the fore once again and to see a return to declining growth rates.

193. The GCEE predicts that GDP growth for the euro area as a whole will be 1.6 % in 2016 and 1.4 % in 2017. ⬂ TABLE 2 Consumer price inflation is forecast to remain around 0.2 % this year due to the continuing base effects of the drop in oil prices. However, once these effects have tapered off, the much higher core inflation rate is likely to filter through to a greater degree once again. This rate is expected to be 0.9 % in 2016 and 1.2 % in 2017. The GCEE is forecasting consumer price inflation of 1.3 % in 2017. ⬂ CHART 19

↘ TABLE 2

Gross domestic product, consumer prices and unemployment rates in the euro area

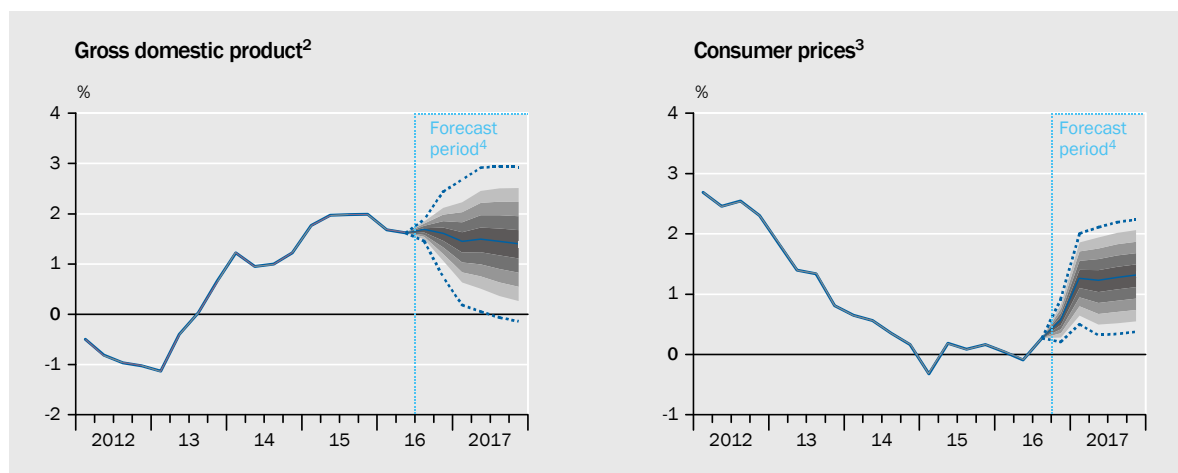| Country/ country group	Weight in %[1]	Gross domestic product			Consumer prices[2]			Unemployment rate[3]		
		change on previous year in %						%		
		2015	2016[4]	2017[4]	2015	2016[4]	2017[4]	2015	2016[4]	2017[4]
Euro area[5]	100	2.0	1.6	1.4	0.0	0.2	1.3	10.9	10.1	9.7
including:										
Germany	29.0	1.7	1.9	1.3	0.1	0.4	1.5	4.6	4.3	4.2
France	20.9	1.3	1.3	1.2	0.1	0.3	1.2	10.4	10.0	9.8
Italy	15.7	0.7	0.7	0.6	0.1	– 0.1	0.8	11.9	11.5	11.2
Spain	10.3	3.2	3.2	2.6	– 0.6	– 0.5	1.1	22.1	19.9	18.3
Netherlands	6.5	2.0	1.7	1.7	0.2	0.0	1.1	6.9	6.3	5.9
Belgium	3.9	1.5	1.5	1.5	0.6	1.8	2.1	8.5	8.2	8.1
Austria	3.2	1.0	1.5	1.4	0.8	0.8	1.6	5.7	5.9	5.8
Ireland	2.4	26.3	2.8	3.8	0.0	– 0.1	1.0	9.4	8.2	7.4
Finland	2.0	0.2	1.0	1.3	– 0.2	0.3	1.3	9.4	8.9	8.5
Portugal	1.7	1.6	1.0	1.4	0.5	0.7	1.2	12.6	11.4	10.5
Greece	1.7	– 0.2	– 0.5	0.5	– 1.1	0.0	0.9	24.9	23.4	22.4
memorandum: **Euro area without Germany**	**71.0**	**2.3**	**1.6**	**1.5**	**0.0**	**0.2**	**1.2**	**13.1**	**12.2**	**11.6**

