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Imbalances in the Euro Area

In the years before the outbreak of the financial and economic crisis large current account imbalances and divergences of competitiveness emerged in the euro area. These disparities persist and endanger the economic recovery, medium-term growth and the cohesion in the euro area. The reduction of the imbalances will weaken economic growth in the euro area for an extended period. However, the disparities could also be smoothed, while the euro area economy grows more rapidly, if productivity increases in the deficit countries and domestic demand is strengthened in Germany.

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The developments of the past months (escalation of the debt crisis in Greece, creation of the euro crisis shield) are discussed primarily with respect to the situation of public finances in the euro area. To a substantial extent the high budget deficits and the rising government debt, especially in Greece, are a problem of the individual countries' government budgets. However, they have also been caused by the current financial and economic crisis as well as the emergence of imbalances of the current accounts and competitiveness within the monetary union prior to the outbreak of the crisis. These imbalances persist and can entail further problems in the euro area. Thus they endanger the cyclical recovery, medium-term economic growth and the cohesion of the monetary union.

Since the introduction of the common currency competitiveness has worsened drastically, particularly in Greece, Ireland, Italy, Portugal and Spain. Since 1999 unit labour costs and consumer prices have risen relative to Germany and – to a lesser extent – relative to other surplus countries such as Austria. This dampened export growth in the deficit countries. However, due to the high inflation rates real interest rates were low, too. This spurred private consumption and investment – in Ireland and Spain the construction sector was boosted in particular – and thus stimulated domestic demand. In the surplus countries, by contrast, the weak wage and price dynamics had a dampening effect on domestic demand, whereas exports expanded rapidly thanks to the high competitiveness. Owing to these factors, high current account deficits emerged in Greece, Ireland, Italy, Portugal and Spain and current account surpluses occurred for instance in Germany, in the Netherlands and in Austria.

When the house price bubbles burst in Ireland and Spain and the world-wide financial and economic crisis broke out, the deficit countries found themselves in a difficult economic situation, which will continue for some time. Domestic demand is weak, unemployment is high, competitiveness has deteriorated strongly and budget deficits have risen considerably. In all countries ambitious austerity programmes are being implemented. In this situation no economic stimulus can be expected from private domestic demand or public finances. Due to the low competitiveness export demand will not spur growth either. Thus, a protracted stagnation phase with the corresponding social consequences is looming.

The causes of these developments have been discussed among economic researchers for some time[1]. At the European level, too, they have lately received increased attention[2]. However, all deficit countries experienced high growth until the outbreak of the crisis. Therefore the imbalances were considered a problem only to a limited extent. However, the problems of these developments became evident with the outbreak of the global financial and economic crisis and the bursting of the house price bubbles in Ireland and Spain.

Recently, the political discussion, especially at the European level, has increasingly addressed the relationship between those countries with a high current account surplus and those with a correspondingly high deficit. The European Commission, above all, has made an increasing effort to develop a concept of fiscal and wage policy coordination in the monetary union. However, current politics – especially in Germany – suggest that governments have not sufficiently realised the need for it yet. The current article discusses the emergence of the current account imbalances and the divergences of competitiveness within the euro area from the start of the monetary union in 1999 until the outbreak of the crisis, the developments during the crisis as well as the current situation. Potential scenarios for a reduction of the imbalances are drawn up as a conclusion. The analysis does not cover all member states of the euro area, but compares the economic developments in the southern European countries and Ireland – the deficit countries which are the focus of the current debate – to that in the surplus country Germany. The following analysis is of limited validity for the Netherlands and Austria. In both countries the current account surplus is substantially lower than in Germany. In Austria it is only due to the services account; the trade account is largely balanced.

