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Report

Fiscal Pact Deepens Euro Area Crisis

Joint analysis of the Macro Group

IMK (Duesseldorf)[1], OFCE (Paris) and WIFO (Vienna)

At a glance

- The expansion of the world economy slowed down noticeably in the second half of 2011. Global economic activity was dampened primarily because of the unfavourable developments in the euro area. The institutes expect its GDP to decline by 0.8 % in 2012 and by 0.5 % in 2013.
- The outlook for the German economy is not particularly bright. The institutes expect GDP to increase by merely 0.3 % (2012) and 0.7 % (2013).
- Simulations of the medium-term trend in the euro area show that simultaneous austerity policies, primarily targeting the supply side will deepen the euro area's economic divide between the southern European member states and Germany. The main cause of the euro crisis will thus not be overcome but aggravated. A way out of the crisis can only be found, if expansionary demand policies return to the economic policy agenda in Europe.

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The global economy marked by the euro crisis

The global economic expansion has slowed noticeably in the second half of the year 2011. Global economic activity was dampened mainly because of the unfavourable developments in the euro area. The uncertainty for private households and companies concerning the future of the euro as well as the enhanced austerity efforts in many EMU countries depressed demand. By contrast the Asian emerging economies and China continued to experience dynamic economic growth and in the USA, too, economic activity gained momentum in the course of the past year. The difficult situation in the euro area will depress global economic trends in the forecast period. This forecast is based on the assumption that the budget consolidation in the euro area is continued in line with the enhanced stability and growth pact. This pact implies drastic spending cuts and tax increases, particularly in the crisis countries. As a consequence the euro area economy will slip into recession in this year and will continue declining in 2013. Therefore, the global economic expansion will be muted. In addition, considerable risks for the world economy consist in the threat of renewed commodity price hikes or the potential failure to solve the crisis of the European Monetary Union.

In 2011 the world economy grew strongly (Table 1). However, the pace of the expansion slowed significantly in the course of the year. This is also reflected in the muted global trade activity. After the latter had continued to expand strongly in the first quarter of 2011, it hardly increased during the rest of the past year. With a year-on-year growth rate of 5.6 % global trade increased far more slowly than a year earlier (+14.9 %). The slowdown affected advanced

[1] In Cooperation with theWSI (Duesseldorf).

and emerging economies alike. Whereas real goods imports continued to increase slightly in the Asian emerging economies and in the USA, they declined noticeably in Latin America and in the euro area. Following global economic growth of 3.9 % (at purchasing power parity) in 2011 the institutes expect an increase of only 3.1 % in this year and 3.5 % in 2013.

After the financial and economic crisis of 2008/09 the Asian emerging economies served as a key engine for the global economic recovery. However, by now a slight slowdown in economic activity can be observed there, too. The euro area crisis and the persistent uncertainty are putting an increasing strain on the global economic expansion. Thus, particularly the shipments of the strongly export-oriented Asian emerging economies have lost significant momentum. At a quarterly growth rate of 2 % China's economy expanded somewhat more slowly in the fourth quarter than in the six preceding months. Annual average economic growth amounted to 9.2 % in 2011, compared to 10.4 % in 2010. During the forecast period Chinese economic growth will slow somewhat. With inflation abating there will be room for a more expansionary monetary policy. In November 2011 and in February 2012 banks' minimum reserve requirements were reduced. For 2012 and 2013 the institutes expect economic growth rates of 8.3 % and 8.2 % in China. In India and in the East Asian emerging economies economic activity will also remain buoyant.

In their role as commodity producers, numerous Latin American emerging economies, but also Russia, benefitted from the price increases in world markets over the past years. In the second half of 2011 commodity and energy prices subsided, dampening economic activity in those countries. A renewed increase of commodity and food prices would again stimulate economic activity there. In addition, these countries have much more fiscal and monetary room for manoeuvre to offset a downturn.

In Japan the economy experienced an unexpectedly sharp decline at the end of 2011. Weak global demand and also the appreciation of the yen are thought to be among the key causes. However, consumer spending and investment have shown a positive trend most recently. During the forecast period the economy is expected to benefit from the reconstruction following the devastating earthquake. The institutes expect an expansion of GDP by 1.2 % in 2012 and by 2.2 % in 2013.

With a growth rate of 1.7 % the US economy, too, expanded much more slowly in 2011 than in 2010 (3 %). The weak performance during the first half of the year had a determining influence on the low annual average growth rate. During the second half of the year economic activity in the USA gained significant momentum. Consumption expenditure of private households as well as gross fixed capital formation contributed the lion's share to the expansion of GDP in 2011. However, inventories also rose sharply in the fourth quarter.

Consumption expenditure of private households in the USA is supported by the beginning improvement in the labour market. In January the seasonally adjusted number of employees increased by 243,000 persons compared to the previous month. The seasonally adjusted unemployment rate declined to 8.3 % of the labour force in January. It thus declined by 0.8 percentage points since August 2011, after nearly stagnating for some time. Compared to its peak (in October 2009) it fell by 1.7 percentage points, but remained almost 4 percentage points above the pre-recession level. The US economy continues to be stimulated by monetary and fiscal policies. Interest rates are expected to remain low during the forecast period. The presidential election in autumn 2012 is also likely to contribute to largely undiminished government spending. The institutes expect the economy to grow by 2.1 % in 2012 and by 2 % in 2013.

Risks for the world economy remain considerable. This forecast assumes that the EMU crisis will not escalate further. An additional increase of yields on bonds of such countries as Italy or Spain or solvency problems of an EMU country would put a considerable strain on the financial system

TABLE 1

Global economic trends

% change of real GDP,
compared to the previous year

	Weight in %[1]	2010	2011	2012	2013
World	100.0	+5.2	+3.9	+3.1	+3.5
Advanced economies	57.5	+3.4	+1.9	+1.2	+1.7
EU 27	20.4	+2.0	+1.6	- 0.4	±0.0
Euro area	14.6	+1.9	+1.5	- 0.8	- 0.5
USA	19.5	+3.0	+1.7	+2.1	+2.0
Japan	5.8	+4.4	- 0.9	+1.2	+2.2
Emerging economies	28.6	+8.9	+7.1	+6.5	+7.0
China	13.6	+10.3	+9.2	+8.3	+8.2
India	5.5	+10.1	+7.1	+6.4	+8.5
Russia	3.0	+4.0	+4.3	+3.5	+2.8
Brazil	2.9	+7.5	+2.8	+3.1	+4.8
ASEAN 5	3.6	+6.9	+4.7	+5.2	+5.8

[1] Shares in GDP at purchasing power parity in USD of 2010 according to the IMF; ASEAN 5: Indonesia, Malaysia, Philippines, Thailand, Vietnam.

Sources: Eurostat; IMF; calculations of the institutes, from 2012 forecast of the institutes.

TABLE 2

Forecast assumptions

Annual data	2011	2012	2013
Three-month Euribor (%)	1,4	0,9	0,8
10-year government bond yield (euro area, %)[1]	4,4	4,5	4,3
10-year government bond yield (USA, %)	2,8	2,3	2,2
Exchange rate (USD/EUR)	1,39	1,27	1,25
Real effective exchange rate of the euro (vis-à-vis 40 countries)[2]	97,7	92,8	92,2
Indicator of Germany's price competitiveness (vis-à-vis 56 countries)	91,7	88,8	88,3
Index of collectively agreed wages (Bundesbank)	1,8	2,5	2,4
Oil price (Brent)	111	115	110

[1] EURO12.
[2] A decrease implies an improvement of competitiveness.

Sources: Deutsche Bundesbank; ECB; EIA; Federal Reserve; from 2012 forecast of the institutes.

and the real economy. The trend of the oil price is another considerable risk factor. The forecast assumes a price of the Brent blend of $ 110 (Table 2). However, if the recent oil price increase continues, this will further dampen the global economic expansion.

Crisis of the monetary union drives euro area into recession

In the wake of the financial and economic crisis of 2008/09 confidence in the public finances of some countries dramatically declined in the euro area. Government support to the financial sector, measures to stabilise economic activity and lower tax revenues caused dramatic increases in budget deficits, particularly in Ireland and some southern European countries, as well as a surge in government debt. In some cases, such as in Greece and in Italy, government debt was relatively high already before the crisis and far exceeded the benchmark of 100 % of GDP in the wake of the crisis. At the end of 2009, after it had become known that government debt in Greece was higher than previously assumed, yields on Greek government bonds began to rise steeply. In May 2010 the governments of the EU countries enacted a financial aid package for Greece amounting to € 110 billion and established a rescue fund, which was called on by Ireland in November 2010 and by Portugal in May 2011, after the yields of their government bonds had also risen sharply. In the second half of 2011 the crisis escalated. In summer it threatened for the first time to spread to larger countries such as Italy and Spain.

In autumn it became obvious that growth expectations for the Greek economy were exaggerated and the budget deficit would turn out higher than envisaged. The governments of the EU countries reacted to these developments with a new financial aid package for Greece including haircuts for private creditors ("private sector involvement") and enhanced fiscal policy rules forcing the majority of euro area countries to implement strict austerity programmes in the coming years. However, all the measures that have been taken so far have not caused government bond yields in the euro area to decline significantly. In March 2012 yields on Greek, Portuguese and Irish government bonds continued to exceed the level which would facilitate a stabilisation of government debt. Yields on Italian and Spanish bonds exceeded 5 %.

The persistent uncertainty for consumers and companies due to the crisis and the simultaneous and increasing efforts to cut spending in most euro area countries weakened demand and dampened growth. In the course of 2011 economic activity slowed continuously. In the fourth quarter the euro area economy declined by 0.3 % compared to the previous quarter (second quarter: +0.2 %, third quarter: +0.1 %). The lack of a comprehensive and credible solution to the crisis, the persistent uncertainty and ever more new austerity measures in the crisis countries are likely to drive these euro area countries deeper into recession.

This forecast assumes that budget consolidation continues according to the rules laid down in the enhanced Stability and Growth Pact ("six-pack") in autumn 2011. This implies a reduction of the structural deficit to 0.5 % of GDP by 2016. In addition, every member state is obliged to cut back one twentieth of the difference between the current government debt (in % of GDP) and the Maastricht target of 60 % per year. Especially in those countries where the debt ratio is high this requires drastic spending cuts. The forecast assumes that 70 % of the budget consolidation affect expenditures, while 30 % consist of measures to raise revenues.

Against the background of the ECB's recent extensive liquidity measures it is assumed that the ECB's main refinancing rate will not be lowered further, but that it will be left at the level of 1 % in deference to representatives of the Bundesbank. In the forecast period the yields of German Bunds will continue to benefit from a "safe haven" bonus. However, this advantage will decline somewhat. By contrast, the yields on other euro area countries' government bonds, particularly those of the crisis countries, will continue to show high risk premia. However, the latter will remain below the levels seen in late November and early December of last year. Due to the recession the euro will depreciate slightly. Thus, an average exchange rate of 1.25 US dollars per euro is to be expected (Table 2).

Under these assumptions the institutes expect GDP of the euro area as a whole to decrease by 0.8 % in 2012. Next year the economy is expected to shrink by 0.5 %. However, there are substantial regional divergences (Table 3).

TABLE 3

Economic growth in the EU

Real GDP, % change

	Weight in %[1]	2010	2011	2012	2013
EU 27	100.0	+2.0	+1.5	- 0.4	±0.0
UK	14.4	+2.1	+1.0	+0.1	+1.4
Euro area	71.4	+1.9	+1.4	- 0.8	- 0.5
Germany	19.4	+3.7	+3.0	+0.3	+0.7
France	14.0	+1.5	+1.7	+0.2	+0.7
Italy	11.7	+1.5	+0.2	- 2.6	- 2.9
Spain	9.0	- 0.1	+0.7	- 1.5	- 1.7
Greece	2.1	- 3.5	- 6.9	- 6.7	- 6.2
Portugal	1.6	+1.4	- 1.6	- 4.3	- 3.0
Ireland	1.2	- 0.4	+2.6	- 1.3	- 1.3

[1] Shares in GDP at purchasing power parity in USD of 2010 according to the IMF.

Sources: Eurostat, IMF, calculations of the institutes; from 2012 forecast of the institutes.

In the countries hit hardest by the crisis the economic situation will continue to worsen considerably. In the past economic growth there was largely driven by a strong expansion of domestic demand. Now the strict austerity packages exacerbate the lack of demand. The institutes expect economic activity to decline drastically in Greece, Ireland, Italy, Portugal and Spain during the forecast period.

By contrast, export-oriented countries, such as Germany, the Netherlands, Austria, the Scandinavian countries, Slovakia and the Czech Republic benefited from the global recovery following the financial and economic crisis of 2008/09. In 2010 and in the first half of 2011 their economies expanded strongly. Meanwhile the euro crisis is clearly leaving its mark on these countries, too. Lower exports to the euro area as well as the slightly lower growth in the Asian emerging economies are dampening economic activity. In Germany, the Netherlands, Austria and the Czech Republic GDP declined in the fourth quarter of 2011. However, the global economic expansion is likely to ensure that the economic slowdown in these countries will be moderate.

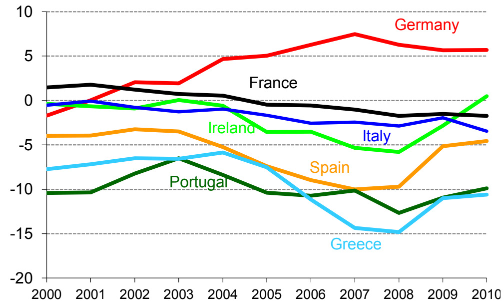
Since the introduction of the European currency significant current account imbalances have accumulated between the euro area member states. The crisis of confidence in the euro area and the drastic measures in Ireland and in the southern European countries have resulted in a partial elimination of these imbalances. In Germany the current account surplus in % of GDP was reduced by two percentage points between 2007 and 2010. Although the current account deficit had decreased significantly in Greece and Spain, it still remained high in 2010. In Portugal the very high current account deficit remained largely unchanged. In Italy and France the deficit even widened further between 2007 and 2010. Only Ireland succeeded in balancing its current account by 2010. The differences in competitiveness, too, have hardly been reduced so far. Although unit labour costs in Germany rose noticeably during the financial and economic crisis of 2008/09, this was mainly due to a temporary productivity decline owing to the retention of workers as well as the use of working time accounts and the implementation of short-time working schemes, which temporarily raised hourly labour costs. In 2010 unit labour costs decreased slightly again. Since 2007 Ireland and Spain have partly succeeded in offsetting their losses of competitiveness vis-à-vis Germany. Greece and Portugal recorded a slight improvement of their competitiveness vis-à-vis Germany for the first time in 2010 (Figure 1).

In the wake of the financial and economic crisis government budget deficits of numerous countries rose dramatically. Government support to the financial system, measures to stabilise economic activity as well as revenue losses due to lower tax receipts increased budget deficits. Due to the persistent loss of confidence in their public finances many countries felt compelled to implement austerity measures. In Ireland and in southern Europe, in particular, these measures are extremely ambitious. Compared to the level of 2009 the primary balance

FIGURE 1

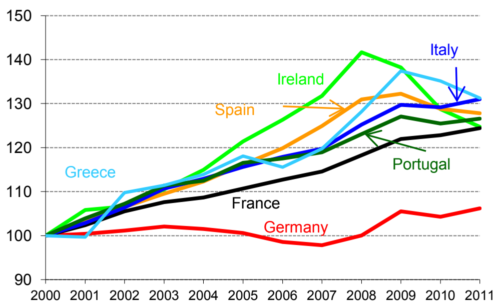
Current account

in % of GDP



Unit labour cost[1]

Nominal, EUR (2000=100)



[1] 2011: Forecast of the European Commission (Autumn 2011).

Sources: European Commission (AMECO data base); IMF; OECD; OeNB (Oesterreichische Nationalbank).

TABLE 4

Unemployment rate

in % of the labour force[1]

	2010	2011	2012	2013
Germany[2]	6.8	5.8	5.4	5.4
France[3]	9.4	9.3	9.8	10.5
Italy	8.4	8.4	9.7	11.3
Spain	20.1	21.6	24.9	25.2
Greece	12.6	17.3	20.1	23.0
Portugal	12.0	12.7	14.1	15.2
Ireland	13.7	14.3	14.1	14.0
United Kingdom	7.8	8.0	8.3	8.5

[1] Eurostat (Labour Force Survey; standardised).
[2] according the ILO (International Labour Organisation) definition; % of the civilian labour force based on DESTATIS data; non-standardised.
[3] according the ILO (International Labour Organisation) definition; based on INSEE data; non-standardised.

Sources: Eurostat (Labour Force Survey); from 2012 forecast of the institutes.

TABLE 5

Harmonised consumer price index

% change on previous year

	Weight in ‰[1]	2010	2011	2012	2013
EU 27	1.000.0	+ 2.1	+ 3.1	+ 2.0	+ 1.2
United Kingdom	160.1	+ 3.3	+ 4.5	+ 2.0	+ 1.2
Euro area	721.0	+ 1.6	+ 2.7	+ 1.9	+ 1.1
Germany	261.6	+ 1.2	+ 2.5	+ 1.8	+ 1.3
France	207.3	+ 1.7	+ 2.3	+ 2.0	+ 1.0
Italy	182.0	+ 1.6	+ 2.9	+ 2.5	+ 1.1
Spain	126.2	+ 2.0	+ 3.1	+ 1.5	+ 0.7
Greece	36.3	+ 4.7	+ 3.1	+ 1.4	+ 1.9
Portugal	22.2	+ 1.4	+ 3.6	+ 1.5	+ 0.9
Ireland	14.7	– 1.6	+ 1.1	+ 0.3	– 0.7

[1] Country weights of the HICP for 2010 according to Eurostat (per mille).