1 – Nominal GDP in the year 2015 as a percentage of the nominal GDP of the euro area. 2 – Harmonised index of consumer prices.
3 – Standardised. For the total euro area and euro area without Germany weighted by the labour force of 2015. 4 – Forecast of the German Council of Economic Experts. 5 – Weighted average of the 19 euro area member states.

Source: Eurostat

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↘ CHART 19

Gross domestic product and consumer prices in the euro area[1]

1 – Change on previous year's quarter (%); Confidence bands are calculated on the basis of the average absolute forecast error for the period from 1999 to 2015. The width of the symmetric confidence band is twice the average absolute forecast error; dashed line: 68 % confidence interval. 2 – Real, seasonally and calendar-adjusted. 3 – Harmonised index of consumer prices. 4 – Forecast of the German Council of Economic Experts.

Sources: Eurostat, own calculations

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ANNEX

↘ TABLE 3

Fiscal indicators for selected member states of the European Union

	2008	2009	2010	2011	2012	2013	2014	2015
Actual net lending/net borrowing[1]								
Euro area	– 2.2	– 6.3	– 6.2	– 4.2	– 3.6	– 3.0	– 2.6	– 2.1
Germany	– 0.2	– 3.2	– 4.2	– 1.0	– 0.0	– 0.2	0.3	0.7
France	– 3.2	– 7.2	– 6.8	– 5.1	– 4.8	– 4.0	– 4.0	– 3.5
Greece	– 10.2	– 15.1	– 11.2	– 10.3	– 8.8	– 13.2	– 3.6	– 7.5
Ireland	– 7.0	– 13.8	– 32.1	– 12.6	– 8.0	– 5.7	– 3.7	– 1.9
Italy	– 2.7	– 5.3	– 4.2	– 3.7	– 2.9	– 2.7	– 3.0	– 2.6
Portugal	– 3.8	– 9.8	– 11.2	– 7.4	– 5.7	– 4.8	– 7.2	– 4.4
Spain	– 4.4	– 11.0	– 9.4	– 9.6	– 10.5	– 7.0	– 6.0	– 5.1
Primary balance[1]								
Euro area	0.8	– 3.5	– 3.4	– 1.2	– 0.6	– 0.2	0.1	0.3
Germany	2.5	– 0.6	– 1.7	1.5	2.3	1.8	2.1	2.2
France	– 0.4	– 4.8	– 4.4	– 2.5	– 2.2	– 1.8	– 1.8	– 1.5
Greece	– 5.4	– 10.1	– 5.3	– 3.0	– 3.7	– 9.1	0.4	– 3.9
Ireland	– 5.7	– 11.8	– 29.3	– 9.3	– 3.9	– 1.4	0.1	0.7
Italy	2.2	– 0.9	0.0	1.0	2.3	2.1	1.6	1.5
Portugal	– 0.7	– 6.8	– 8.2	– 3.1	– 0.8	0.0	– 2.3	0.2
Spain	– 2.9	– 9.3	– 7.5	– 7.2	– 7.5	– 3.5	– 2.5	– 2.0
Cyclically adjusted net lending/net borrowing[2]								
Euro area	– 3.1	– 4.3	– 5.0	– 3.6	– 2.5	– 1.5	– 1.2	– 1.2
Germany	– 1.1	– 0.7	– 3.2	– 1.6	– 0.5	0.1	0.4	0.9
France	– 4.1	– 5.8	– 5.9	– 4.8	– 4.1	– 3.2	– 2.7	– 2.4
Greece	– 12.5	– 15.6	– 9.8	– 5.8	– 2.6	– 6.9	0.9	– 3.5
Ireland	– 7.7	– 11.6	– 30.2	– 11.3	– 6.2	– 3.6	– 2.8	– 3.2
Italy	– 3.3	– 3.1	– 3.1	– 2.6	– 1.1	– 0.6	– 0.9	– 1.1
Portugal	– 4.0	– 8.5	– 10.7	– 6.3	– 3.1	– 2.2	– 5.2	– 3.2
Spain	– 5.1	– 9.2	– 7.1	– 6.6	– 6.4	– 2.4	– 2.3	– 3.1
Debt level[1]								
Euro area	68.6	78.4	83.8	86.1	89.5	91.3	92.0	90.4
Germany	65.1	72.6	81.0	78.7	79.9	77.5	74.9	71.2
France	68.0	78.9	81.6	85.2	89.5	92.3	95.3	96.2
Greece	109.4	126.7	146.2	172.1	159.6	177.4	179.7	177.4
Ireland	42.4	61.7	86.3	109.6	119.5	119.5	105.2	78.6
Italy	102.4	112.5	115.4	116.5	123.3	129.0	131.9	132.3
Portugal	71.7	83.6	96.2	111.4	126.2	129.0	130.6	129.0
Spain	39.4	52.7	60.1	69.5	85.7	95.4	100.4	99.8