Current account trends

The build-up of the divergences in the euro area between 1999 and 2007 is clearly reflected in the current account balances (Figure 1). In Greece, Ireland, Italy, Portugal and Spain the current accounts worsened markedly. Greece, Portugal and Spain already exhibited a negative current account balance in 1999. By 2007 the deficit in Greece had risen to almost 15 percent of GDP (+9 percentage points), in Spain it reached almost 10 percent (+7 percentage points). In Portugal the current account deficit also widened to nearly 10 percent of GDP. However, the fastest increase had occurred in the second half of the 1990s. Since the start of the monetary union the deficit has remained largely stable at a very high level. Ireland and Italy still showed a small surplus in 1999. The current accounts subsequently worsened significantly in these countries, too (Ireland –5½ percentage points, Italy –3 percentage points), and were strongly negative in 2007. In Germany, however, the small deficit (1999 –1.3 percent) turned into a substantial surplus, which already amounted to 7.7 percent of GDP in 2007 (+9 percentage points).

Current accounts affected by differing demand trends

The diverging trends of the current account balances in the countries of the euro area are due to diverging developments of GDP and individual demand components (Table 1). Among the deficit countries Greece, Ireland and Spain experienced the strongest economic expansion during 1999-2007 (Ireland +6 percent p.a., Greece +4 percent, Spain +3½ percent). In Portugal and Italy, by contrast, average economic growth remained below 2 percent. In Germany, as a surplus country, GDP also expanded slowly during this period. At 1.5 percent the growth rate marked the bottom end of the growth spectrum in the euro area.

In Greece and Spain the high economic growth was fuelled by domestic demand. In both countries it contributed almost 5 percentage points to GDP growth in the period analysed. By contrast, the contribution of exports proved small (below 1.5 per-

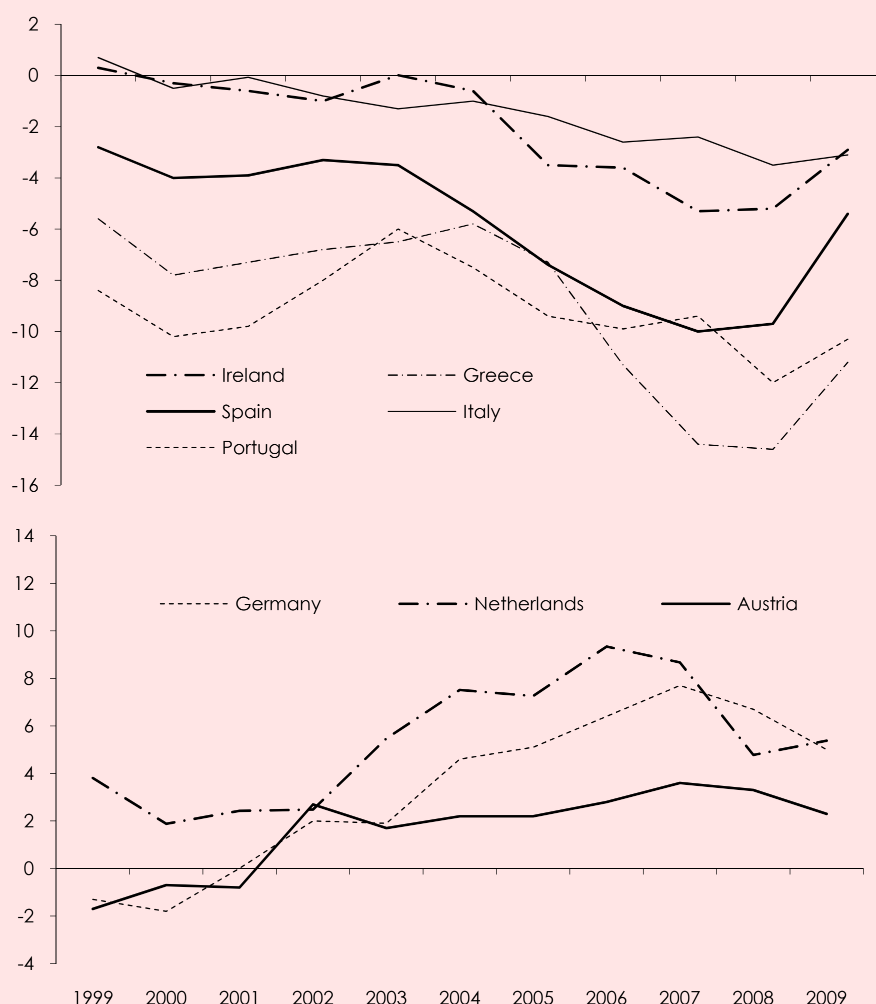
[1] A limited selection of the numerous studies on this topic are, e.g., *Breuss* (2009), *Darvas – Pisani-Ferry* (2008), *Dullien* (2009), *Eichengreen* (2007), *Ederer – Marterbauer – Walterskirchen* (2009), *Marterbauer* (2010), *Marterbauer – Walterskirchen* (2005).