Sources: Eurostat; from 2012 forecast of the institutes.

is planned to improve by 12 percentage points of GDP in Greece, by 10 percentage points in Ireland and Portugal and by 7 percentage points in Spain until 2013. In view of the looming persistence of the recession it seems unlikely that these objectives will be met. Already in the past year it became increasingly obvious that Greece and Portugal would miss the deficit reduction targets for 2011 that had been imposed on them. In Spain, too, the budget deficit target was clearly exceeded. The economic slump during the forecast period will leave its mark on government budget balances. Nevertheless, the institutes expect budget deficits to diminish somewhat by 2013 owing to the drastic austerity efforts.

There are substantial labour market problems in the euro area. The seasonally adjusted unemployment rate reached 10.4 % of the labour force in December 2011, exceeding the level of June 2011 by 0.4 percentage points. In the countries hit hardest by the crisis the situation is particularly dramatic: In Spain the unemployment rate amounted to 22.9 %. In Ireland and Portugal it was 14.5 % and 13.6 %, respectively. In Greece it had reached 19.2 % of the labour force already in October. The recession in the euro area is expected to lead to a further increase of unemployment in the forecast period with levels in the individual countries diverging widely (Table 4).

During the course of 2011 the increase of consumer prices was dampened mainly because of falling energy and other commodity prices. Following a pronounced decline in the second half of 2011, however, the crude oil price (Brent) returned to $ 120 per barrel in March 2012. By contrast, the HWWI's index of commodity prices excluding energy (in US dollars) was about 13 % below the level of the previous year. In December consumer price inflation slowed to 2.7 % year-on-year. By contrast, the core inflation rate (HICP excluding energy and

Weak economic growth in France

In France economic trends were slightly better than in the euro area as a whole in 2011. Unlike in most other member states of the monetary union, where GDP declined in the fourth quarter, the expansion continued in France (+0.2 %), helped especially by gross fixed capital formation. By contrast, consumption expenditure of private households remained sluggish. Net exports improved somewhat during the final three months of 2011. However, on average they did not contribute to the economic expansion.

In the past year the French economy did not grow fast enough to prevent a rise in unemployment. A minimum growth rate of 2 % would be required to stabilise the unemployment rate. Thus, the seasonally adjusted unemployment rate has risen slightly again since mid-2011. In January 2012 it reached 10 % of the labour force. Owing to the increased labour market participation of women and the pension reform inducing the elderly to retire later, the labour supply in France rises by 0.6 % per year. The unfavourable situation in the labour market also dampens price trends. Although, at 2.6 %, annual inflation was slightly higher in January 2012 than a year earlier, it was largely driven by the increase of energy and food prices. By contrast, the core inflation rate amounted to only 1.5 % due to subdued wage increases.

During the forecast period the French economy will expand only moderately. Anemic demand of the euro area trade partners will limit export growth. Domestic demand will be dampened by the envisaged budget consolidation. Consumption expenditures of private households are expected to remain largely stagnant because of the muted real wage trend as well as tax increases. The French government has committed itself to reducing the budget deficit by two percentage points of GDP in each of the years 2012 and 2013. The announced measures consist equally of spending cuts and tax increases. The expenditure-based measures include in particular the reduction of the number of public sector employees, decoupling public sector wages and social transfers from inflation as well as pension and hospital reforms. On the revenue side an increase of the reduced VAT rate from 5.5 % to 7 %, an increase of corporate income tax for large corporations, freezing the income and wealth tax rates, raising capital income tax and the introduction of a financial transactions tax have been decided. These measures and reduced stimulus from abroad will cause the French economy to expand by merely 0.2 % in 2012 and 0.7 % in 2013.

The problems of the banking sector pose a risk to economic activity in France. In view of the declining value of government bonds and the implementation of Basel III, French banks might further tighten lending conditions. So far there has been no hint of a credit crunch. The decline of new loans seems to be mainly a consequence of falling credit demand of households and corporations.

However, the key challenge for French economy consists in the reduction of its current account deficit. Since the establishment of the monetary union France’s relative competiveness vis-à-vis euro area countries with low wage growth such as Germany has worsened persistently. A whole range of measures is envisaged to improve competitiveness, particularly in industry. In addition to supporting innovation, research and development as well as financing small and medium-sized enterprises, France follows a strategy of increasing its competitiveness via wage moderation and the reduction of non-wage labour costs. This strategy, inspired by German wage trends, involves the danger of weakening domestic demand. A reduction of employers’ social security contributions would be financed by an increase of both the VAT rate and the capital income tax rate. This strengthens corporate competitiveness, but burdens private households.

unprocessed food), which is more strongly affected by the cycle, remained unchanged at 2 %. Weak economic activity is expected to have its share in limiting the scope for price increases in the euro area. Energy and other commodity prices are even expected to decline as a consequence of the muted global expansion. For the euro area as a whole the institutes expect annual consumer price increases of 1.9 % in 2012 and of 1.1 % in 2013 (Table 5).

The economic situation in Germany

Mixed outlook for economic activity

The German economy continued to expand strongly in 2011 GDP increased by 3 %, rising above the pre-crisis level during the course of the year. Most of the growth was observed during the first half of the year and was driven both by domestic and by foreign demand. At the end of the year waning foreign demand and weaker consumer spending lead to a minor decline of aggregate output. The adverse developments in the euro area were the main cause of the export slump.

The outlook for 2012 is not particularly favourable. Although in Germany, unlike in several other euro area countries, no recession is expected, dwindling demand in the euro area is increasingly dampening German exports and consequently also investment. By contrast, exports to emerging economies are expected to continue their upward trend, although they are unlikely to regain the momentum of the past two years. This year private consumption expenditure will once again contribute decisively to economic growth. This is due to the stable income growth, caused by higher negotiated wage increases and the continuation of the favourable employment trend. Nevertheless, the general business tendency will be muted, because the other components of domestic demand will not provide any noticeable stimulus. The institutes expect an average annual increase of GDP by only 0.3 % in 2012 (Table 6).

The outlook for the coming year is mixed. German exporters are expected to improve their competitiveness vis-à-vis countries outside the euro area and consequently increase their shipments to this part of the world. On the other hand the persistent austerity policies will continue to dampen demand in the euro area exerting a strong negative effect on German exports to the region. Overall, however, net exports are expected to contribute positively to economic growth. Expected increased export demand particularly from third countries will also stimulate domestic demand, especially investment in machinery and equipment. Private consumption expenditure, too, is expected to expand at a similar pace as in this year. All in all, the institutes expect GDP to grow by 0.7 % in 2013 (Table 6, Table 7).

TABLE 6

Key forecast figures for Germany

% change

	2010	2011	2012	2013
Gross domestic product	3.7	3.0	0.3	0.7
Private consumption expenditure	0.6	1.5	0.6	0.7
Government consumption expenditure	1.7	1.4	1.0	0.7
Gross fixed capital formation	5.5	6.4	0.8	1.5
Net exports[1]	1.5	0.8	-0.2	0.1
Exports	13.7	8,2	3.0	3.5
Imports	11.7	7.4	3.9	3.8
Total employment	0.5	1.3	0.8	0.1
Unemployment rate[2]	7.7	7.1	6.8	6.8
Unit labour cost	-1.5	1.2	2.2	1.2
Consumer prices	1.1	2.3	1.8	1.3
Budget balance[3]	-4.3	-1.0	-0.7	-0.2

[1] Contribution to growth calculated from the chained volume index.
[2] % of the civilian labour force.
[3] % of gross domestic product.

Sources: DESTATIS; ECB; from 2012 forecast of the institutes.

TABLE 7

Statistical components of GDP growth

% or percentage points

	2011	2012	2013
Statistical carry-over effect at the end of the previous year[1]	1.2	0.2	0.3
Growth rate over the course of the year[2]	2.0	0.6	0.9
Annual average GDP growth rate, adjusted for working days	3.1	0.5	0.8
Calendar effect[3]	-0.1	-0.2	-0.1
Annual average GDP growth rate	3.0	0.3	0.7

[1] Seasonally and working-day adjusted index in the fourth quarter of the previous year relative to the working-day adjusted quarterly average of the previous year.
[2] Annual growth rate in the fourth quarter adjusted for working-day effects.
[3] % of gross domestic product.

Sources: DESTATIS; calculations of the institutes, from 2012 forecast of the institutes.

Recession in the euro area dampens export growth

In 2011 German foreign trade expanded rapidly once again. Annual exports of goods and services increased by 8.2 % in real terms. However, the annual growth rate of the fourth quarter (6.3 %) reflects a marked loss of momentum compared to a year earlier (13.9 %). This was mainly caused by a sharp decline of import demand from European countries and in particular from the euro area in the second half of 2011 (Figure 2). Once again German exports were spurred by the strong demand from Asia. Following the surge of 2010 (44.3 %) German shipments of goods continued to climb by another 20 % last year. However, German exports of goods to the USA also expanded vigorously (Figure 2).

During the forecast period German exports will grow only slowly, because they are affected massively by the recession in the euro area. Both in this year and next year German shipments to the monetary union, which is the most important market for German products and accounts for a share of more than 40 %, will decline. By contrast, German exports will receive strong stimulus from the persistently buoyant demand in the Asian region as well as Russia. Under the forecast assumptions of a euro dollar exchange rate of 1.25 and the continuation of the upward trend of the US economy goods trade with the USA is also expected to expand significantly. Overall, exports of goods and services will increase by 3.2 % in the course of this year and by 3.9 % in the course of next year. On average export growth will amount to 3 % and 3.5 % per year in 2012 and in 2013, respectively.

In the past year imports of goods and services also rose markedly. Their annual average growth rate amounted to 7.4 % (in real terms). In the fourth quarter 2011 they exceeded the level of a year earlier by 6.4 %. During the forecast period the favourable employment situation will stimulate import demand, causing shipments to Germany to grow somewhat faster than exports both in this year and next year. At the end of this year imports will be 3.8 % above the level of the end of last year. In the course of next year the increase will be 4.1 %. This translates into annual average growth rates of 3.9 % and 3.8 % in 2012 and in 2013, respectively. The contribution of foreign trade to GDP growth will thus be -0.2 percentage points in this year and +0.1 percentage points in 2013 (Table 8).

Import prices surged once again last year (+5.2 %) due to considerable price hikes of fuels, metals, food and other commodities. During the forecast period import price inflation is expected to ease significantly. On the one hand the recession in the euro area and the slowing economic activity in Asia will dampen price increases of metals and other commodities. On the other hand it is assumed in view of the global situation that the oil price will decline again and amount to $ 110 per barrel during the forecast period. Overall, the import deflator is expected to increase by 2.3 % in this year. After that import prices are predicted to decline by 0.6 % next year.

Once again export prices (2.7 %) rose more slowly than import prices in the past year (5.2 %). Against the background of a recession in the euro area and the related decline of demand for German products export prices are expected to climb only marginally if at all. The expected increase is 1.3 % in this year and 0.5 % next year. Following a renewed worsening in this year the terms of trade will improve considerably again next year.

TABLE 8

Growth contributions of expenditure aggregates[1] in Germany
Percentage points

	2010	2011	2012	2013
Gross domestic product	3.7	3.0	0.3	0.7
Domestic demand	2.3	2.2	0.6	0.7
Consumption expenditure	0.7	1.1	0.5	0.5
Private households	0.4	0.8	0.3	0.4
Government	0.3	0.3	0.2	0.1
Fixed capital formation	1.0	1.1	0.2	0.2
Machinery and Equipment	0.7	0.5	0.0	0.2
Construction	0.2	0.5	0.1	0.1
Other capital formation	0.1	0.1	0.1	0.0
Changes in inventories	0.6	0.0	-0.1	0.0
Net exports	1.5	0.8	-0.2	0.1
Exports	5.8	3.9	1.5	1.8
Imports	-4.3	-3.1	-1.7	-1.7

[1] Calculated on the basis of the chained volume index; growth contributions of individual aggregates may not add up to the GDP growth rate due to rounding.

Sources: DESTATIS, calculations of the institutes, from 2012 forecast of the institutes.

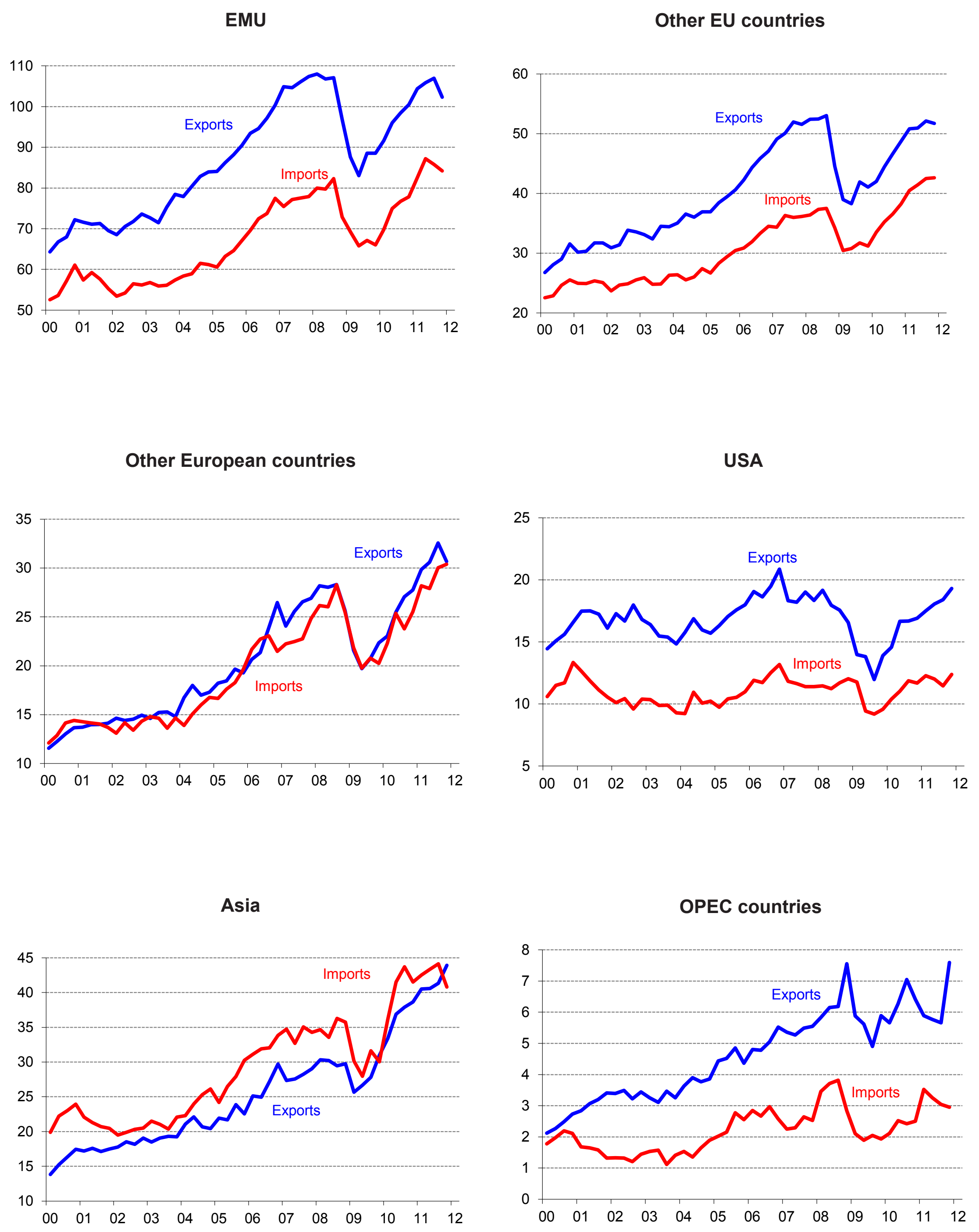
Equipment investment in the doldrums for now

Investment in machinery and equipment expanded only sluggishly in the past year, stagnating at the end of the year. Thus, in the fourth quarter it was 3.1 % higher than a year earlier. The annual average growth rate amounts to 7.6 % due to the high statistical carry-over effect. Although financing conditions were rather favourable in 2011, both lower profit expectations and the crisis of confidence are likely to have impaired businesses' willingness to invest. For the time being the fairly stagnant trend is expected to persist. This is also implied by the recent deterioration of business expectations among capital goods manufacturers. In the further course of the year sales prospects will worsen markedly,

FIGURE 2

Germany's foreign trade by region

Trade of goods, seasonally adjusted quarterly data, billion EUR



Sources: Deutsche Bundesbank; DESTATIS; calculations of the institutes.

because the world economy will grow at a much slower pace than in the past two years. Furthermore, the utilisation of production capacity has continuously declined since the summer of last year. Therefore no perceptible expansion of investment in new capacity is to be expected and the increase of replacement and modernisation investment will also be muted.

The profit situation of businesses is expected to worsen significantly in the near future, improving slightly only next year. As a consequence of small productivity increases due to the economic slump unit labour costs will temporarily rise somewhat faster. Companies' financing conditions will generally remain favourable. Overall, in view of these developments, growth of investment in machinery and equipment will almost stagnate in this year and is not expected to pick up again until next year. During the course of 2012 it will expand by only 0.5 %, which is equivalent to an annual average growth rate of 0.5 %. In 2013 it will increase by 2.5 % on average. In the fourth quarter it will be 3.5 % above the level of a year earlier (Figure 3, Table 9).

Only weak growth of construction investment

In the past year construction investment recorded an extraordinarily strong expansion by 5.8 %. This is the highest growth since the construction boom of the early nineties which was driven by the German reunification. The annual growth rate of the fourth quarter 2011 even reached 7.6 %. This positive development can be observed in all subsectors.