1 – In relation to nominal GDP. 2 – In relation to potential output.

Sources: European Commission, Eurostat

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↘ TABLE 4

Economic situation of the member states of the euro area

Country	Deviation of levels compared to pre-crisis level		Deviation of levels compared to potential level		Potential growth[5]	Change between 2013 and 2015		
	GDP[1]	UR[2,6]	GDP[3]	UR[4,6]	GDP	Output gap	GDP	UR[6]
	%	Percentage points	%	Percentage points	%	Percentage points	%	Percentage points
Germany	6.3	– 2.8	– 0.2	0.2	1.5	0.5	3.3	– 0.6
Estonia	– 2.1	1.6	– 0.4	1.8	2.5	– 0.8	4.3	– 2.4
Ireland	27.5	4.7	0.2	– 0.1	4.0	7.4	37.0	– 3.7
Latvia	– 5.3	3.8	0.6	1.4	2.2	1.1	4.9	– 2.0
Lithuania	4.0	4.8	0.7	0.9	2.5	0.7	5.3	– 2.7
Malta	21.4	– 0.6	1.4	0.1	4.4	1.4	9.8	– 1.0
Slovakia	12.2	1.9	– 0.2	– 0.0	2.7	1.8	6.5	– 2.7
Belgium	5.5	1.5	– 0.4	– 0.6	1.1	1.1	3.2	0.1
France	3.7	3.0	– 1.3	– 0.6	0.8	0.2	1.9	0.1
Netherlands	1.3	3.2	– 0.7	– 0.9	0.8	2.0	3.4	– 0.4
Luxembourg	14.4	2.2	– 0.5	– 0.7	2.9	2.0	8.4	0.5
Austria	3.3	1.6	– 0.8	– 0.3	0.9	– 0.0	1.6	0.3
Slovenia	– 4.6	4.6	– 0.9	– 0.9	0.7	4.1	5.5	– 1.1
Spain	– 4.7	13.9	– 4.0	– 3.7	– 0.0	4.6	4.6	– 4.0
Finland	– 5.7	3.0	– 2.6	– 1.3	0.0	– 0.4	– 0.5	1.2
Greece	– 26.4	17.1	– 8.1	– 4.9	– 2.1	4.7	0.1	– 2.6
Italy	– 7.9	5.8	– 2.4	– 1.5	– 0.3	1.8	0.8	– 0.2
Portugal	– 5.6	3.8	– 2.2	– 0.1	– 0.1	3.0	2.5	– 3.8
Cyprus	– 9.0	11.3	– 2.5	– 3.6	– 1.3	3.9	0.1	– 0.9

1 – For Estonia, Ireland, Greece, Italy, Latvia and Luxembourg: deviation of 2015 compared to the maximum in 2007. For all other countries compared to the maximum in 2008. 2 – For Estonia, Ireland, Spain, Italy, Latvia, Lithuania and Luxembourg: deviation of 2015 compared to the minimum in 2007. For all other countries compared to the minimum in 2008. 3 – Real GDP minus potential output in relation to potential output; potential output for Germany from own estimate; GDP for Ireland adjusted for the sharp increase of GDP in the 1st quarter of 2015. 4 – Difference between NAWRU and unemployment rate. 5 – Potential Growth in 2015. 6 – UR: Unemployment Rate.