[2] *European Commission* (2006, 2008, 2009, 2010).

centage points). While the economy expanded much less dynamically, domestic demand was the decisive factor for growth in Italy and in Portugal, too, whereas exports increased sluggishly. In Ireland growth was driven by exports to a much larger extent than in the other deficit countries: on average exports contributed 6.7 percentage points p.a. to real GDP growth during 1999-2007, domestic demand contributed 4.8 percentage points annually. By contrast, in Germany, as a surplus country, exports contributed most to growth (3.0 percentage points p.a., domestic demand 0.4 percentage points p.a.).

Figure 1: Current account

As a percentage of GDP



Source: OECD.

At 8 percent p.a. German real exports did not only grow much faster than domestic demand in 1999 to 2007, they also increased faster than in the deficit countries (Greece, Spain and Portugal about 5 percent, Italy 3 percent). Only Ireland achieved similar export growth rates as Germany (7½ percent).

Due to the vigorous expansion of domestic demand imports also increased strongly in the deficit countries. Therefore imports exceeded exports in almost all countries and contributed negatively to growth, to a particularly large extent in Spain (–1.0 percentage points p.a.) and in Greece (–0.6 percentage points p.a.). In Italy and Portugal the growth contribution of net exports was close to zero. Imports increased strongly in Ireland, too. However, exports of goods and services exceeded imports. Foreign trade still contributed about 1 percentage point to real GDP growth. In Germany imports also increased strongly, but not as fast as exports. In this case the high import growth reflects an expansion of foreign trade much rather than

a dynamic trend of domestic demand. Net exports contributed 1 percentage point per year to economic growth.

The growing export orientation of the German economy is also reflected in the demand structure. The share of exports in nominal GDP rose by about 18 percentage points between 1999 and 2007, that of imports by 11½ percentage points. This development reflects Germany's increasing integration into the world economy. In Italy and Portugal the share of exports in GDP increased by only 4½ percentage points, in Greece it rose by 1 percentage point and in Spain it remained almost constant. In Ireland the share of foreign trade even declined significantly. Both the export ratio and the import ratio decreased by more than 6 percentage points. With foreign trade accounting for about 80 percent of GDP Ireland is still by far the most open economy in this group of countries.

Thus the build-up of the current account imbalances in the euro area was determined both by foreign trade developments and by domestic demand.