Due to the backlog of work following bad weather at the end of 2010 residential construction investment surged particularly during the first half of 2011. Yet in the second half of the year the high level could still be increased further. Average annual growth amounted to 6.3 %. Apparently, private households increasingly purchased residential property motivated by favourable labour market conditions and relatively low mortgage interest rates. The outlook will remain rather positive for the time being. New orders have been on an upward trend again for some months and the stock of orders is also high. Furthermore, business expectations of construction companies have recovered recently. Against the backdrop of the slight decline of construction permits observed since autumn the expansion of residential construction investment is expected to slow somewhat in the further course of the forecast period. Overall, residential construction investment is expected to grow markedly in 2012 and somewhat more slowly in 2013.

In 2011 non-residential construction investment increased by a considerable 6.9 %, matching the dynamic trend of investment in machinery and equipment with which there usually is a high correlation. However, the decline of new orders since the autumn and the lower number of construction permits point to a deceleration of the expansion of non-residential construction investment. Additional investment into new capacity is expected to be only of minor importance, because capacity utilisation has been declining for several months. The persistently favourable financing conditions are supportive. In 2012 non-residential construction investment will at best grow negligibly. In the following year the increase will be slightly stronger, paralleled by marginally higher investment in machinery and equipment.

Government construction investment expanded by 1.3 % in 2011. After the phasing-out of stimulus programmes last year it is expected to contract during the forecast period, particularly since no significant stimulus can be expected from the municipalities either. Although the financial situation of the latter will improve to some extent, it will continue to be dominated by the enhanced budget consolidation. Therefore a contraction of government construction investment is expected for both years.

Overall, construction investment will increase by an annual average of 1 % in 2012 and by 0.9 % in 2013 (Figure 3, Table 9).

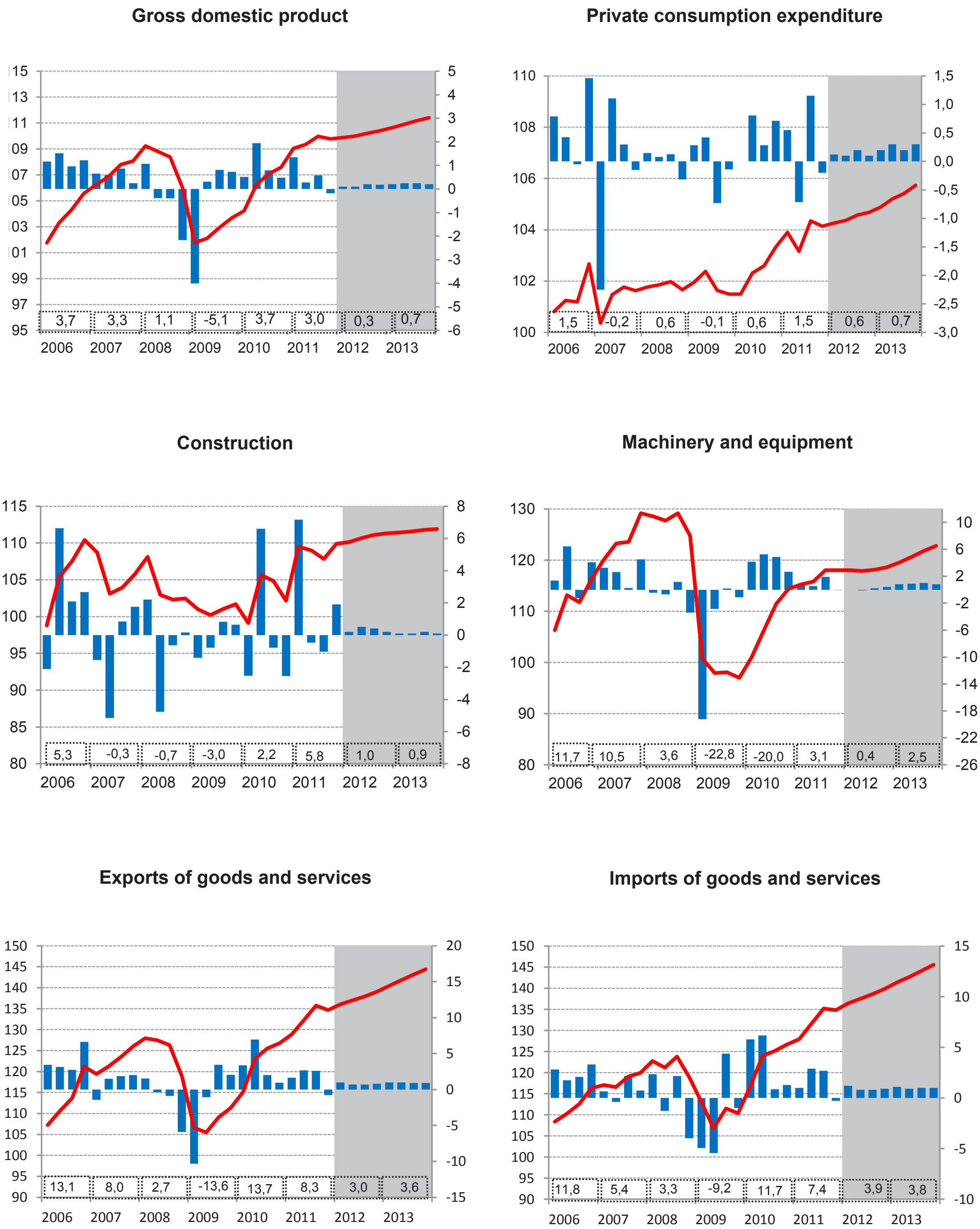
Private consumption expenditure: recovery continues at low pace

During the course of 2011 private consumption expenditures increased only half as strongly as in the previous year at a rate of 0.8 %. Yet, owing to the statistical carry-over effect the annual average growth rate amounted to 1.5 %. At 3.2 % disposable income growth was somewhat stronger than in the previous year, as both net wages and salaries and entrepreneurial and property income rose considerably. However, the real expansion of disposable income was limited by the strong increase of the private consumption deflator (2.1 %). Simultaneously the propensity to save diminished. The savings ratio thus dropped by 0.3 percentage points to 11 %.

At 2.5 % negotiated wages will rise faster this year than last year. The increase of effective wages (per employee) will turn out slightly lower due to negative wage drift. As average annual employment will expand once more, gross wages and salaries will increase by 2.8 %. Allowing for the slight reduction of social contributions, net wages and salaries will grow at a similar rate.

GDP by expenditure

Seasonally and calendar adjusted series[1]



Chain index 2005=100 (left axis).
% change on previous quarter (right axis).
[1] From first quarter 2012 forecast of the institutes.
Average annual growth rate.

Sources: DESTATIS; calculations of the institutes.

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TABLE 9

Macroeconomic trends in Germany

% change on previous year

	2010	2011	2012	2013
Expenditure[1]				
Private consumption[2]	0.6	1.5	0.6	0.7
Government consumption	1.7	1.4	1.0	0.7
Machinery and equipment	10.5	7.6	0.4	2.5
Construction	2.2	5.8	1.0	0.9
Other capital formation	4.7	4.8	2.8	0.5
Exports	13.7	8.2	3.0	3.5
Imports	11.7	7.4	3.9	3.8
Gross domestic product	3.7	3.0	0.3	0.7
Prices				
Gross domestic product	0.6	0.8	1.1	1.8
Consumption expenditure[2]	1.9	2.1	1.6	1.2
Imports	4.5	5.2	2.3	-0.6
Memorandum item:				
Consumer prices	1.1	2.3	1.8	1.3
Income distribution				
Compensation of employees	2.5	4.4	2.5	2.0
Profits[3]	10.5	1.5	-1.2	4.5
National income	5.1	3.4	1.3	2.8
Memorandum items:				
Negotiated wages (per hour)	1.6	1.7	2.5	2.4
Effective earnings (per hour)	0.0	2.9	2.8	2.5
Wage drift	-1.6	1.2	0.3	0.1
Gross wages and salaries	2.7	4.7	2.8	2.1
Gross wages and salaries per employee	2.2	3.3	2.0	2.0
Production				
Employed persons	0.5	1.3	0.8	0.1
Hours worked per employed person	1.8	0.4	-0.8	-0.5
Total hours worked	2.3	1.7	0.0	-0.4
Productivity (per hour)	1.4	1.3	0.3	1.1
Gross domestic product[1]	3.7	3.0	0.3	0.7
Memorandum items:				
Unemployment[4] (ILO, 1,000 persons)	2,946	2,505	2,366	2,351
Unemployment rate (ILO, %)	6.8	5.8	5.4	5.4
Unemployment[5] (BA, 1000 persons)	3,238	2,976	2,882	2,876
Unemployment rate[6] (BA, %)	7.7	7.1	6.8	6.8
Unit labour cost	-1.5	1.2	2.2	1.2
Budget balance, % of GDP	-4.3	-1.0	-0.7	-0.2

[1] Adjusted for inflation.
[2] Private households including non-profit institutions serving households.
[3] Operating surplus and mixed income.
[4] Definition of the International Labour Organisation (ILO).
[5] Definition of the Federal Employment Agency (Bundesanstalt für Arbeit, BA).
[6] % of the civilian labour force.

Sources: Deutsche Bundesbank; DESTATIS; Federal Employment Agency; calculations of the institutes, from 2012 forecast of the institutes.

This year monetary transfers will increase slightly. Although public pensions will increase by 2.2 % as of 1 July 2012 due to the favourable wage and salary trends of the past year and despite the deductions because of the pension guarantee, the sustainability factor and the “Riester factor”, average annual unemployment benefits will decline as a consequence of falling unemployment. Withdrawals of entrepreneurial and property income will expand at a significantly slower pace than last year. Overall, disposable income will increase by 2.2 % in this year, or by only 0.6 % if adjusted for inflation (private consumption deflator). With the savings ratio remaining constant consumer spending will go up by an average of 0.6 % in 2012 (Figure 3, Table 9).

Next year negotiated wages will rise by 2.4 %. Effective wages (per employee) will increase by only 2.1 % due to the negative wage drift. As employment is expected to expand only marginally, gross wages and salaries will grow by a similar proportion. In line with current legislation net wages and salaries will advance at the same rate due to unchanged social contributions and only marginal tax relief. Monetary transfers will rise slightly faster than this year. Withdrawals of entrepreneurial and property income are expected to expand only slightly. In real terms disposable income will increase by 0.8 %. With the savings ratio rising marginally (+0.1 percentage points) consumer spending will go up by 0.7 % in 2013.

Inflation abating

As observed often before, domestic inflationary trends are driven by oil price developments. In no previous year was crude oil as expensive on average as in 2011. Last year the average price of a barrel of the Brent blend equalled $ 111 (€ 80), considerably exceeding the level of 2008 ($ 97, € 65). Currently, the oil price is fluctuating around the benchmark of $ 120 (€ 92). After an increase by 29 % in 2010 the crude oil price soared by another 40 % in 2011. The oil price affects inflation both directly and indirectly. Whereas the direct effect via fuel and household energy prices is felt immediately, the indirect effect, which is the consequence of rising production costs for almost all goods and services, unfolds with some delay. Therefore rising energy costs are not only reflected in a broad inflation indicator including all categories of goods and services, but also in the index excluding direct energy costs. Most recently the latter index exhibited an increase of 1.6 %. In February 2012 energy accounted for

0.7 percentage points of the inflation rate of 2.3 %. Food prices also climbed at an above-average pace, whereas services and rents exhibited a weak inflation rate of slightly above 1 %.

In view of weaker economic activity the scope for price increases is expected to be smaller during the forecast period, so that, under the assumption of nearly constant exchange rates and a crude oil price of $ 110 per barrel, inflationary pressures are expected to abate. With unit labour costs increasing by 2.2 % and 1.2 % in 2012 and in 2013, respectively, consumer prices are expected to climb by 1.8 % and 1.3 %, respectively. Thus, the inflation rate will remain below the ECB's inflation target of 1.9 % in both years.

Only weak increase of production

In 2011 aggregate output grew strongly for the second year in a row. It increased by 3% on average. However, the year-on-year growth rate in the fourth quarter amounted to only 2 %. The recovery proved particularly strong in manufacturing, where output surged by 8.2 %, with the export-oriented capital goods industry expanding particularly strongly. Transport (5.9 %) and business services (4.2 %) reported above-average growth rates as they benefitted from the manufacturing boom.

For the first half of 2012 a stagnant tendency of aggregate output is becoming apparent, particularly in industry. This is implied by leading indicators. Since the summer of the past year new orders have exhibited a falling trend, especially for capital goods producers. The decline mainly reflected falling foreign orders (3-month growth rate: foreign orders -3.9 %, domestic orders -2.3 %). Production data for January show a slight increase to a level corresponding to the average of the fourth quarter 2011. Seasonally adjusted GDP is expected to increase at best by 0.1 % in the first quarter 2012.

In the further course of the year production will remain on a weak trend. Exports, particularly of capital goods, will expand only marginally due to a less dynamic world economy and the recession in the euro area, which remains German exporters' most important market. The domestic economy, too, will no longer exhibit the strength of the past year. The slightly restrictive fiscal policy stance will also exert a dampening effect. All in all, there will be only a very subdued expansion of production in 2012: At the end of the year aggregated output will exceed the level of a year earlier by 0.6 %. This implies an average annual growth rate of 0.3 %. Next year aggregate output growth is expected to turn out slightly higher, as both foreign trade and the domestic economy will provide a stronger growth impulse. The annual average increase of GDP will amount to 0.7 %. The year-on-year growth rate of the fourth quarter will be slightly higher at 0.9 %.

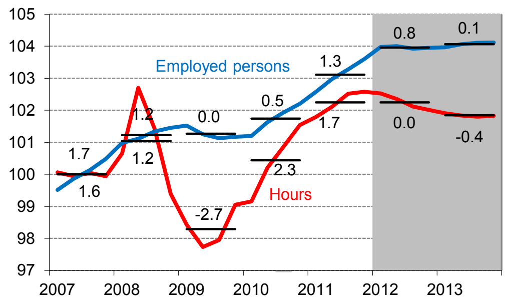
Further improvement of labour market conditions despite weak activity

Cyclical conditions in the labour market were very favourable in the past year 2011. Total employment increased by almost 550,000 persons to an annual average of 41.1 million persons (Figure 4, Table 10). The number of employees subject to social security contributions experienced an even stronger growth. According to preliminary estimates of the Federal Employment Agency an average of roughly 28.4 million persons were employed in jobs subject to social security contributions in 2011, exceeding the level of the previous year by 675,000 persons. About 120,000 of these additional jobs subject to social security contributions were in the temporary employment industry. By contrast the number of marginally employed persons in so-called "mini-jobs" declined by an average of 24,000 in 2011, having receded already in the previous year. Underemployment reported by the Federal Employment Agency (excluding short-time work) continued to fall, amounting to 4.15 million persons on average in 2011. This is equivalent to a decline by 11.7 % or nearly 550,000 underemployed persons compared to the previous year. Owing to the reduction of labour market measures, which relieve the labour market and exert a direct influence on the level of registered unemployment while not affecting the level of underemployment, the drop in registered unemployment of 263,000 persons was significant-

FIGURE 4

Domestic employment and hours worked

Seasonally and calendar adjusted series[1]



Annual average (2007=100)
From first quarter 2012: Forecast.

[1] % change on previous year.

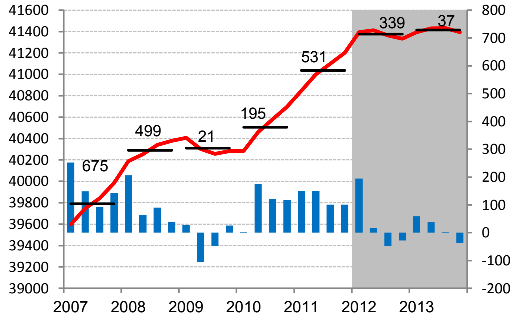
Sources: DESTATIS; calculations of the institutes, from first quarter 2012 forecast of the institutes.

FIGURE 5

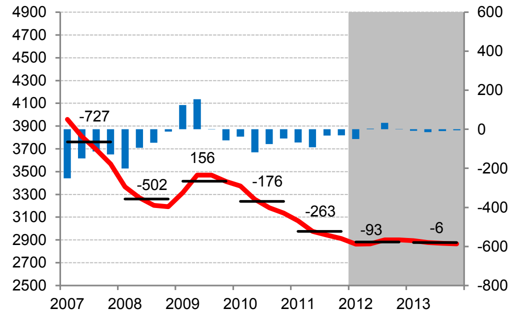
Employed and unemployed persons

Seasonally adjusted series[1]

Employed nationals



Unemployed persons



Seasonally adjusted series, 1000 persons (left axis).
Annual average (left axis).
Forecast.

[1] Change on previous year, 1,000 persons.

Sources: DESTATIS; Federal Employment Agency; calculations of the institutes, from first quarter 2012 forecast of the institutes.

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TABLE 10

Labour market balance sheet

Annual average, 1,000 persons

	2010	2011	2012	2013
Employed persons, national concept	40,506	41,037	41,376	41,413
Commuting balance	47	63	72	76
Employed persons, domestic concept	40,553	41,099	41,448	41,489
Employees	36,065	36,553	36,855	36,881
Employees subject to social security contributions	27,757	28,431	28,890	28,980
Subsidised employment[1]	242	172	127	124
"Mini jobs"	4,883	4,859	4,814	4,780
"One-euro jobs" [2]	260	166	117	116
Self-employed persons	4,488	4,546	4,593	4,608
Subsidised self-employment[3]	154	136	113	96
Unemployed persons (BA)[4]	3,238	2,975	2,882	2,876
Unemployment rate (BA)[5]	7.7	7.1	6.8	6.8
Unemployed persons (ILO)[6]	2,946	2,505	2,366	2,350
Unemployment rate (ILO)[7]	6.8	5.8	5.4	5.4
Cyclical short-time work	429	104	157	177

[1] Wage subsidies and other labour market instruments („Arbeitsbeschaffungsmassnahmen", „Strukturanpassungsmassnahmen", „Personal-Service-Agenturen", „Eingliederungszuschuss", „Eingliederungszuschuss bei Vertretung", „Eingliederungszuschuss bei Neugruendung", „Arbeitsentgeltzuschuss", „Einstiegsgeld bei abhaengiger Beschaeftigung", „Arbeitsgelegenheiten bei Entgeltvariante", „Beschaeftigungszuschuss", „Qualifikationszuschuss fuer Juengere", „Eingliederungshilfen für Juengere", „Entgeltsicherung für Aeltere").