Sources: European Commission, Eurostat, own calculations

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REFERENCES

Baker, J. et al. (2016), The short-term economic impact of leaving the EU, *National Institute Economic Review* 236, 108–120.

BIS (2016*), 86. Jahresbericht – 1. April 2015-31. März 2016*, Bank für Internationalen Zahlungsausgleich, Basel.

Bussière, M., G. Callegari, F. Ghironi, G. Sestieri and N. Yamano (2013), Estimating trade elasticities: Demand composition and the trade collapse of 2008-2009, *American Economic Journal: Macroeconomics* 5.3, 118–151.

Carstensen, K., S. Henzel, J. Mayr and K. Wohlrabe (2009), IFOCAST: Methoden der Kurzfristprognose, *ifo Schnelldienst* 23/2009, 15–28.

CBO (2016), *An update to the budget and economic outlook: 2016 to 2026 – August 2016*, Congressional Budget Office, Washington, DC.

Council of the European Union (2016a), *Recommendation for a council implementing decision on imposing a fine on Portugal for failure to take effective action to address an excessive deficit*, Brüssel.

Council of the European Union (2016b), Recommendation for a council implementing decision on imposing a fine on Spain for failure to take effective action to address an excessive deficit, Brüssel.

Daly, M.C., B. Hobijn, A. Şahin and R.G. Valletta (2012), A Search and Matching Approach to Labor Markets: Did the Natural Rate of Unemployment Rise?, *Journal of Economic Perspectives* 26, 3–26.

Deutsche Bundesbank (2016a), Zur Schwäche des Welthandels, *Monatsbericht* März 2016, 13–37.

Deutsche Bundesbank (2016b), Zu den gesamtwirtschaftlichen Auswirkungen der quantitativen Lockerung im Euro-Raum, *Monatsbericht* Juni 2016, 29–54.

ECB (2016a), Jüngste Entwicklung der Kapitalströme in die Schwellenländer, *Wirtschaftsbericht* 5/2016, Frankfurt am Main, 20–23.

ECB (2016b*), The euro area bank lending survey - Third quarter of 2016*, Europäische Zentralbank, Frankfurt am Main.

ECB (2016c), Steigerung der Widerstandsfähigkeit und des langfristigen Wachstums: die Bedeutung stabiler Institutionen und Wirtschaftsstrukturen für die Länder des Euro-Währungsgebiets und die WWU, Wirtschaftsbericht 5/2016, 92–117.

European Commission (2016a), European economic forecast - Spring 2016, Institutional Paper 25, Brüssel.

European Commission (2016b), *Empfehlung für einen Beschluss des Rates zur Feststellung, dass Spanien auf die Empfehlung des Rates vom 21. Juni 2013 nicht mit wirksamen Maßnahmen reagiert hat*, SWD(2016) 241 final, Brüssel.

European Commission (2016c), *Recommendation for a council decision establishing that no effective action has been taken by Portugal in response to the council recommendation of 21 June 2013*, SWD(2016) 240 final, Brüssel.

Evenett, S.J. and J. Fritz (2016), *Global trade plateaus - The 19th global trade alert report*, Centre for Economic Policy Research, London.

Fernald, J. (2015), Productivity and potential output before, during, and after the great recession, in: Parker, J. A. und M. Woodford (Hrsg.): *NBER Macroeconomics annual 2014*, Volume 29, University of Chicago Press.