Table 1: Demand trends in the euro area

	Ireland		Greece		Spain		Italy		Portugal		Germany		Netherlands		Austria	
	1999-2007	2007-2009	1999-2007	2007-2009	1999-2007	2007-2009	1999-2007	2007-2009	1999-2007	2007-2009	1999-2007	2007-2009	1999-2007	2007-2009	1999-2007	2007-2009
	Average year-to-year percentage changes, in real terms															
Private consumption	+ 5.4	– 4.0	+ 4.0	+ 0.2	+ 3.8	– 2.7	+ 1.1	– 1.3	+ 1.8	+ 0.5	+ 0.6	+ 0.3	+ 1.2	– 0.6	+ 1.6	+ 0.6
Government consumption	+ 6.0	+ 0.1	+ 4.2	+ 5.0	+ 5.0	+ 4.7	+ 2.0	+ 0.7	+ 1.8	+ 2.3	+ 0.8	+ 2.5	+ 3.3	+ 2.6	+ 1.1	+ 2.2
Gross fixed capital formation	+ 5.6	–22.9	+ 5.6	–10.7	+ 5.6	–10.0	+ 2.4	– 8.2	– 0.6	– 6.0	+ 0.7	– 3.1	+ 1.1	– 4.4	+ 1.5	– 3.5
Machinery and equipment	+ 7.2	–18.4	+ 9.7	– 7.2	+ 5.1	–13.1	+ 2.2	–11.6	+ 1.2	– 4.3	+ 3.9	– 9.2	+ 1.8	– 9.3	+ 1.8	– 6.3
Construction	+ 5.6	–26.0	+ 2.8	–15.3	+ 5.8	– 8.4	+ 2.8	– 5.7	– 2.1	– 8.7	– 2.1	+ 0.9	+ 1.1	– 2.2	+ 0.6	– 2.2
Residential construction	+ 5.9	–33.8	+ 5.2	–25.5	+ 6.9	–17.7	+ 3.1	– 6.2	–	–	– 2.4	– 0.2	+ 1.6	– 6.7	– 0.8	– 4.9
Non-residential construction	+ 5.3	–15.2	– 1.7	+ 3.1	+ 4.9	+ 0.6	+ 2.5	– 5.2	–	–	– 1.9	+ 2.3	+ 0.4	+ 2.8	+ 1.6	– 0.4
Domestic demand	+ 5.6	– 9.0	+ 4.3	– 0.6	+ 4.4	– 3.3	+ 1.5	– 2.6	+ 1.2	– 0.6	+ 0.4	– 0.2	+ 1.7	– 0.7	+ 1.4	– 0.4
Exports	+ 7.5	– 1.7	+ 4.7	– 7.7	+ 5.0	– 6.4	+ 3.2	–11.8	+ 4.7	– 6.2	+ 8.1	– 6.0	+ 5.6	– 2.9	+ 7.4	– 7.7
Goods	+ 4.3	– 3.1	+ 4.3	– 4.3	+ 5.4	– 6.8	+ 3.3	–12.6	+ 4.4	– 7.5	+ 8.1	– 7.2	+ 6.4	– 3.6	+ 7.8	– 9.2
Services	+15.1	+ 0.0	+ 4.9	–10.2	+ 4.2	– 5.5	+ 3.0	– 8.5	+ 5.7	– 2.2	+ 8.2	+ 0.7	+ 3.1	+ 0.1	+ 6.3	– 3.8
Imports	+ 7.2	– 5.8	+ 4.8	– 7.2	+ 7.6	–11.7	+ 3.6	– 9.6	+ 3.2	– 3.5	+ 5.7	– 2.6	+ 5.2	– 2.7	+ 6.1	– 7.4
Goods	+ 4.7	–16.4	+ 4.9	– 8.9	+ 7.5	–12.5	+ 3.5	–10.6	+ 3.3	– 3.8	+ 6.3	– 2.7	+ 6.2	– 3.7	+ 6.5	– 7.9
Services	+11.0	+ 3.0	+ 4.2	– 0.6	+ 8.1	– 8.4	+ 3.8	– 5.4	+ 2.5	– 1.4	+ 3.3	– 1.9	+ 1.9	+ 0.8	+ 4.5	– 5.4
Gross domestic product	+ 6.0	– 5.1	+ 4.2	+ 0.0	+ 3.6	– 1.4	+ 1.5	– 3.2	+ 1.4	– 1.3	+ 1.5	– 1.9	+ 2.2	– 1.0	+ 2.3	– 0.8

Source: European Commission, WIFO calculations.

Both in Ireland and in Spain the strong increase of domestic demand is linked to a vigorous expansion of construction investment. In both countries it rose by about 6 percent annually on average during 1999 to 2007 and thus contributed about 1 percentage point p.a. to overall growth. During this period its share in GDP increased by 5½ percentage points. In all other countries which are analysed here construction investment declined relative to GDP or increased only slightly.

In the deficit countries private consumption expenditure contributed predominantly to economic growth (Greece, Ireland and Spain about 2 to 3 percentage points, Italy and Portugal about 1 percentage point). In Germany private consumption remained sluggish. With the exception of Greece, investment into machinery and equipment hardly contributed to growth both in the surplus countries and in the deficit countries.

The diverging dynamics of the demand components are reflected in the production side of GDP (Table 2). In Germany – as in Greece and Ireland – value added in industry surged. In Greece and, above all, in Ireland and in Spain the construction sector also expanded strongly, whereas it shrank in Germany. Accordingly the share of industry in German value added increased, whereas the construction sector lost importance. In Spain and Ireland, by contrast, the share of construction rose. However, the largest contribution to growth came from the service sector, which accounted for a rising share of value added in the deficit countries. In Greece trade,

hotels and restaurants and transport accounted for more than half of overall economic growth. They were the only sectors exhibiting a rising share in value added.