[2] Work opportunities with refund of additional expenses („Arbeitsgelegenheiten mit Mehraufwandentschaedigung").

[3] Various start-up bonuses („Gruendungszuschuss", „Existenzgruendungszuschuss", „Ueberbrueckungsgeld" and „Einstiegsgeld").

[4] Definition of the Federal Employment Agency (Bundesagentur fuer Arbeit, BA).

[5] % of the total civilian labour force.

[6] Definition of the International Labour Organisation (ILO).

[7] % of the domestic labour force.

Sources: DESTATIS; Federal Employment Agency; calculations of the institutes, from 2012 forecast of the institutes.

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ly lower than the decline in underemployment. On average there were 2.98 million registered unemployed persons in 2011 (Figure 5). The unemployment rate decreased to 7.1 % compared to 7.7 % in the previous year. However, regional differences remain substantial. For instance, the unemployment rate of Eastern Germany (including Berlin) exceeded that of Western Germany by more than 5 percentage points at 11.3 % in the past year.

As the euro area as a whole is "scrimping" itself into a recession with its austerity policies, German economic activity will deteriorate, too, leaving a mark also on the labour market during the forecast period. However, the very positive basis of the past year will have a substantial effect on the annual average tendency in 2012. Therefore, the average annual growth rate will be higher than the increase in the course of the year, which provides a more realistic picture of the cyclical situation in the labour market. The German labour market entered the current year with a considerable positive statistical carry-over effect in the case of employment and a significant negative carry-over in the case of unemployment. Even most recently labour market trends, which usually lag behind the general economic trend, have been remarkably positive with total seasonally adjusted employment rising by 86,000 to 41.45 persons in January 2012. In February seasonally adjusted unemployment amounted to 2.87 million registered unemployed persons. This implies stagnation compared to the previous month. However, as average declines in unemployment of 23,000 persons per month were observed in the two winter months December and January, it can be assumed that the stagnation is mainly due to the unusually cold weather in February, which the seasonal adjustment procedure cannot take into account sufficiently. Yet, even if the labour market is generally on a dynamic upward trend, the expansion will come to a standstill in the course of 2012 und temporarily reverse. Nevertheless, unemployment is expected to drop by an average of 93,000 persons to 2.88 million registered unemployed persons in 2012, with the negative statistical carry-over effect accounting for more than 80,000 persons. The average annual unemployment rate is expected to fall to 6.8 %. With a statistical carry-over effect from 2011 of about 260,000 persons, total employment will rise by 350,000 persons to 41.45 million persons. Following an increase of 675,000 persons in 2011, the number of employees who are subject to social security contributions is expected to increase by almost 460,000 persons in this year reaching a total of 28.89 million persons. At the same time marginal employment will continue the slight decline observed already in previous years.

As a consequence of the weak economic situation labour market conditions will hardly improve in 2013. Annual average employment will expand by only about 40,000 persons or 0.1 % to 41.49 million persons. De facto, the number of unemployed persons will stagnate at the level of the previous year, leaving the unemployment rate at 6.8 %.

Total hours worked of both employees and self-employed persons rebounded strongly after the trough in the second quarter 2009 expanding by about 0.5 % per quarter until the fourth quarter 2011, albeit at a slowing pace. Although hours worked per employed person increased by 9.7 hours between the trough in the second quarter 2009 and the third quarter 2011, they still remained about 8.2 hours below the peak of the last boom phase recorded in the second quarter 2008. In the last quarter of 2011 a seasonally and calendar adjusted decrease of hours worked per employed person of 0.25 % was observed. In 2012 and in 2013 hours worked per employed person will fall by 0.8 % and 0.5 %, respectively. Correspondingly, total hours worked will stagnate in 2012 and then decline by 0.4 % next year. The reduction in hours worked per employee is driven by several factors such as the trend towards part-time work, a strongly negative calendar effect and, not least, the use of various instruments of internal flexibility.

As already during the crisis years 2008/09, when the use of various instruments of internal flexibility helped to reduce working time per person considerably and to save a substantial number of jobs (Herzog-Stein et al. 2010), it is assumed that companies will once again try to use instruments of internal flexibility, such as working time accounts, reduction of over-time work and – if necessary – a general reduction of regular working hours, to weather the economic slump without large-scale layoffs. Owing to the dynamic economic expansion of the years 2010 and 2011 companies have rebuilt substantial capacities, which allow them to actually use the instruments of internal flexibility. However, the corresponding scope is much smaller than in 2008. Hourly productivity growth is expected to follow a clearly pro-cyclical trend in 2012, amounting to only 0.3 %, after 1.3 % in 2011. In 2013 hourly productivity is expected to rise again by 1.1 %.

Slightly restrictive fiscal policy

Following a year dominated by fiscal stimulus packages, fiscal policy shifted to slightly restrictive course in the past year. This course will be maintained during the forecast period. The discretionary fiscal impulse will amount to -0.4 % of GDP in this year, followed by -0.3 % of GDP next year.

This year the strongest restrictive impulse will result from the final phasing out of most measures of the stimulus packages, whereas the additional spending cuts of the so called package for the future ("Zukunftspaket") will contribute a minor share. Further, the expected consolidation efforts of the federal states ("Länder") and municipalities will contribute to the overall negative impulse. The latter is diminished only slightly by the reduction of the public pension contribution rate from 19.9 % to 19.6 %.

Both this year and next year the general government deficits will decrease. Although government revenues are expected to rise more slowly due to slower growth of taxes and social contributions, government expenditures are expected to lag behind them, not least because of the historically low interest rates on federal government bonds. The deficit ratio will decline to 0.7 % percent of GDP in 2012 and to 0.2 % in 2013.

Medium-term projection until 2016

At the start of the Macro Group's forecast procedure the situation was characterised by uncertainty and conflicting data. Since the summer 2011 leading indicators and in particular new orders have worsened. In the last quarter of 2011 EU GDP shrank by 0.3 %. Even in Germany aggregate output (adjusted for seasonal and working day effects) declined by 0.2 % compared to the previous quarter. At the same time the divide of the EU in terms of economic activity widened. The southern EU countries are already in a recession, which will continue in the current year. Substantially more favourable economic trends are expected in the central and northern EU countries with Germany serving as a growth engine.

These developments resulted from the crisis of the euro area which has been deepening since the autumn of 2009. At the same time the divergences of economic activity in the European countries are reinforcing the euro crisis. Thus, the dramatic rise of bond yields forced governments to implement pronounced austerity policies, first in Greece, and subsequently also in Ireland, Portugal, Spain and, finally, Italy. Both developments prevented an economic recovery, which in turn caused interest rates to rise further. At the same time interest rates decreased in Germany and in the other central and northern EU countries. The recovery lead to an improvement of public finances, and spared these countries painful consolidation measures, which in turn strengthened the upturn.

In addition the contrasts in terms of economic performance have increased within the EU, because the divergences in global economic trends have also continued to widen since the financial crisis of 2008/2009. On the one side of the divide there are the emerging economies, such as China, India and Brazil, which continue to expand strongly and on the other side there are the industrial countries, whose economic activity has recovered only slowly. Those EU countries whose growth is driven primarily by export demand, such as Germany, the Netherlands and Austria, have benefitted from the import dynamics of the emerging economies to a much larger extent than the southern European countries of the euro area. After the introduction of the euro growth in the latter countries had been stimulated mainly by domestic demand.

The differences in the levels of bond yields, in economic activity and in government debt trends have mutually reinforced each other. Initially, these developments made the establishment of the EFSF necessary and, with the crisis spreading to Ireland, Portugal, Spain and Italy, lead to a series of EU summits, the decisions of which rapidly became obsolete as the crisis escalated.

In view of these developments the heads of government of 25 of the 27 EU member states (excluding the UK and the Czech Republic) committed themselves to enhanced consolidation in January 2012. This “Treaty on Stability, Coordination and Governance in the Economic and Monetary Union” – in the following referred to as “the EU fiscal pact” – was signed at the EU summit of 1 and 2 March 2012. It requires the 25 EU countries to draft their budgets in line with two criteria after changing their national legislation, preferably via amendments to their constitutions:

- Following the German example of the “debt brake” each country is allowed to show a maximum structural (i.e. cyclically adjusted) budget deficit of 0.5 % of GDP (deficit criterion).
- Every year government debt must be reduced by an amount equivalent to one twentieth of the difference between the current debt ratio and the target of 60 % (debt criterion).

The 25 heads of government decided that the larger consolidation requirement should be binding for fiscal policy.

Simulations with the global econometric model of Oxford Economics (OEF model) have shown that consolidation based on the debt criterion would severely impair economic activity in EU countries such as Italy and Belgium, which exhibit particularly high debt ratios, and thus would dampen economic growth in the EU as a whole over many years.

Economic researchers commonly make additional assumptions in such situations, which yield a more favourable forecast. This is to ensure that one’s own forecast will not differ too much from those of other institutes and international organisations. The Macro Group has chosen a different approach.

For the baseline scenario it has been assumed that policy makers in the 25 EU countries will abide by the decisions of January 2012, irrespective of a worsening economic performance. The recent developments in Greece support this assumption: The persistent economic decline has not by any chance induced senior EU politicians to reconsider the strategy of austerity policies. Rather, Greece was forced to adopt increasingly drastic austerity measures (Table 11).

Assumptions of the simulations

The medium-term projection was produced using the OEF model. The latter combines sub-models for 46 countries or regions, whose interactions are modelled via export and import functions for goods and services. The model version of February 2012 was used as a starting point. It was modified assuming that the decisions of the 25 European heads of government will be implemented as follows beginning in mid-2012:

- The annual consolidation requirements of the individual EU countries are identified on the basis of data for 2011. Estimates of the sizes of the structural deficits are taken from the European Commission’s autumn forecast.
- It is assumed that the target of a maximum structural deficit of 0.5 % of GDP is to be reached by 2016 (in analogy with the German “debt brake”).

TABLE 11

Consolidation requirement according to the deficit and the debt criteria

% of GDP

	Initial level 2011		Annual consolidation requirement		Debt ratio in 2013	Annual consolidation requirement
	Deficit	Debt	Deficit	Debt		
Belgium	-3.0	97.2	-0.5	-1.9	96.3	-1.8
Bulgaria	-1.2	17.5	-0.1	–	15.3	–
Czech Republic	-3.6	39.9	-0.6	–	39.5	–
Denmark	-2.1	44.1	-0.3	–	45.0	–
Germany	-1.3	81.7	-0.2	-1.1	81.7	-1.1
Estonia	-0.2	5.8	–	–	6.1	–
Ireland	-9.1	108.1	-1.7	-2.4	99.3	-2.0
Greece	-5.0	162.8	-0.9	-5.1	157.6	-4.9
Spain	-4.9	69.6	-0.9	-0.5	65.0	-0.3
France	-4.7	85.4	-0.8	-1.3	84.4	-1.2
Italy	-3.1	120.5	-0.5	-3.0	119.7	-3.0
Cyprus	-5.9	64.9	-1.1	-0.2	70.9	-0.5
Latvia	-3.2	44.8	-0.5	–	47.1	–
Lithuania	-4.2	37.7	-0.7	–	39.4	–
Luxembourg	0.5	19.5	–	–	20.3	–
Hungary	-5.0	75.9	-0.9	-0.8	79.1	-1.0
Malta	-3.1	69.6	-0.5	-0.5	71.5	-0.6
Netherlands	-3.2	64.2	-0.5	-0.2	64.5	-0.2
Austria	-3.1	72.2	-0.5	-0.6	71.6	-0.6
Poland	-5.5	56.7	-1.0	–	55.3	–
Portugal	-6.9	101.6	-1.3	-2.1	97.3	-1.9
Romania	-3.7	34.0	-0.6	–	33.3	–
Slovenia	-3.0	45.5	-0.5	–	54.6	–
Slovakia	-4.9	44.5	-0.9	–	42.1	–
Finland	0.1	49.1	–	–	47.0	–
Sweden	0.9	36.3	–	–	38.4	–
United Kingdom	-8.0	84.0	-1.5	-1.2	78.7	-0.9

Sources: Forecast of the European Commission.
(Autumn 2011, http://ec.europa.eu/economy_finance/publications/european_economy/2011/pdf/ee-2011-6_en.pdf);
calculations of the institutes based on simulations with the OEF model.

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- Countries for which neither the deficit nor the debt criterion indicates any consolidation requirement will not implement any austerity measures. However, they will not use their fiscal room for manoeuvre for expansionary measures (according to the decisions of the 25 heads of government they would only be permitted to do this up to a structural deficit of 1 % of GDP as long as the debt ratio remains clearly below 60 %).
- 70 % of the consolidation measures consist of spending cuts in government consumption, public investment and government transfers and 30 % consist of increases in direct and indirect taxes as well as employees' social security contributions.
- All three expenditure (revenue) components are reduced (increased) to the same relative extent.
- The consolidation policies are adjusted on the basis of the simulation results for 2013. If, for instance, the deficit criterion no longer indicates any consolidation requirement, but the debt criterion does, the austerity policy is continued (the difference between the debt ratio of 2013 and the 60 % target is decreased by one twentieth per year).

Table 11 shows the consolidation requirements of all EU countries in terms of the deficit and the debt criterion, respectively, based on 2011 data. According to calculations of the European Commission Belgium's structural deficit amounted to 3.0 % of GDP and the government debt ratio was 97.2 %. According to the deficit criterion this implies a consolidation requirement of 0.5 % of GDP per year (this is to ensure that a level of 0.5 % of GDP is reached in 2016). According to the debt criterion the consolidation requirement would be 1.9 % of GDP (one twentieth of the difference between the current debt level and the 60 % target). For this reason the model simulation is based on the assumption that Belgium reduces its government spending by about 1.3 % of GDP and raises its revenues by 0.6 % of GDP.

The largest annual consolidation requirements resulting from the decision of the 25 EU countries would be faced by Greece (5.1 %), Italy (3.0 %), Ireland (2.4 %) and Portugal (2.1 %) in % of GDP. In the United Kingdom the consolidation requirements in % of GDP would also be drastic, – 1.5 % per year –, but its government refused to consent to either of the rules.

Only four countries – Estonia, Luxembourg, Finland, and Sweden – meet both the deficit and the debt and there is no need for consolidation according the "double rule".

The model simulation was carried out in two steps. First, the reduction of the three expenditure categories and the increase of the three types of revenues, respectively, were preset for all countries in the model and an initial simulation was carried out. It yielded a deepening of the downturn in 2012, which was shown in the baseline projection of the OEF model, and its continuation in the following year.

According to the model simulation all countries meet the deficit target in 2013. This is the case for two reasons: Firstly, the consolidation measures improve the budget balance of the countries and, secondly, the output gap widens substantially, so that the structural balance turns out more favourable than the overall balance.

By contrast, there is hardly any improvement of the government debt ratios: The synchronised austerity policies result in a stagnating nominal GDP. At the same time the government budget balance remains negative in most EU countries. On the basis of the government debt ratios simulated by the OEF model for 2013 the consolidation policies will be continued in line with the government debt criterion in the individual EU countries during the years from 2014 until 2016 (Table 11 shows the consolidation requirement for each country).

TABLE 12

Global economic assumptions of the medium-term projection

Fiscal pact scenario

	Ø 1992-2001	Ø 2002-2006	Ø 2007-2011	Ø 2012-2016
Oil prices (Brent, USD/Barrel)	19.2	42.3	84.4	104.5
Exchange rate (USD/EUR)	1.2	1.2	1.4	1.3
3-month interest rate (%)				
Euro area	5.7	2.6	2.5	0.4
USA	5.0	2.7	1.9	0.8
Long-term interest rate (%)				
Euro area	6.8	4.1	4.1	3.3
USA	6.1	4.4	3.5	3.4
World trade, in real terms	6.7	8.3	3.6	6.2

Sources: ECB; Federal Reserve; WIFO; from 2012 forecast of the institutes.

TABLE 13

Real GDP growth

	Ø 1992-2001	Ø 2002-2006	Ø 2007-2011	Ø 2012-2016
World	3.1	4.1	3.0	4.0
Advanced economies	2.7	2.4	0.6	2.0
EU27	2.5	2.1	0.5	0.9
Euro area	2.1	1.8	0.5	0.5
Germany	1.6	1.0	1.1	1.0
France	2.0	1.7	0.5	0.7
Itay	1.6	1.1	-0.6	-0.6
United Kingdom	3.1	2.8	0.2	1.7
USA	3.5	2.7	0.5	2.7
Japan	0.8	1.5	-0.2	1.7
China	10.3	10.6	10.5	8.5
India	5.9	7.6	8.0	8.0
Russia	-2.9	6.8	2.7	3.6
Brazil	2.5	3.3	4.2	4.1

Sources: Oxford Economics; from 2012 model simulation of the institutes.

The global economic framework

Based on these assumptions the OEF model displays the following global economic framework in the "fiscal pact scenario" (Table 12).

Not least due to the austerity-induced stagnation in the euro area (until 2016 the economy will grow by merely 0.5 % per year – Table 13) the dollar-euro exchange rate will be only $ 1.27 on average, which is significantly below the average level of the past 5 years ($ 1.39). The interest rate will also remain extremely low. In the euro area short term interest rates are expected to be even slightly lower than in the USA (Table 12).