Forni, L., A. Gerali and M. Pisani (2010), Macroeconomic effects of greater competition in the service sector: The case of Italy, *Macroeconomic Dynamics* 14, 677–708.

Gal, P. and A. Hijzen (2016), *The short-term impact of product market reforms: A cross-country firm-level analysis*, Economics Department Working Paper 1311, Organisation for Economic Co-operation and Development, Paris.

Gerali, A., A. Notarpietro and M. Pisani (2015), *Structural reforms and zero lower bound in a monetary union*, Working Paper 1002, Banca d'Italia, Rom.

Gomes, S., P. Jacquinot, M. Mohr and M. Pisani (2013), Structural reforms and macroeconomic performance in the euro area countries: A model-based assessment, *International Finance* 16, 23–44.

Gordon, R.J. (2012), *Is U.S. economic growth over? Faltering innovation confronts the six headwinds*, NBER Working Paper 18315, Cambridge.

Hofmann, B. and B. Bogdanova (2012), Taylor Rules and Monetary Policy: A Global 'Great Deviation'?,

BIS Quarterly Review September 2013, 37-49.

Iacoviello, M. and S. Neri (2010), Housing market spillovers: evidence from an estimated DSGE Model, American Economic Journal: Macroeconomics 2, 125–164.

IMF (2016a), *The People´s Republic of China: 2016 Article IV Consultation*, IMF Country Report No. 16/270, Washington, DC.

IMF (2016b), *The People´s Republic of China: Selected Issues*, IMF Country Report 16/271, Washington, DC.

IMF (2016c), *Euro Area Policies: Article IV Consultation*, IMF Country Report 16/219, Washington, DC.

IMF (2016d*), Too slow for too long, World Economic Outlook*, Internationaler Währungsfonds, Washington, DC.

IMF (2015a), *Uneven growth: Short- and long-term factors, World Economic Outlook*, Internationaler Währungsfonds, Washington, DC.

IMF (2015b), *Structural reforms and macroeconomic performance: Initial considerations for the fund, Staff Report*, Internationaler Währungsfonds, Washington, DC.

IMF (2011), Der IWH-Flash-Indikator, *Wirtschaft im Wandel* 1/2011, 13–14.

IRC Trade Task Force (2016), Understanding the weakness in global trade – What is the new normal?, Occasional Paper 178, Europäische Zentralbank, Frankfurt am Main.

Joint Economic Forecast Project Team (2013), Deutsche Konjunktur erholt sich - Wirtschaftspolitik stärker an der langen Frist ausrichten, Gemeinschaftsdiagnose im Auftrag des Bundesministeriums für Wirtschaft und Technologie, Berlin.

Noland, M., G.C. Hufbauer, S. Robinson and T. Moran (2016), *Assessing trade agendas in the US presidential campaign*, PIIE Briefing 16–6, Washington, DC.

Nunns, J., L. Burman, B. Page, J. Rohaly and J. Rosenberg (2016), *An analysis of Donald Trump's revised tax plan*, Tax Policy Center, Washington, DC.

OECD (2016a), *Cardiac arrest or dizzy spell: Why is world trade so weak and what can policy do about it?*, OECD Economic Policy Paper No. 18, Paris.

OECD (2016b), *Economic outlook - June 2016*, Organisation for Economic Co-operation and Development, Paris.

OECD (2016c), *The economic consequences of Brexit: A taxing decision*, OECD Economic Policy Paper 16, Paris.

OECD (2016d*), Economic Policy Reforms: Going for Growth - Interim report*, Organisation for Economic Co-operation and Development, Paris.

Praet, P. (2016), *The ECB's monetary policy response to disinflationary pressures*, Rede, ECB and Its Watchers XVII conference, Frankfurt am Main, 7. April.

RWI (2011), Ein System von Brückengleichungen für die Kurzfristprognose, *RWI Konjunkturberichte* 62, 65–67.

Weidner, J. and J.C. Williams (2011), What is the new normal unemployment rate?, *FRBSF Economic Letter* 5.