Table 2: Trends of gross value added in the euro area

	Ireland		Greece		Spain		Italy		Portugal		Germany		Netherlands		Austria	
	1999-2007	2007-2009	1999-2007	2007-2009	1999-2007	2007-2009	1999-2007	2007-2009	1999-2007	2007-2009	1999-2007	2007-2009	1999-2007	2007-2009	1999-2007	2007-2009
	Average year-to-year percentage changes, in real terms															
Agriculture and forestry	− 2.4	+ 1.2	− 3.4	+ 1.9	+ 0.2	− 1.6	− 0.8	− 1.1	− 1.2	+ 2.1	− 0.2	+ 2.1	+ 0.9	+ 1.7	− 0.4	+ 1.1
Industry	+ 6.4	− 0.2	+ 3.5	− 2.0	+ 1.7	− 7.8	+ 0.7	− 9.5	+ 1.1	− 4.5	+ 2.4	− 8.9	+ 1.8	− 3.2	+ 3.8	− 3.1
Manufacturing	+ 5.2	–	+ 3.5	− 1.0	+ 1.5	–	+ 0.7	−10.5	+ 0.7	–	+ 2.7	− 9.4	+ 2.2	− 4.8	+ 4.0	− 4.2
Construction	+ 5.6	−22.0	+ 4.8	−21.3	+ 5.3	− 3.9	+ 2.6	− 4.6	− 1.3	− 7.7	− 3.3	+ 1.2	+ 0.5	+ 0.6	+ 1.3	− 1.8
Services	+ 5.9	− 2.4	+ 4.9	+ 2.9	+ 4.0	+ 0.6	+ 1.7	− 1.5	+ 2.1	+ 0.8	+ 1.8	− 0.0	+ 2.5	− 0.2	+ 2.2	− 0.0
All activities	+ 5.9	− 3.5	+ 4.2	+ 0.9	+ 3.6	− 1.4	+ 1.5	− 3.3	+ 1.6	− 0.7	+ 1.7	− 2.2	+ 2.2	− 0.7	+ 2.5	− 0.8
Gross domestic product	+ 6.0	− 5.1	+ 4.2	+ 0.0	+ 3.6	− 1.4	+ 1.5	− 3.2	+ 1.4	− 1.3	+ 1.5	− 1.9	+ 2.2	− 1.0	+ 2.3	− 0.8

Source: European Commission, WIFO calculations.

Competitiveness and real interest rates determine differing demand trends

The divergences of the current account balances are thus the consequence of trends in price competitiveness[3] on the one hand and the conditions for domestic demand – particularly the real interest rate – on the other hand.

Differences in competitiveness trends can be illustrated based on the real effective exchange rate. In a common currency area real appreciations or devaluations can occur only via shifts in relative prices. As the prices of tradable goods are identical across countries and do not follow the fluctuations of consumer prices, the real effective exchange rate is often calculated on the basis of unit labour costs. At given prices an increase of unit labour costs diminishes the profit margin and consequently the potential of companies to strengthen their competitive position by investing.

During 1999-2007 the real effective exchange rate based on unit labour costs shows a substantial worsening of competitiveness in Greece, Ireland, Italy, Portugal and Spain (Figure 2). In Ireland the real exchange rate increased by 24 percent, in Spain and Italy by more than 15 percent and in Greece and Portugal by about 10 percent. Germany improved its competitiveness vis-à-vis its trade partners: despite a simultaneous appreciation of the euro vis-à-vis the US dollar by almost 30 percent the real effective exchange rate declined by 7 percent.

This trend corresponds to the growth of exports and imports in the individual countries, which is discussed above. A real appreciation diminishes competitiveness and thus dampens exports. At the same time imports become cheaper, so that losses of competiveness contribute to an increased import growth. The current account balance thus worsens. The evolution of market shares confirms this picture. During the reference period Germany's share in nominal OECD exports rose accordingly. However, Spain and Italy gained market shares, too; in Greece and Portugal the shares remained largely constant. Only Ireland lost shares in export markets. However, this was partly a correction of the strong increases of market shares in the 1990s.