Until 2013 the oil price (Brent) will decline slightly as a consequence of the persistent recession in Europe and will then increase to $ 111.7 by 2016. On average during 2011/2016 it will be $ 104.5 per barrel and thus 23.4 % above the average level between 2007 and 2011. The most recent oil price hike is due to political tensions in the Middle East and is expected to be temporary – otherwise the predicted global growth would be slightly lower. The prices of the remaining commodities (in dollar terms) will decline noticeably, mainly due to the appreciation of the dollar and the relatively weak economic trends in the advanced economies.

Until 2016 world trade will expand by an annual average of 6.2 %, faster than during the preceding 5 years, which were dominated by the financial and economic crisis. The high growth of international trade is primarily the consequence of the persistently dynamic economic expansion in the emerging markets, especially the BRIC countries (Table 13).

Persistent divergences in global growth trends

Differences in growth trends are increasing both within the group of advanced economies and in the world economy not least due to the continued austerity policies in the euro area.

For the euro area the OEF model forecasts an annual economic growth of merely 0.5 %, i.e. a period of stagnation. In the rest of the EU countries economic trends are more favourable, mainly because of lower long-term interest rates. For instance, the British GDP is expected to increase by an annual 1.7 % until 2016. Further, the need for consolidation is small or non-existent in some (Scandinavian) countries. For the EU27 as a whole a medium-term annual growth rate of 0.9 % results; Table 13).

In the USA economic activity is expected to expand by 2.7 % per year. This relatively high growth pace results not least, because the economic recovery continues in 2012 and in 2013 (in contrast to the euro area). To a crucial extent it is supported by the expansionary monetary policy. The latter stabilises not only the short-term interest rate, but also the long-term interest rate at a level, which remains clearly below the nominal growth rate. For Japan, too, the OEF model forecasts an economic growth rate which is almost twice as high as in the EU27 (1.7 % per year compared to 0.9 %).

In the BRIC countries the dynamic expansion of aggregate output will continue. For China and India the OEF model predicts growth rates of 8.5 % and 8.0 %, respectively. The economies of Russia and Brazil are expected to grow at a slightly lower pace (3.6 % and 4.1 % per year, respectively). World GDP (at purchasing power parity) will increase by 4.0 % per year according to the OEF model projection (Table 13, Figure 6).

Synchronous austerity policies continue to dampen growth

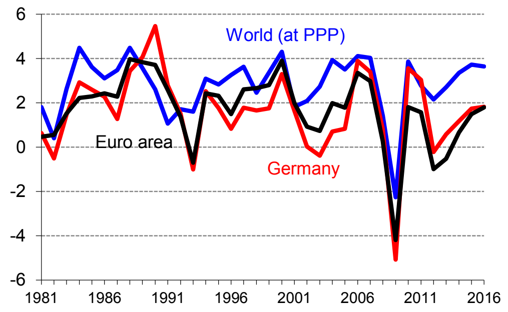
Figures 7 and 8 as well as Table 14 illustrate that the simultaneous austerity policies in almost all EU countries would have a particularly strong negative effect on economic growth in the euro area. The EU countries with a national currency of their own can partly offset the dampening effects of a restrictive fiscal policy via an expansionary monetary policy. According to the simulation with the OEF model GDP would shrink for two years (gross capital formation would be most affected), unemployment would rise to more than 12 % in 2014 and from 2015 consumer prices would start to decline, which would entail the risk of deflation.

An austerity policy in line with the EU fiscal pact would have a particularly strong effect on the economic trends in those southern euro area countries, where the economic and social situation is already much worse than in the central and northern European countries (Table 14). For Greece the OEF model forecasts a de facto collapse of the economy, in Italy and Portugal, too, GDP would decline on average during the forecast period, while it would stagnate in Spain.

FIGURE 6

Global economic growth[1]

Annual % change of real GDP



[1] 2012-2016: Fiscal pact scenario.

Sources: Oxford Economics; calculations of the institutes, from 2012 forecast of the institutes.

Even if these results, like all econometric simulations, imply that a number of assumption hold (and must therefore be interpreted as a scenario rather than an exact forecast), they nevertheless suggest the following conclusion: Synchronous austerity policies in line with the EU fiscal pact will widen the divide within the euro area between the member states in southern Europe and Germany as well as the other euro area countries in central and northern Europe. The main cause of the euro crisis will thus not be overcome but aggravated.

The catastrophic effects of synchronous austerity policies in the EU at a time when the southern European member states are already in recession become obvious in the comparison with an alternative strategy: If it were possible to stabilise the level of long-term interest rates at 2 % (as in the USA and the UK) during the simulation period by introducing euro bonds, a much more favourable trend would result in all euro area countries, but also in the EU as a whole and, consequently, in the world economy (cf. Figures 7 and 8; details of how this alternative scenario could become a reality are discussed below).

Although the OEF model, a standard econometric model strongly determined by the supply side, predicts a marked reduction of the budget deficit (from 2014 even budget surpluses are shown), the government debt ratio will not start to decline until in 2015 and moreover to such a limited extent that

TABLE 14

Two scenarios of medium-term trends in the euro area

Model simulation with Oxford Economics' global model

	Fiskal pact Ø 2012/ 2016	Euro bonds	Fiskal pact Ø 2011/ 2016	Euro bonds	Fiskal pact Ø 2011/ 2016	Euro bonds
	Germany		Austria		Netherlands	
GDP growth rate	1.0	1.7	1.0	1.6	0.7	1.5
Gross capital formation	1.2	3.8	1.5	2.3	1.1	2.3
Unemployment rate	7.6	6.5	5.0	4.4	6.2	5.4
Inflation rate	0.0	1.9	1.3	2.1	0.5	1.8
Budget balance, % of GDP	1.7	-0.8	-1.4	-2.7	-2.3	-2.3
Government debt ratio	80.5	79.7	72.5	72.6	70.6	67.2
Current account balance, % of GDP	6.4	4.2	2.5	2.4	6.5	7.0
	France		Finland		Belgium	
GDP growth rate	0.7	1.4	2.3	2.4	0.7	1.3
Gross capital formation	0.3	2.3	4.0	3.1	2.2	2.6
Unemployment rate	9.6	9.1	7.4	7.2	7.9	7.1
Inflation rate	0.9	2.0	1.2	1.8	0.8	1.9
Budget balance, % of GDP	-0.6	-3.4	-1.0	-0.6	3.1	-1.2
Government debt ratio	89.6	90.9	46.0	44.4	94.2	98.2
Current account balance, % of GDP	-1.8	-2.7	1.8	2.5	1.4	0.5
	Italy		Portugal		Greece	
GDP growth rate	-0.6	0.7	-0.8	-0.5	-6.4	-1.2
Gross capital formation	-0.6	1.4	-2.8	-3.1	-11.1	-10.9
Unemployment rate	11.1	8.8	14.1	13.2	26.8	21.1
Inflation rate	0.1	2.6	1.0	2.1	-0.1	1.5
Budget balance, % of GDP	4.6	-0.4	-3.7	-2.9	8.0	-2.2
Government debt ratio	118.3	115.9	113.2	107.0	149.6	127.0
Current account balance, % of GDP	-0.7	-2.4	-4.6	-5.1	-0.5	-5.1
	Spain		Ireland		Euro area	
GDP growth rate	0.2	0.9	0.6	1.5	0.5	1.3
Gross capital formation	0.0	1.0	3.6	4.4	0.5	2.3
Unemployment rate	23.9	23.3	14.0	12.5	11.4	10.3
Inflation rate	0.5	1.7	0.1	1.5	0.4	2.0
Budget balance, % of GDP	-2.8	-3.3	-1.1	-0.4	0.6	-1.8
Government debt ratio	79.9	77.7	115.6	104.3	88.3	87.2
Current account balance, % of GDP	-2.7	-2.7	3.2	2.5	0.8	-0.3

Sources: Oxford Economics; from 2012 model simulation of the institutes.

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it will still exceed the level of 2011 in 2016 (Figures 7 and 8, Table 14). Three factors can explain this austerity or debt paradox: The dampening effects on growth, the ensuing deflationary tendencies and the level long-term interest rates, which permanently remains above the (nominal) growth rate. For these reasons government debt does not rise more sharply in the alternative scenario of an interest rate stabilisation via euro bonds than it does in the fiscal pact scenario, despite the avoidance of austerity measures (Figures 7 and 8).

The result of the model simulation according to which an austerity policy over five years does not help to reduce the government debt ratios, reflects the fundamental flaw of the debt criterion in the EU fiscal pact: Unlike in the case of the deficit criterion there is no differentiation between government debt accumulated for cyclical reasons and government debt that accumulated for other ("structural") reasons. Thus, if synchronous austerity policies cause recessions and widen the (negative) output gap, the structural deficit declines. However, the overall deficit causes the debt ratio to increase further and thus triggers a continuation of the austerity course because of the debt criterion.[2]

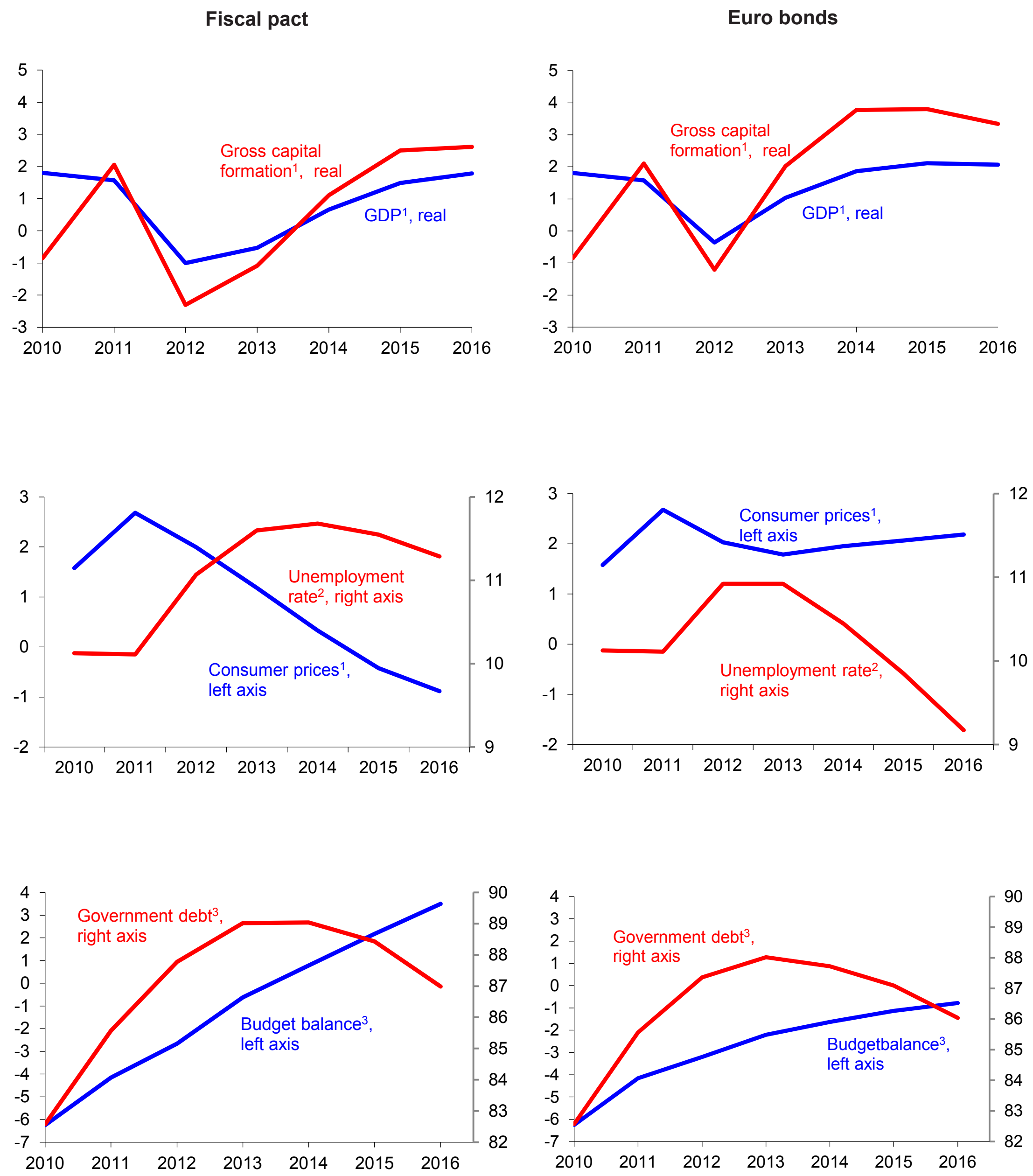
Another flaw of the debt criterion consists in the arbitrariness of the target of a debt ratio of 60 %. When this figure was "invented" as part of the Maastricht criteria, it was justified by the assumption that nominal GDP would grow by 5 % per annum in the medium to long term. In this case the government debt ratio converges towards 60 % even if the budget deficit permanently reaches the Maastricht limit of 3 %.

In actual fact, however, nominal GDP of the euro area (11 countries) has increased by only 3.5 % per

[2] In terms of the model's structure the almost permanent consolidation policies affect the government debt ratio due to the negative repercussions of declining demand via the dampening of growth, lower tax revenues and higher social transfers. This has implications for the model solution: Although the OEF model is determined from the supply side in the medium to long term, an equilibrium solution cannot be reached, because the model is constantly hit by new demand shocks.

FIGURE 7

Two scenarios of macroeconomic performance in the euro area



[1] % change on previous year.
[2] % of the labour force.
[3] % of GDP.

Sources: Oxford Economics; from 2012 model simulation of the institutes.

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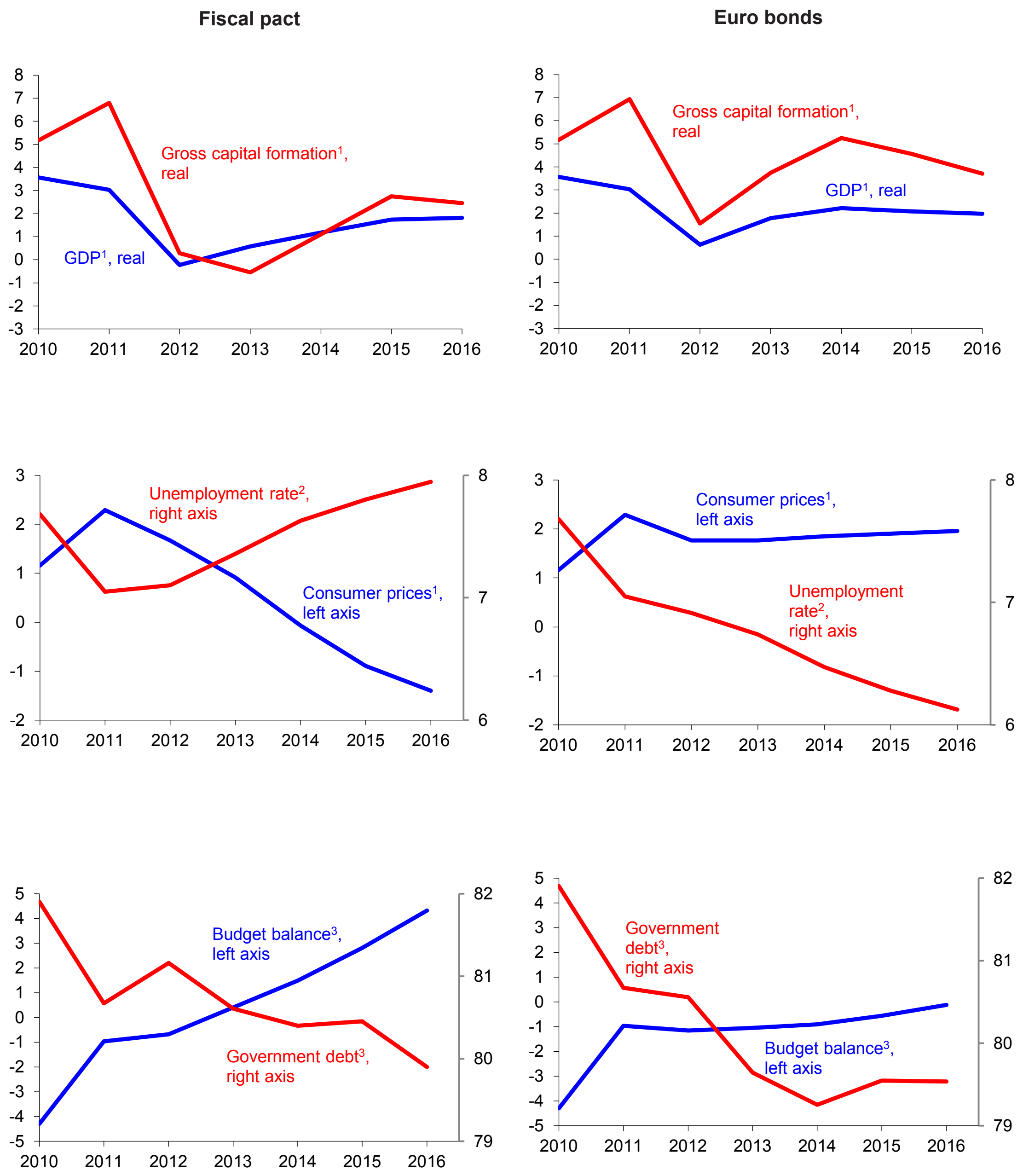
FIGURE 8

Two scenarios of macroeconomic performance in Germany



[1] % change on previous year.
[2] % of the labour force.
[3] % of GDP.

Sources: Oxford Economics; from 2012 model simulation of the institutes.