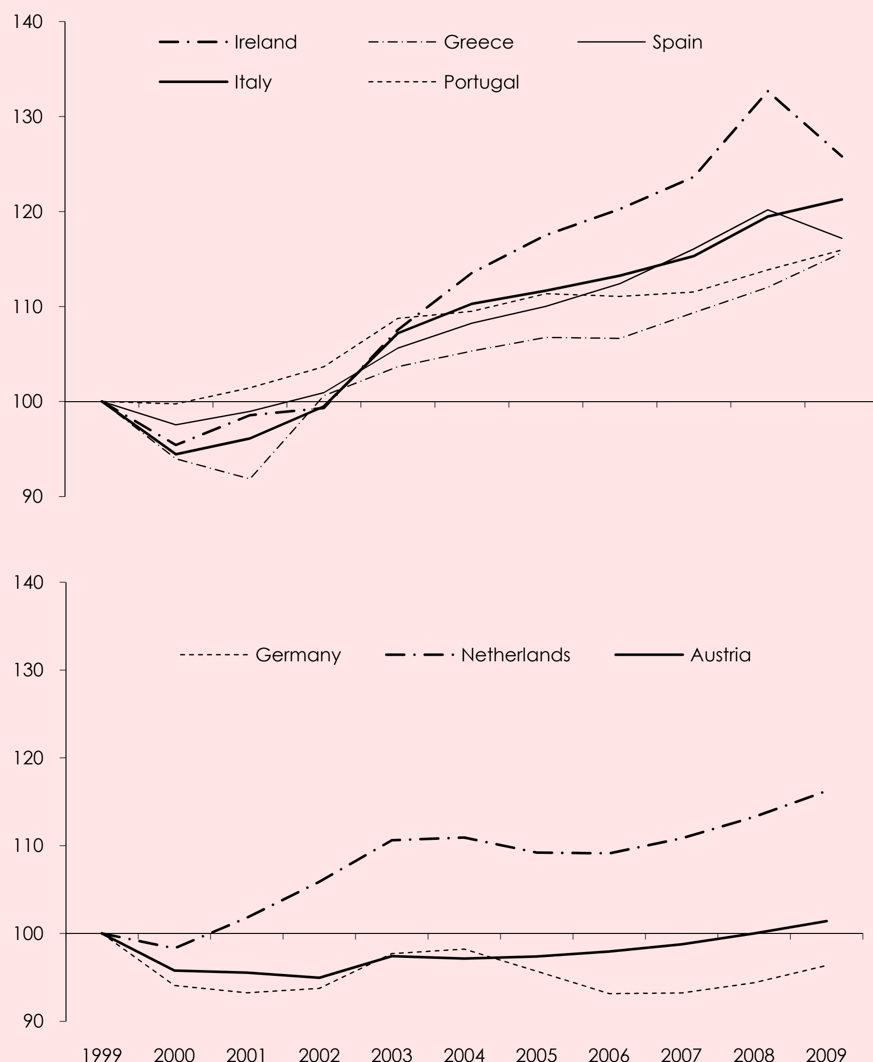
The real effective exchange rate reflects the differing trends of prices and unit labour costs in the euro area. The sharpest increase of harmonised consumer prices occurred in Ireland at an average annual rate of 3.5 percent in the period 1999-2007. In Greece, Spain and Portugal, too, the HICP increased by more than 3 percent per year, in Italy by about 2.5 percent. In Germany, by contrast, inflation was relatively low at 1.7 percent p.a. Similarly, the growth of nominal unit labour costs (Figure 3) in all deficit countries exceeded that of Germany[4] by about 25 percentage points between 1999 and 2007.

[3] In this article, the term "competitiveness" always refers to price or cost competitiveness. A more comprehensive definition of the concept of competitiveness is provided by *Aiginger* (2006).

[4] To a certain extent higher inflation rates are likely in countries, whose economy is catching up (Balassa-Samuelson effect). According to a study by the *European Commission* (2009), however, the Balassa-Samuelson effect does not contribute significantly to the higher inflation in the deficit countries.

Figure 2: Real effective exchange rates

1999 = 100

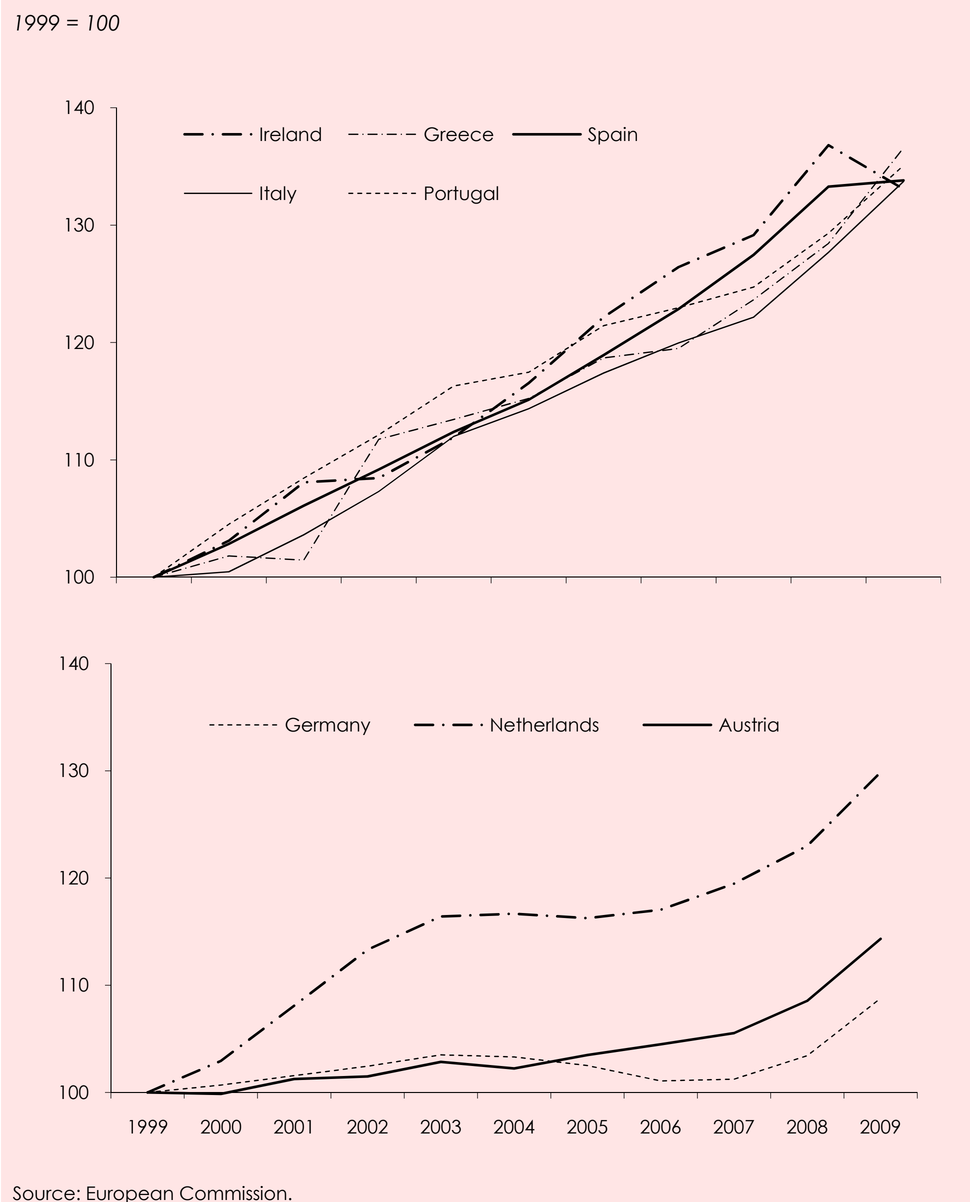


Source: European Commission, deflated using the relative unit labour costs vis-à-vis 24 trading partners.