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year since 1992. Under the unchanged assumption of an overall deficit of 3 % of GDP this would imply a maximum or target for the government debt ratio of about 86 %. If, however, the overall deficit is to be limited to 0.5 % of GDP (this is what the EU fiscal pact implies, because over the business cycle the structural deficit equals the overall deficit), this would result in an implied target for the government debt ratio of about 14 %. If this logic is applied consistently, a country like Italy would have to reduce its public debt by 5.3 percentage points of GDP per year for twenty years.

Persistently weak growth of the German economy

Under the assumptions of the fiscal pact scenario the OEF model forecasts a period of weak economic activity in Germany. GDP would grow by only 1.0 % per year until 2016 (Table 15). This is largely determined by two factors. Firstly, a substantial part of Germany's exports are delivered to other euro area countries and the German economy is thus affected by the synchronous austerity policies. Secondly, according to the EU fiscal pact Germany has to consolidate its budget by 1.1 % of GDP per year (Table 11), which dampens net incomes and consequently consumption and imports (Table 15).

Thus, under the conditions of the EU fiscal pact German GDP growth is likely to remain as weak as in the two preceding five-year-periods. However, in those times Germany was lagging behind the other European countries, whereas in the forecast period it would be a "frontrunner" with an average growth rate of 1.0 %. Among the euro area economies only the Finnish economy is expected to grow less slowly (Table 14).

The main reason for this relatively good performance consists in the persistently strong increase of exports to the continually fast-growing emerging markets. On average German exports will expand by 5.0 % per year. As imports will grow by slightly less (+4.1 % per year) German net exports amounting to an average of 6.4 % of GDP will reach the highest level of all five-year-periods of the past 30 years (Table 14). Under the conditions of the fiscal pact scenario Germany would thus not contribute to a reduction of the current account imbalances within the EU.

As a consequence of weak demand the output gap will widen: Whereas potential output will expand by 1.5 % per year, GDP will increase by only 1.0 %. The German economy will thus remain below its potential to a larger extent than ever before. On average the output gap will equal -3.5 % (Table 15). This is also the reason why inflation grinds to a halt: Consumer prices stagnate, the GDP deflator even declines by 0.2 % per year.

TABLE 15

Macroeconomic trends in Germany

% change

	Ø 1991-2000	Ø 2001-2006	Ø 2007-2011	Ø 2012-2016
Expenditure				
Consumption expenditure				
Private households	1.6	0.3	0.5	0.5
Government	1.8	0.4	2.1	-1.2
Gross fixed capital formations	1.2	0.1	1.1	1.2
Exports	5.7	7.5	3.3	5.0
Imports	5.3	6.0	3.5	4.1
GDP	1.6	1.0	1.1	1.0
Potential output	1.8	1.1	1.3	1.5
Output gap, % of GDP	-0.3	-1.6	-0.8	-3.5
Prices				
GDP	1.6	0.9	1.0	-0.2
Consumption expenditure	1.8	1.3	1.4	0.0
Unit labour cost	1.2	-0.6	1.5	-0.4
Income distribution				
Compensation of employees	2.6	0.5	2.8	0.6
Profits	4.3	3.9	0.7	-4.6
Production				
Employment	0.2	-0.1	1.0	-0.2
Productivity per employed person	1.4	1.2	0.1	1.2
GDP	1.6	1.0	1.1	1.0
Memorandum items:				
Unemployment rate	9.8	10.7	7.9	7.6
Budget balance, % of GDP	-2.9	-3.3	-1.7	1.7
Current account balance, % of GDP	-1.0	3.9	6.0	6.4

Source: Oxford Economics, from 2012 model simulation of the institutes.

Although the government balance turns into surplus from 2013 onwards due to the persistently restrictive fiscal policy, the government debt ratio does not decline noticeably remaining around 80.5 % on average during the period from 2012 until 2016 (Figure 8 and Table 14).

An alternative scenario: euro bonds and low interest rates

One reason why the consistent implementation of the EU fiscal pact will have such disastrous consequences consists in the fact that this "therapy" is not geared to the causes of the "disease". The point is that the euro crisis has not been caused by an irresponsible increase of government spending, but by the following developments:

- Irresponsible lending encouraged speculation on growing house prices in the USA. Due to the packaging of this outstanding debt into collateral debt obligations and its world-wide sale the bursting of the house price bubble escalated into a global financial and economic crisis.

- This financial crisis forced a massive expansion of government spending in the form of bank rescue and stimulus packages. Further, government budgets were strained by the automatic stabilisers during the recession of 2009.
- Since the introduction of the euro the current account imbalances of the euro area countries had widened, (also) because traditional forms of wage formation were adhered to. The former hard currency countries, especially Germany, implemented restrictive wage policies (even more restrictive than during the existence of the DM, when they served to mitigate the cost effects of currency appreciations), the former soft currency countries in southern Europe allowed higher wage increases (as if they could be offset by devaluations as in the past).
- From autumn 2009 onwards financial players began to speculate on a default of uncompetitive euro area countries using credit default swaps. First, they focused on Greece, and then they turned to Ireland, Portugal, Spain and Italy. The yields of these countries' bonds rose to unsustainable levels. At the same time interest rates declined for the "good" countries, particularly Germany.
- The persistently high interest rates and the ensuing enforcement of austerity policies pushed Portugal, Spain and Italy back into recession in 2011. In the one country with the highest level of interest rates and the most radical austerity policies, in Greece, the economic downturn has aggravated into an outright depression.

These undesirable developments in financial markets and in economic policy widen the economic and potentially also the political divide between the central and northern European euro area countries and the southern European euro area countries endangering the survival of the European Monetary Union. The introduction of euro bonds for a joint financing of all euro area countries at a uniform interest rate represents a "therapy", which eliminates two key causes of the "euro disease": The excessive level of long-term interest rates relative to the medium-term GDP growth rate and the enormous interest rate differentials between the individual member states.

Therefore the following alternative scenario has been simulated using the OEF model: It assumes that long-term government bond yields are stabilised at 2 %. For this purpose e.g. a European Monetary Fund could issue euro bonds at low interest rates. This would ensure similarly low interest rates in euro area countries as in the USA or in the UK (nor would Germany have to accept higher interest rates than it currently pays). Although public debts are higher in both these countries than in the euro area, interest rates are substantially lower, because the central banks of the USA and of the UK are willing to support their own countries via the purchase of bonds.

In a monetary union, however, the central bank can only temporarily fulfil this function. If it acted as a permanent "government financing agency" the concentration of power would become too large for the ECB (it would decide alone, which members of the monetary union it supports and which ones it will not support). This would be the EMF's task as a common financing agency of the euro area countries. It would raise funds by issuing euro bonds at interest rates linked to the short-term rate and provide the funds to the euro area countries. Lending would be subject to strict conditionality. This conditionality, i.e., the criteria for receiving funds, should take into account the different conditions in the single countries as well as the fact that stable economic growth is a prerequisite for any sustained improvement of public finances.

Euro bonds would enjoy the unlimited guarantee of all 17 euro area countries as well as support from the ECB (if necessary the ECB would buy euro bonds in the secondary market to stabilise the bond rate.) In view of the higher competitiveness of the European real sector compared to that of the USA, the doubly insured euro bonds would hardly be less attractive than US treasury bonds (for a concept for the EMF see Schulmeister 2011).

Thus, in the euro area, too, interest rates could be reduced below the medium-term growth rate, as a negative interest-growth differential is a prerequisite for the long-term sustainability of financial debt. This results from the "dynamic budget restriction" (Schulmeister 1995):

- If the interest rate is lower than the growth rate, an indebted sector (corporations, government) can borrow more than it has to pay in interest for existing debts (it can thus maintain a primary deficit) without necessarily seeing its debt ratio (relative to GDP) rise.
- However, if the interest rate is above the growth rate, an indebted sector has to achieve a primary surplus. It can thus borrow less than it pays in interest for existing debts (the indebted sector loses liquidity).

As a consequence of the high-interest policy of the early 1980s and the subsequent decline of inflation the nominal interest rate has almost permanently remained above the nominal growth rate in countries exhibiting particularly low inflation, such as Germany. The business sector adapted to this condition: It turned its primary balance into surplus by reducing its external financing and its real investment and by accumulating financial assets instead.

Private households permanently achieve primary surpluses (they save more than their earned interest). As the total of all primary balances adds up to zero, the government can only maintain a primary surplus under these conditions, if the fourth sector, the rest of the world, maintains high primary deficits. Although Germany was successful in doing so in recent years (current account surpluses are much larger than net interest payments from the rest of the world), this only helped to shift the problem to other countries.

The simulation of the euro bond scenario was again based on the original OEF model version of February 2012. The only difference is that the ten-year bond yields of all euro area countries were fixed at 2 % from the third quarter of 2012 onwards. For the purpose of a clear delineation of the contrast with the fiscal pact scenario this alternative scenario does not incorporate the consolidation measures assumed there.

Figures 7 and 8 show that macroeconomic trends would be much more favourable in the low interest scenario ("euro bonds") than in the baseline scenario ("fiscal pact"). This is true both for the euro area as a whole and for Germany. Whereas an enhanced consolidation policy during recession would prolong the crisis, the economy would pick up fast in the case of a sustained interest reduction, mainly as a consequence of a rebound of investment activity.

In the euro bond scenario the unemployment rate in the euro area would decline steadily from 2013 onwards. In the fiscal pact scenario, by contrast, it would rise until 2014 and then remain at the high level of 12 % (Figure 7). In Germany both scenarios yield similarly divergent employment trends (Figure 8). In the euro bond scenario the inflation rate would stabilise at 2 %, in the fiscal pact scenario a slight deflation would begin in 2015, mainly due to the increasing underutilisation of production capacity, above all in the form of rising unemployment.

Although net borrowing of the government would improve more sharply in the fiscal pact scenario than in the euro bond scenario, the government debt ratio would not. In 2016, the latter would be even slightly higher in the fiscal pact scenario than in the euro bond scenario, because nominal GDP growth would be significantly higher in the second scenario (Figures 7 and 8).

Table 14 summarises the economic performance according to each of the scenarios for the average of the forecast period. For the 11 largest euro area countries and for almost all of the 6 macroeconomic indicators the euro bond scenario yields a far better economic performance than the fiscal pact scenario. Merely the current account deficits would be slightly higher in France, Italy, Portugal and Greece in the euro bond scenario than in the fiscal pact scenario. This is due to the fact that an expansionary interest policy would also stimulate import demand in all euro area countries so that the current account would be slightly negative for the euro area as a whole, whereas it would be marginally positive in the fiscal pact scenario.

Finally, it should be noted that the results of both model scenarios depend on numerous conditions, not only with respect to the assumptions about the implementation of the EU fiscal pact on the one hand and the management of long-term interest rates on the other hand, but also with respect to the stability of the behaviour of the business sector, private households and the government as represented in the model equations. Therefore, the numerical results of the scenarios must be interpreted cautiously. However, the differing trends are likely to reflect a true picture of the differences in quality between a policy of permanent austerity on the one hand and a low interest policy via euro bonds on the other hand.

After all, the results of the fiscal pact scenario correspond to the experience with the austerity policies in Greece – albeit in a weaker form, because the consolidation measures demanded by the EU fiscal pact are less pronounced: Budget deficits will be reduced, economic growth will be dampened and, as a consequence, the government debt ratio will not improve.

By contrast, the results of the euro bond scenario correspond to the economic trends in the USA and in the UK: Despite the consolidation policies they are more favourable than in the euro area, because the central banks stabilise the interest rates at nearly 2 %.

It can be concluded that even in a model which is largely supply-side oriented the economic policy course imposed by the fiscal pact has significant negative effects on growth and employment. In reality the consequences are likely to be far more severe, because lower incomes and the resulting lower demand will result in larger losses of aggregate output.

Economic policy challenges

The crisis of the monetary union

The crisis in the euro area has escalated to an extent, which had seemed unthinkable at its onset. Despite numerous support programmes for the crisis countries and despite the establishment of the "rescue fund" (EFSF) and the permanent European Stability Mechanism (ESM), which have been provided with billions of euros, a lasting stabilisation of the euro area has not yet been achieved. Numerous adjustment programmes have been implemented. In addition, the ECB generously provided banks with ample liquidity. Although the latter measure reduced market uncertainty, well-funded doubts persist as to whether the crisis has been brought under control.

The fundamental problem consists in a lack of confidence in financial markets as well as the exploitation and reinforcement of uncertainty by speculators. Therefore the demanded yields on government bonds of the crisis countries, but also on the bonds of numerous banks, are too high to be financed over an extended period. Banks' lending conditions have remained relatively restrictive. In such an uncertain environment, the real economy, too, is negatively affected. The mistrust of the markets is rooted in the incomplete and inconsistent economic policy measures that have been taken so far to overcome the crisis. To date there is no credible institutional framework which would prevent the insolvency of a member state. Moreover, the opinion that the insolvency of a country and even its exit from the monetary union are desirable options seems to exist among governments. Further, the success of the implemented policy measures has fallen well short of the expectations. In particular, contrary to wide-spread expectations, they have proved extremely harmful to growth in the affected economies. This makes it all the more difficult if not impossible to meet budget targets. Measured against government debt, efforts to consolidate public finances fall short of the expectations. This is particularly true for Greece where the recession has been particularly deep, but, to a lesser extent, also for the other crisis countries. Therefore, it is time to take stock and examine what has been achieved so far and what remains to be done.

So far no major success has been achieved. The mistrust in the stability of the euro area which was spreading at an accelerating pace in the past year has been contained since the end of 2011. This was accomplished with the help of the ECB's generous provision of liquidity. It significantly reduced the probability of a financial collapse of financial players. The cheap liquidity enables them to make quick profits at a comparatively low risk by lending these funds at higher interest rates not least to governments requiring them to refinance their debt. This increases the security in the banking sector simultaneously dampening government bond yields. In other words: governments are able to refinance their debt more cheaply.

However, this could have been achieved in a more efficient way. If the ECB had bought the bonds directly in the secondary market, the dampening effect on government bond yields would have been much larger. For, in this case, the reduction would not have depended on the willingness of the banks to buy government bonds at all instead of other assets. Banks would nevertheless have been stabilised, because their need to write-off government bonds would have diminished. However, this more efficient approach was prevented by the massive resistance from some members of the ECB council and from some governments. The latter include the German government in particular. Against this background recent attempts to stop the ECB from a potential continuation of the provision of amply liquidity are very dangerous.

Yet the most important long-term problem remains unsolved. Current account imbalances in the euro area are still substantial. Although it was decided to monitor them under the European Semester, the rules according to which this is to happen remain inadequate. This concerns particularly the asymmetric approach to deficits and surpluses. The special treatment of surpluses, for which a threshold of 6 % of GDP was agreed, disqualifies the whole procedure. Such an approach is inadequate for the elimination of the imbalances. The root of the current problems will thus persist.

From a more short-term perspective the most serious problem consists in the one-sided supply side orientation of current economic policies in Europe. It is correct to say that Greece, like Spain and Portugal, will have to improve its competitiveness also via supply-side measures, if it is to balance its current account in the long run. However, the imposed exaggerated fiscal austerity has resulted in a severe decline of GDP. This in turn makes it very difficult to meet budgetary objectives thus leading to further spending cuts, which trigger a downward spiral of aggregate output. To date there has been no adequate economic policy response to tackle this problem. Most governments seem to continue believing that restrictive fiscal policies will facilitate an automatice rebound of economic activity. Yet, meagre growth will persist, if demand is depressed. The only remaining hope is that sufficient demand for European products will arise in the rest of the world, particularly the emerging economies. However, firstly, this is beyond the economic and political influence of European governments and, secondly, such a scenario is highly unlikely in view of the global economic situation. Furthermore, the stronger economic expansion of the emerging economies benefits the countries hit hardest by the euro crisis less than the relatively stable economies. Thus, for a way out of the crisis demand policies have to return to the economic policy agenda in Europe. This would also strengthen confidence in the euro area's future development.

Negative effects of fiscal restriction

In 2011 the output gap was clearly negative in all euro area countries. For the euro area as a whole estimates range from -2 % according to the European Commission to -2.6 % according to the OECD and -8.4 % according to the OFCE. The European Commission estimates potential output growth in the period since 2008 at 0.8 % per year. Such estimates imply that Europe will have to accept low growth and high unemployment.

The government budget deficit of the euro area as a whole reached a level in 2011 that remained significantly below those of Japan, the United Kingdom and the USA (9-10 % of GDP). Almost all euro area countries, with the exceptions of Germany, Finland and Luxembourg, breached the Maastricht deficit limit of 3 % of GDP.

Under the pressure of financial markets and the European Commission (or the "Troika" in the cases of Greece, Ireland and Portugal) all member states of the European Monetary Union implemented fiscal consolidation measures either in 2010 or 2011. Based on the trend output before the crisis and the most recent OECD Economic Outlook these policy measures will account for 2 % of GDP in each of the years 2011, 2012 and 2013 (Table 16). Between 2010 and 2013 the cumulative negative fiscal impulse will amount to more than 24 % of GDP in Greece and to 12 % of GDP in Portugal, Spain and Ireland. Fiscal restriction is felt above all on the expenditure side: spending cuts account for an average 80 % of the austerity measures in the euro area (Table 17).

Table 18 shows the effect of the currently envisaged fiscal tightening using a small model developed by the OFCE. The model includes the fiscal plans as presented in Table 16. It then takes account of the direct effects of these policy measures on the basis of the respective domestic fiscal multipliers (slightly below 1 for larger economies, 0.6 for smaller economies). It also includes the effects of the fiscal plans that have been announced in the countries of the euro area, the USA and in Japan that affect foreign demand. The simu-

TABLE 16

Fiscal impulses

% change

	2010	2011	2012	2013	Total
Germany	0.8	-1.0	-0.6	-0.7	-1.5
France	-1.0	-1.8	-2.3	-2.0	-7.1
Italy	-0.8	-1.6	-3.6	-2.9	-8.9
Spain	-3.4	-4.1	-3.0	-2.3	-12.8
Netherlands	-0.8	-1.4	-2.1	-1.0	-5.3
Belgium	-1.4	-0.8	-1.3	-1.4	-4.9
Austria	0.4	-0.6	-1.2	-0.6	-2.0
Portugal	-0.8	-6.6	-4.5	-2.4	-14.3
Finland	0.0	-1.0	-1.5	-0.9	-3.4
Ireland	-3.7	-1.5	-3.8	-3.0	-12.0
Greece	-8.6	-7.1	-5.1	-3.5	-24.3
Euro area	**-0.9**	**-1.9**	**-2.2**	**-1.7**	**-6.7**
United Kingdom	-1.1	-2.1	-1.8	-1.8	-6.8
USA	-0.9	-1.4	-1.2	-1.4	-4.9
Japan	-0.2	-0.1	-0.3	0.4	-0.2

Source: Estimation of the Macro Group based on the OECD, Economic Outlook November 2011. Fiscal impulses are calculated as the announced changes of the structural budget balances on the basis of the pre-crisis trend GDP growth.

TABLE 17

Break-down of fiscal consolidation programmes 2010-2013

% of GDP

	Primary expenditures	Revenues	Total
Germany	-2.2	-0.8	-1.5
France	-4.4	2.7	-7.1
Italy	-5.9	3.0	-8.9
Spain	-11.2	1.6	-12.8
Netherlands	-4.1	1.2	-5.3
Belgium	-6.7	1.6	-4.9
Austria	-2.2	-0.2	-2.0
Portugal	-11.2	3.1	-14.3
Finland	-5.0	-1.6	-3.4
Ireland	-8.2	0.8	-9.0
Greece	-18.9	5.4	-24.3
Euro area	**-5.3**	**1.4**	**-6.7**
United Kingdom	-6.9	0.1	-6.8
USA	-2.5	1.4	-3.9
Japan	-1.3	-1.1	-0.2

Source: Calculations of the institutes.

TABLE 18

Effects of the fiscal impulses on GDP, the government deficit and the government debt during the years 2011-2013

	% of GDP					Government budget balance	Government debt
	2010	2011	2012	2013	Total	2013	2013
Germany	0.4	-1.2	-1.0	-0.9	-2.7	0.2	2.8
France	-1.2	-1.8	-2.7	-2.3	-8.0	2.7	0.8
Italy	-1.0	-1.6	-3.9	-3.1	-9.6	4.1	2.9
Spain	-3.4	-4.1	-3.6	-2.8	-13.9	6.5	-6.0
Netherlands	-0.7	-1.2	-1.7	-1.0	-4.6	3.0	-4.2
Belgium	-1.1	-0.9	-1.3	-1.2	-4.7	2.6	-1.6
Austria	0.3	-0.8	-1.2	-0.8	-2.5	0.8	0.8
Portugal	-1.1	-6.6	-4.6	-2.7	-14.0	8.0	-3.7
Finland	0.0	-1.1	-1.5	-1.0	-3.6	1.4	-1.1
Ireland	-2.7	-1.4	-3.0	-2.4	-9.5	8.2	-8.4
Greece	-8.6	-7.4	-5.5	-3.8	-25.3	12.9	-11.3
Euro area	**-1.1**	**-2.0**	**-2.3**	**-2.0**	**-7.4**	**3.0**	**-0.3**
United Kingdom	-1.1	-2.5	-2.3	-2.2	-8.1	3.2	-0.8

Source: Calculations of the institutes.

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lation is carried out under the assumption that interest rates remain unaffected as these restrictive policy measures do not strongly improve the debt ratio.

The cumulative negative effect on GDP is estimated at 7.4 percentage points for the euro area as a whole, contrasting with 14 percentage points in Spain and Portugal and 25 percentage points in Greece. The positive ex ante effect of fiscal tightening on the government budget balance is likely to be reduced considerably by this depressive effect. As a consequence of the production decline the debt ratio in % of GDP is not expected to decrease.

Countries that have to implement strongly restrictive policy measures will experience a sharp fall in output and high unemployment. Under these conditions government deficit objectives will not be met, which will be used as an argument to justify additional austerity measures. According to the European Commission such a policy would be inevitable to reassure financial markets. But would a policy leading to an extended period of depression really be reassuring?

In 2012 demand in the euro area will clearly be insufficient. Occasionally it is pointed out that there have been periods in the economic development of some countries, when a fiscal contraction had an expansionary effect on production activity. However, this occurred in combination with other measures, such as currency devaluations, reductions of interest rates, an increase of private debt following financial deregulation or a strong increase of private demand due to economic shocks (such as accession to the EU), which are no longer at the disposal of the euro area countries in this form.

Some economists argue that such restrictive policies would have only a limited negative effect on production, because households will expand their consumption expenditure due to Ricardian effects. However, this is unlikely in the current situation, because the austerity measures squeeze household incomes and show that governments expect a permanently lower potential output growth. There is no guarantee that risk premiums will fall, for public debt will increase and the implemented fiscal policies will weaken the euro area and upset financial markets.

The sustainability of public debt depends on growth and interest trends. On the basis of OECD figures the debt of most countries seems unsustainable, even if the respective countries succeeded in closing the output gap. The difference between the current structural primary balance and the primary balance required to stabilise the debt ratio amounts to 3 percentage points in the case of France. For Greece, Italy and Ireland it is 4 percentage points and for Spain and Portugal it is 6 percentage points (Table 19). The problem is that restrictive fiscal policies aiming at a reduction of the structural deficit will actually raise the cyclical deficit, which prevents a stabilisation of the debt ratio.

The new fiscal pact

On 9 December 2011 the Council of the EU has decided on a fiscal pact (“fiscal compact”). It states that “budgets will be balanced or in surplus”, which is interpreted as equivalent to the statement that “the structural deficit will have to remain below

TABLE 19

Sustainability of government debt at the end of 2011

	% of GDP					
	Structural primary balance (OECD)	Debt	Nominal interest rate	GDP growth rate[2]	SPB gap [3](OECD)	SPB gap [3](OFCE)
Germany	0.90	83	2.4	2.6	1.1	2.9
France	-1.70	86	3.5	2.1	-2.9	1.1
Italy	1.80	120	6.5	1.5	-4.2	6.3
Spain	-2.70	68	5.9	1.3	-5.8	1.6
Netherlands	-2.20	65	3.0	2.6	-2.5	1.2
Belgium	0.00	96	4.1	3.5	-0.5	2.3
Austria	-0.30	74	3.4	3.0	-0.6	2.0
Portugal	-2.30	102	3,5[1]	-0.5	-6.4	1.7
Finland	-0.40	52	2.9	4.3	0.3	3.4
Ireland	-3.60	107	3,5[1]	2.7	-4.4	2.3
Greece	4.10	161	3,5[1]	-1.4	-3.7	6.9
United Kingdom	-4.70	88	2.8	2.8	-4.7	0.0
Japan	-6.70	206	1.2	1.3	-6.5	-3.5
USA	-6.00	101	2.7	3.9	-4.8	-3.3

SPB gap = gap of the structural primary balance.
[1] Including EFSF loans.
[2] Expected average growth rate of nominal GDP during the years 2012-2013.
[3] Difference between the structural primary balance and the primary balance required for a stabilisation of the debt ratio.

Source: Calculations of the institutes.

0.5 % of GDP". However, an adjustment mechanism is now to be triggered automatically. As of now the countries will have to adopt these rules in their constitutions or their national budget processes. The European Court of Justice is to be given the right to verify whether this rule is obeyed. It remains to be seen whether this is legally sound. Countries exhibiting deficits will have to reduce them rapidly in accordance with a time table proposed by the European Commission. Countries whose debt ratio exceeds 60 % of GDP will have to reduce the excess debt by 5 % per year. Countries that are in an excessive deficit procedure will have to submit their budgets and structural reform programmes to the European Commission and Council for approval. The implementation of these programmes and the annual draft budgets will be monitored by the Commission and the Council. A qualified majority will be necessary to avert sanctions, if a country does not keep its deficit below the limit of 3 % of GDP.

From the point of view of the Macro Group this agreement is macroeconomically dangerous. It imposes deficit rules on the countries that are based on arbitrary figures. Is the 0.5 % limit compatible with macroeconomic balances? Is the restrictive fiscal policy required to balance the budgets and push the debt ratio below 60 % consistent with a macroeconomic equilibrium? Is a debt ratio of 60 % of GDP realistic, if Europe wants to promote the development of pension funds, which are legally obliged to hold public securities in their portfolios? The pact does not even allow for debt financing of investment.

The pact enforces automatic policy reactions. Discretionary measures will be inadmissible. On 26 October 2011 the European Council decided that all countries in an excessive deficit procedure will have to honour their commitments independently of cyclical developments. Not only does this mean that they will have to abstain from anti-cyclical policies. On the contrary: they will even have to adopt pro-cyclical measures. This implies that they will have to announce restrictive policies whenever the economic outlook worsens. This is particularly dangerous in 2012, as even the European Commission expects negative GDP growth in the euro area.

The agreed strengthening of fiscal rules is inconsistent with sensible European economic policies. Improved coordination is necessary, but the mere control of numerical limits is not the same as true economic policy coordination and is heading in the wrong direction. There is no reason

TABLE 20

Fiscal indicators of selected economies

	Current account balance % of GDP 2011	Budget balance % of GDP 2011	Government debt % of GDP 2011	Average GDP growth % 2011-12	Score maximum: 20	Structural primary balance % of GDP 2011[1]	Yield on 10year government bonds % 1 February, 2012
Finland	0.4	-2.0	49	2.2	17.8	-0.3	2.4
Germany	4.9	-1.2	82	1.8	17.1	0.9	1.9
Austria	3.0	-3.4	72	1.9	17.1	-0.2	3.0
Netherlands	7.8	-4.2	64	0.9	15.2	-2.1	2.4
Belgium	-0.5	-3.5	97	1.3	12.9	0.0	3.7
France	-2.3	-5.7	85	1.0	10.7	-2.6	3.0
Spain	-4.0	-6.2	70	0.5	8.9	-2.6	5.1
USA	-3.0	-10.0	101	1.9	8.9	-5.9	2.0
Ireland	0.5	-10.3	108	1.1	8.6	-3.3	8.2
United Kingdom	-0.6	-9.4	84	0.7	8.6	-4.7	2.1
Japan	2.2	-8.9	206	0.9	8.4	-5.6	1.0
Italy	-3.6	-3.6	121	0.1	7.1	1.9	5.5
Portugal	-8.0	-5.9	102	-2.4	5.7	-2.2	12.8
Greece	-8.6	-9.0	163	-4.5	2.9	5.1	34.3

[1] OECD estimate.

Sources: OECD; economic press; calculations of the institutes.

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why the stimulus to the European economy, which lost 9 % of GDP since the financial crisis of 2008, should be abandoned prematurely with the implementation of austerity programmes.

Limited solidarity

The EU governments were unable both to stop the speculation that started in 2009 and to credibly assure that the euro area will continue to exist. They have let unsustainable government bond yields emerge in financial markets. This belied expectations that these bonds would be safe.

The northern member states and the ECB are reluctant to end speculation by announcing that the ECB guarantees public debt or that governments finance themselves via jointly emitted and guaranteed euro bonds. They want to put pressure on the rest of the countries to make sure that they will implement austerity measures and structural reforms. However, this strategy is dangerous for the euro area.

Government debt securities of the euro area countries have become risky assets which weakens EU banks that hold considerable quantities of these securities. The loss in value of government debt securities has entailed losses for the banks. The latter have to be recapitalised, but how can they ever have sufficient capital to be prepared for the insolvency of governments? Financial markets assume that governments will have to rescue their domestic banking system. This constitutes an additional risk factor putting a strain on these countries. Countries such as France or Austria have lost their triple-A rating, which in turn weakens the EFSF. Under the pressure of the financial markets the euro area has entered a vicious circle.

In Table 20 the countries are ranked according to four criteria watched by the markets: current account balance, budget balance, government debt ratio and GDP growth. It shows that, in terms of the interest rate level, it is very costly to be a member state of the European Monetary Union. For instance Belgium and Spain pay interest exceeding the level in the UK by 1.6 and 3.0 percentage points, respectively, although this cannot be justified by larger imbalances. Italy faces a high risk premium although its structural primary balance is positive according to estimates both of the OECD and the OFCE. An interest rate that is 3.6 percentage points above that of Germany is not sustainable for Italy. This difference amounts to 4.3 % of GDP for Italy. The ESM, which is to start operating already in July 2012, obliges the member states to sign the macroeconomically harmful fiscal pact that prevents strategies of macroeconomic stabilisation. It further obliges countries to introduce so-called “collective action clauses” (CAC) to their government bonds and to announce “private sector involvement”. This implies that government debt securities will be seen as risky assets subject to higher interest rates and that they will be vulnerable to financial market speculation. Financial support is linked to strict conditionality and monitoring by the ECB, the IMF as well as the European Commission, which implies that any country will try to delay calling on any funds until its situation will have worsened dramatically.

Neither the fiscal pact nor the ESM will be able to stabilise the euro area. A necessary condition for as stable euro area is that all member states can finance their government debt at the same sufficiently low interest rate. Its level has to be below the long-term nominal growth in the euro area, in analogy to the situation in the USA, in the UK and in Japan.

This will only be possible, if the countries' debts are fully guaranteed. Under the given institutions of the euro area the countries should subject their national fiscal policies to a coordination process. Such a coordination process should aim at full employment. It should take account of all causes of imbalances such as competitiveness and external imbalances. However, this should be done from a European perspective, which means that the surplus countries would have to implement expansionary economic policies. In the coordination process an agreement should be reached, which is difficult. Coordination cannot consist in sticking to automatic rules as envisaged in the Stability and Growth Pact or in the new fiscal pact, but it should be a bargaining process between the countries taking the macroeconomic requirements into account. The pact should provide for the case of no agreement. In practice, however, everything should be done to avoid this case. This is the only way out of the crisis.

ECB to the Rescue

In late November 2012, the confidence crisis in the euro area headed for a new climax: Euro area yields once again started rising dramatically, with Italian 10-year government bond yields reaching 7½ %, and a credit crunch loomed large in the face of deteriorating bank balance sheets. The EU summit in early December did little to alleviate the pressure. In the same month the ECB set in motion an extensive rescue operation: With two unprecedented 3-year, low-interest refinancing operations, the ECB essentially guaranteed the refinancing of banks and provided ample cheap funds for banks to increase their profitability by purchasing government bonds and to strengthen their capital base by buying back their own high-yield bonds. Nonetheless, by themselves the monetary policy measures of early December 2011 do not suffice to end the crisis – they only provide a breathing space for policy makers. Given the nexus between budget deficits, debt ratios, growth, and confidence, a resumption of growth is a conditio sine qua non for overcoming the current crisis in the euro area. This applies all the more as current ECB policies entail numerous risks which could materialise if policy makers do not manage to engineer a turnaround in euro area growth prospects.

Yields have come down significantly since November 2011 and banks have been active in buying bonds – both government bonds and commercial bonds, including their own. At the same time, however, loans to the private sector are sluggish, the distribution of refinancing credits among euro area countries is highly skewed and the inter-central-bank assets and liabilities (TARGET2) have increased dramatically.

High demand for refinancing loans

The demand for the three-year refinancing loans was high: On 22. December 2011 banks received 489 billion euro in refinancing loans, on 1 March 2012 a further 530 billion euro. The total volume of refinancing loans did not increase by this amount, because shorter-term refinancing loans were paid back, but nonetheless, by 9 March 2012 overall refinancing loans had increased by 453 billion euro or 68 % to 1,018 billion euro (Figure 9).

Up-to-date figures are not yet available about the national distribution of these loans but it seems reasonable to assume that the shift toward the crisis countries observed since 2007 has intensified rather than abated. In January 2012, Germany accounted for only 2.4 % of all refinancing loans compared to 55 % in January 2007.[3] Italy's refinancing needs started to rise significantly in August 2011 and now account for 24.3 % of all refinancing loans compared to a mere 4 % five years ago. Greece, Portugal, Spain and Ireland have experienced a steady increase in central-bank refinancing since the beginning of the international financial crisis in July 2007 (Figure 10). Together with Italy, these countries accounted for 66 % of the total volume at the end of January 2012.

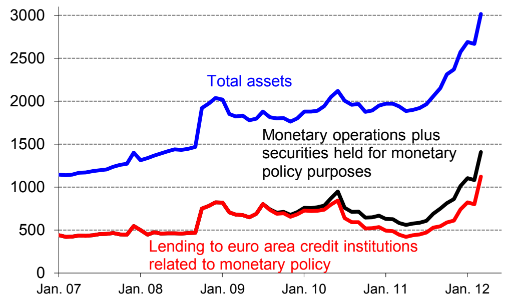
Until December 2011 the central banks of the euro system were liable for losses incurred as a result of monetary policy operations according to

[3] These figures are approximations because the Bundesbank publishes average figures for each minimum reserve maintenance period whereas the other central banks publish end-of-month data.

FIGURE 9

Consolidated financial statement of the Eurosystem

January 2007 – March 2012,1 EUR billions



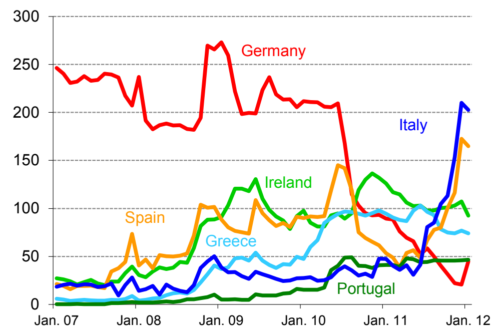
[1] Monthly averages of the published end-of-week figures.

Sources: European Central Bank; calculations of the institutes.

FIGURE 10

National allocation of liquidity-providing refinancing operations

January 2007 – March 2012, end-of-period[1], EUR billions



[1] For Germany, monthly averages for the reserve maintenance period ending in the respective month.

Source: Financial statements of the national central banks.

their share in the ECB's capital. With the lowering of collateral requirements national central banks now provide refinancing loans at their own risk. It is not only questionable how sensible such a procedure is but also how realistic it is in practice.

Record inter-central-bank balances (TARGET2)

The steep increase in the demand for ECB refinancing loans on the part of banks in the crisis countries is to a great extent due to their lack of other refinancing possibilities. Not only are interbank loans scarce, but deposits of residents are also withdrawn. This outflow of private capital led to a build-up of arrears between euro-area central banks (TARGET2 balances). When private creditors withdraw funds from an Italian bank, for example, and redeposit them at a German bank it is a cross-border transaction that involves the central banks of both Germany and Italy: The Bank of Italy incurs a liability vis-à-vis the German Bundesbank. If these arrears are not compensated for by transactions running the other way by the end of the day, the balances are transformed into liabilities of the Bank of Italy vis-à-vis the ECB and corresponding liabilities of the ECB vis-à-vis the German Bundesbank. Prior to the international financial crisis the TARGET2 balances were negligible. In January 2012 – the latest available data – they reached record highs: The Bundesbank's TARGET2 assets amounted to 498 billion euro, Italy and Spain each had TARGET2-liabilities of almost 200 billion euro (Figure 11).

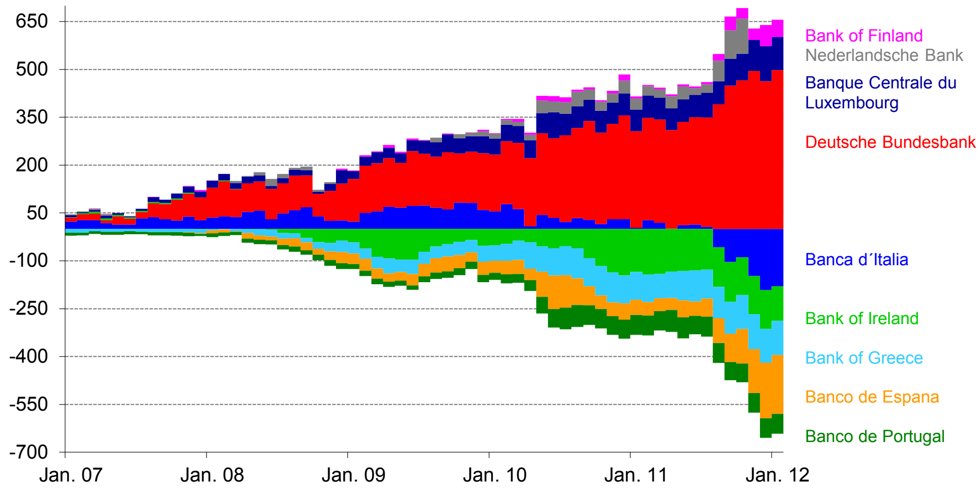
It should be noted that there is no causal linkage between a country's current account position and the sign of its TARGET2-balances.[4] Italy, for example, has run current account deficits since 2002, yet it had positive TARGET2 balances until July 2011 when Italy was engulfed by the wave of contagion spreading throughout the euro area. Since then Italy's TARGET2 liabilities have increased in giant steps. The example of Ireland further illustrates that current account balances and TARGET2 balances are not related: Ireland, which has recently managed to turn its current account into surplus, nonetheless had TARGET2 liabilities of 110 billion euro in January 2012 and its TARGET2 liabilities far exceed its cumulated past current account deficits. TARGET2 liabilities have the same root as the increased dependence on central bank financing – a lack of confidence in the solvency of the banking system of the crisis countries. It is therefore not a coincidence that the central bank refinancing and the TARGET liabilities are of similar magnitude (Tober 2011). In Ireland the TARGET2 balances even exceed the refinancing loans. Given that TARGET2 balances are assets and liabilities vis-à-vis

[4] In Germany, some economists argue that such a linkage exists (Sinn/Wollmershäuser 2011). Olaf Storbeck and Buiter et al. were among the first to point to the logical flaws in the arguments put forth (Buiter et al. 2011a; 2011b and Storbeck 2011; see also Tober 2011).

FIGURE 11

TARGET2 balances of selected national central Banks in the Eurosystem[1]

January 2007 – March 2012, end-of-period, EUR billions



[1] Figures as published in the financial statements: Germany – External position of the Bundesbank in the EMU / Claims within the Eurosystem / Other claims (net) (time series EU8148); Greece – Target2 / Target liabilities; Finland – Liabilities related to Target and correspondent accounts (net); Ireland – „Other liabilities in the Eurosystem" approximated by „Other liabilities" minus the amount by which these exceeded the TARGET2-liabilities at the end of 2010; Italy –Other liabilities within the Eurosystem (net); Luxembourg – Claims on the Eurosystem; Netherlands – intra-ESCB claims; Portugal – Liabilities / Monetary financial institutions / Euro area countries (Deposits and deposit-like instruments); Spain – Deposits of other euro area countries / MFIs (time series 7.94).

Sources: Financial statements of the national central banks.

the ECB, any potential loss incurred is shared by the national central banks in proportion to their capital share in the ECB. As mentioned above, the rules for risk sharing in the case of monetary operations have been changed: If national central banks make use of the permissible lower collateral requirements, they alone are liable for any losses. That may or may not be realistic in the case of a country experiencing widespread bank losses; if a country with a crushing debt burden leaves the euro area, however, it is far from likely that it will be able to take on its (share of) TARGET2 liabilities denominated in Euro.

Tensions eased; crisis far from over

Despite the crisis phenomena as reflected in the skewed refinancing of banks and the steep increase in inter-central-bank balances, the situation in financial markets has eased up noticeably since late 2011 (Figure 12). Since late November, Ireland's 10-year government bond yields have come down from 10 % to 7 %, and in Italy the corresponding yield declined by more than 2 percentage points to 5 %. These yields are still very high given the current dismal economic outlook. However, short-term rates rate substantially lower – for example, 1.7 % and 2.2 % for 2-year Italian and Spanish government bonds, respectively. If the crisis does not flare up again and economic growth resumes, most the crisis countries might therefore be able to handle their debt burden. Those are big ifs, however. Without a fiscal policy turnaround, economic growth is unlikely to resume any time soon. Recession could trigger another confidence loss. Furthermore, Portugal's long-term rates have not come down, indicating that despite verbal reassurances, markets are not convinced that the Greek debt swap is an isolated case.

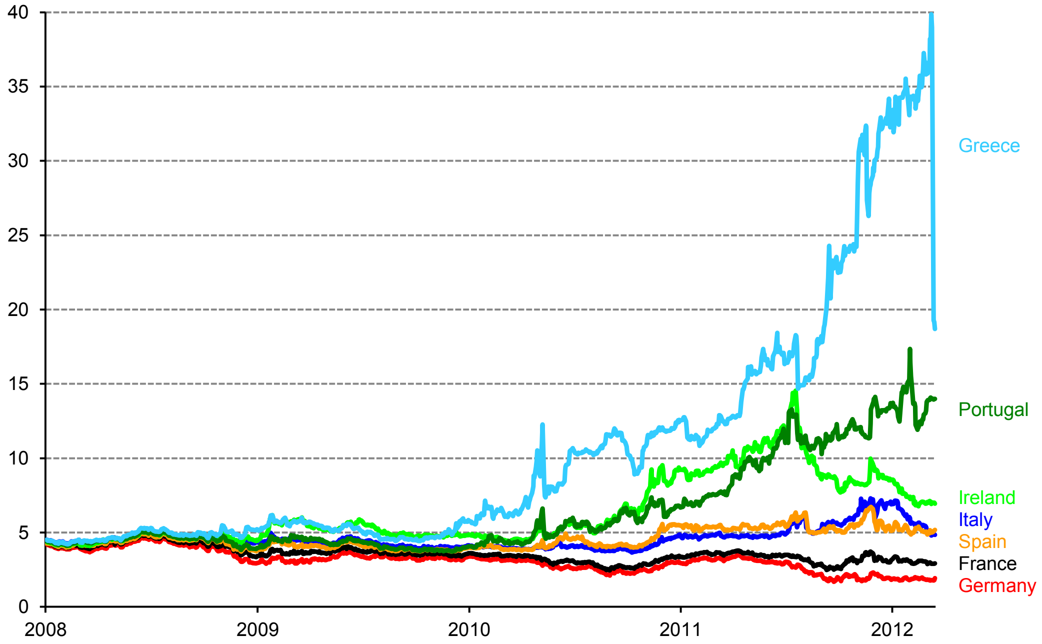
It therefore remains to be seen whether the ECB's round-about approach to crisis resolution will pay off. Rather than directly targeting the loss of confidence that caused many countries to be faced with unsustainable interest demands (Macro Group 2011), the euro system is providing unlimited, low-interest funds to national banking systems whose solvency is intimately linked to that of their home country. The situation will stabilise only if the high liquidity provided by the central banks ultimately results in higher production.

The key risk inherent in this crisis strategy is not higher inflation. Core inflation is at 1.5 % and even lower when increases in indirect taxes are discounted. Both money and loan growth is subdued: Loans

FIGURE 12

10-year government bond yields of selected euro-area countries

Daily values in %



Source: Reuters (EcoWin Financial).

to the private sector increased by only 1.1 % in January 2012, with loans to non-financial corporations up only 0.7 %. Core inflation is only likely to pick up if euro area countries experience sustained and vigorous growth. Given an unemployment rate of 10.7 % (January 2012), there is ample room for production increases. With the tailwind of growth the confidence problems in the euro area would decline and the euro system could easily absorb any excess liquidity by using higher yield deposit facilities, for example.

The real risk thus lies in a recessionary environment in which confidence does not return but instead either banks fail or the austerity measures forced upon the crisis countries make exit the more viable option for some countries. The latter would entail debt repudiation and, at best, sizable losses for tax payers in the euro area.

Banks on their way out of the turbulences?

European Banks are involved in the southern euro area countries Portugal, Italy, Spain and Greece via loans to other banks, government debt securities in their portfolios as well as loans to households and companies. This engagement has become a cause of concern for the financial markets.

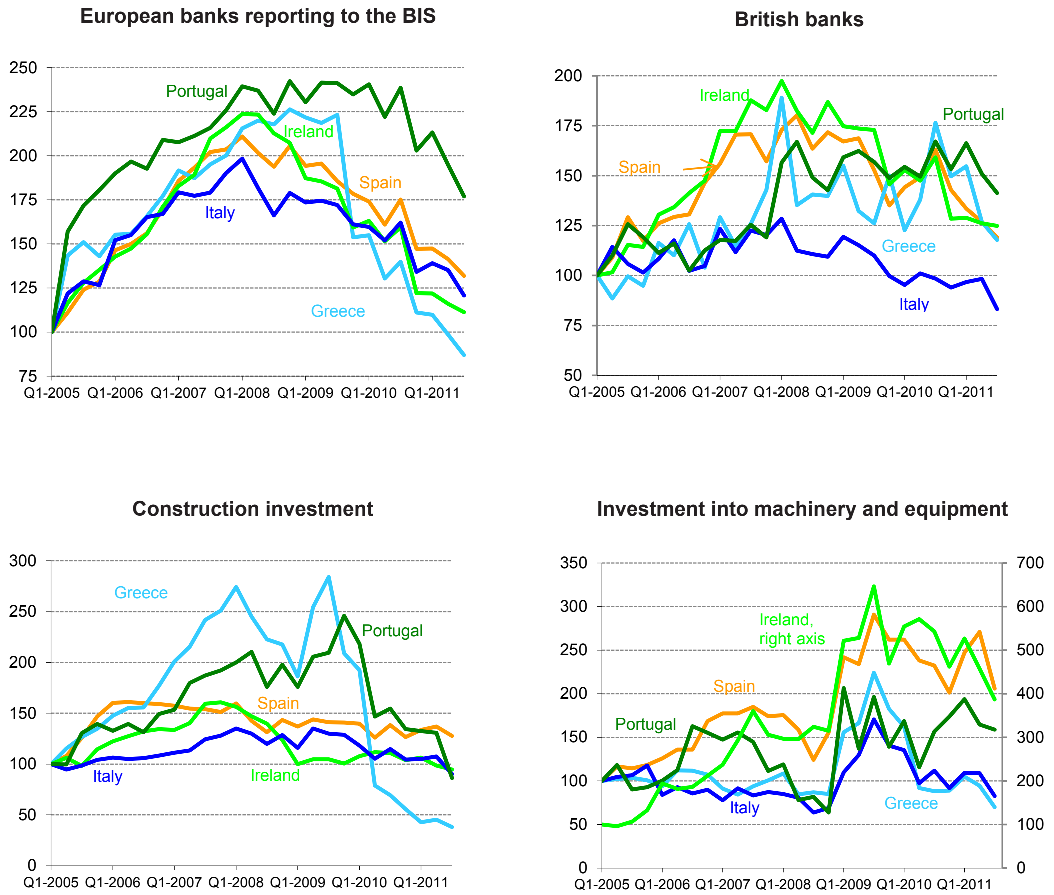
With a total exposure of its banking system amounting to about € 437 billion or 21.9 % of GDP in the third quarter 2011 (Table B1) France is among the countries that are most vulnerable to the risks emanating from the crisis countries. Amounting to € 322 billion (12.5 % of GDP) Germany's exposure is smaller. The British banking system has a stake of € 230 billion or 13.3 % of the British GDP. By comparison the engagements of US and Japanese banks are negligible at € 96 billion (0.9 % of GDP) and € 59 billion (1.4 % of GDP), respectively. In the wake of the financial crisis foreign banks withdrew their funds from these economies, albeit at a different pace (Figure B1).

In mid-July 2011 the stress tests for European banks were assessed positively (European Banking Authority 2011). However, the assumptions that these stress tests were based on were not very realistic. For the euro area a growth rate of 2 percentage points below the baseline scenario was simulated for each of the years 2011 and 2012. Thus, a recession and a weak recovery

FIGURE B1

Banks' foreign receivables

Index 2005Q1=100



Sources: Bank for International Settlements (consolidated banking statistics / ultimate risk basis); calculations of the institutes.

were simulated for the euro area (-0.5 % in 2011 and +1.2 % in 2012). This coincided with an increase of unemployment (+0.3 percentage points in 2011 and +1.2 percentage points in 2012), a decrease of the inflation rate (-0.5 percentage points in 2011 and -1.1 percentage points in 2012), a strong decline of house prices and an increase of long-term interest rates, while the yields on government bonds would reach up to 30 %. The objective of this "stress"-scenario was to examine whether banks would be able to maintain a core capital ratio above 5 %. Under these assumptions only 8.9 % of the 90 banks that were tested had a ratio below 5 %[1], which would de facto make a recapitalisation necessary to meet the capital requirements. In terms of the results of this stress test the European banking system is considered sufficiently resilient in the case of a serious crisis. However, it has to be taken into account that this stress test did not allow for the case of a government's insolvency. With the restructuring of the Greek debt such a case has already materialised de facto, albeit for a very small country. Therefore, the stress test has probably not been strict enough for a realistic assessment of the banks' risks (Table B1).

[1] The core capital according to Basel II is merely 2 %. Due to Basel III it increases to 4.5 % (from 2013). This ratio measures the share of the risk-weighted assets which is covered by equity capital.

TABLE B1

Receivables of the domestic banking sector from the crisis countries by sector

Third quarter 2011 (billion EUR)

	"Euro 5"[1]	Germany	France	United Kingdom	Japan	USA
				Spain		
Banks	81.3	44.3	25.0	13.4	2.9	13.0
Government	44.9	18.6	19.1	4.3	7.0	3.7
Private non-banks	125.3	50.7	57.9	48.0	7.5	17.0
Total	251.4	113.6	102.0	65.7	17.4	33.7
				Greece		
Banks	1.3	0.7	0.4	0.7	0.2	0.9
Government	15.3	8.0	5.1	1.5	0.1	1.0
Private non-banks	34.4	4.5	28.3	6.0	0.5	2.3
Total	50.9	13.2	33.8	8.2	0.8	4.2
				Ireland		
Banks	25.3	14.1	6.9	12.7	1.1	6.4
Government	4.8	2.0	1.8	3.3	0.5	1.3
Private non-banks	95.6	55.6	11.7	80.8	12.2	23.2
Total	126.0	71.7	20.5	96.8	13.9	30.8
				Italy		
Banks	63.0	28.4	26.3	5.5	1.9	6.8
Government	104.6	31.4	58.1	6.0	17.5	7.2
Private non-banks	238.2	42.4	178.6	31.7	6.3	9.3
Total	405.8	102.1	262.9	43.3	25.7	23.3
				Portugal		
Banks	15.7	6.2	4.4	2.3	0.1	1.1
Government	15.6	5.6	3.8	1.2	0.3	0.6
Private non-banks	68.5	9.4	10.0	13.0	0.6	1.8
Total	99.7	21.2	18.2	16.5	1.0	3.5
				Total		
Banks	186.6	93.6	63.0	34.6	6.3	28.2
Government	185.1	65.6	87.9	16.3	25.4	13.9
Private non-banks	561.9	162.6	286.5	179.6	27.1	53.6
Total	933.8	321.8	437.4	230.4	58.8	95.6
In % GDP	12.3	12.5	21.9	13.3	1.4	0.9

[1] „Euro 5": Belgium, Germany, France, Spain, Italy.

Sources: Bank for International Settlements (consolidated banking statistics / ultimate risk basis); calculations of the institutes.

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Hans Böckler Stiftung
Fakten für eine faire Arbeitswelt.

Telephone +49 211 7778-331, Fax +49 211 7778-266,
IMK@boeckler.de, **http://www.imk-boeckler.de**

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