However, differences between inflation rates do not only affect a country's competitiveness. In the monetary union the European Central Bank is responsible for monetary policy and thus determines the nominal interest rate. The real interest rate, which is relevant for the investment decisions of companies and the consumption decisions of private households, results from the difference between the nominal interest rate and the inflation rate. If the inflation rate is high, then real interest rates are low and vice versa. In all deficit countries the average real long-term interest rate was significantly lower in 1999-2007 than in the surplus countries. Depending on the country the real interest rate differential with Germany ranged between 1 and 2 percentage points. Therefore credit-financed investment and private consumption expanded vigorously in the deficit countries. At the same time the savings ratio declined by several percentage points in all countries. In Ireland and Spain this mainly affected the construction sector (see above). In these countries, real estate prices surged by between 7½ percent and 9 percent per year during the period from 1999 to 2007. The increase was not quite as pronounced in the other deficit countries. In Germany, by contrast, the high real interest rate dampened domestic demand. As a consequence the savings ratio rose markedly and house prices declined (Table 3).

Figure 3: Unit labour costs in the total economy

1999 = 100



Source: European Commission.

Table 3: House prices, saving ratio and interest rates

	Real house prices	Saving ratio	Real long-term interest rate
	Year-to-year percentage changes 1999-2007		Ø 2000-2007
	Percent	Percentage points	Percent
Ireland	+ 7.3	− 0.5[1]	0.4
Greece	+ 5.5	− 1.7	1.4
Spain	+ 9.1	− 0.4	1.2
Italy	+ 5.6	− 0.2	2.2
Portugal	+ 1.0	− 0.6	1.4
Germany	− 2.5	+ 0.2	2.7
Netherlands	+ 4.4	− 0.1	2.2
Austria	+ 0.2	+ 0.2	2.4

Source: BIS, European Commission, OECD, WIFO calculations. – [1] 2002-2007.

Causes of the inflation divergences

Price trends are essentially influenced by the trend of unit labour costs. The latter again are determined by the relationship between changes in productivity and nominal wage growth. Greece and Ireland experienced the highest average productivity increase during 1999-2007 (more than 2.5 percent p.a.; see Table 4). In the other deficit countries (Italy, Portugal, Spain), by contrast, the productivity of the to-

tal economy rose by less than 1 percent p.a. In Germany, as a surplus country, it ranged between these two rates (at slightly above 1 percent p.a.).

In all deficit countries nominal wages per employee increased much more sharply than productivity. In Greece and Ireland the wage increases were by far the highest (almost 6 percent p.a.). In Italy, Portugal and Spain they amounted to an average of about 3 percent. Thus, nominal unit labour costs increased by about 3 percent p.a. in all countries. As wage growth was weaker in Germany (about 1 percent p.a.), nominal unit labour costs did not increase during the reference period.

Parallel to this development consumer prices (HICP) in the deficit countries surged, too. However, the HICP rose even more sharply than nominal unit labour costs. Real unit labour costs, which are by definition closely linked to the wage ratio and are thus a measure of the share of wages in value added, declined slightly. Only Italy experienced an insignificant increase. Despite the strong nominal wage growth the wage ratio diminished marginally in the deficit countries. This might be due to the fact that part of euro area inflation resulted from import price hikes – particularly of energy and commodities.

Table 4: Productivity, wages and prices in the euro area

	Productivity[1]		Wages per employee[2] Nominal		Deflator of private consumption		Wages per employee[2] Real		Unit labour costs Nominal		Unit labour costs Real	
	1999-2007	2007-2009	1999-2007	2007-2009	1999-2007	2007-2009	1999-2007	2007-2009	1999-2007	2007-2009	1999-2007	2007-2009
	Average year-to-year percentage changes											
Ireland	+ 2.5	– 0.4	+ 5.9	+ 1.1	+ 3.5	– 0.2	+ 2.2	+ 1.3	+ 3.3	+ 1.5	– 0.3	+ 1.7
Greece	+ 2.9	+ 0.5	+ 5.6	+ 5.7	+ 3.6	+ 2.7	+ 2.0	+ 2.9	+ 2.7	+ 5.1	– 0.9	+ 2.4
Spain	+ 0.1	+ 2.4	+ 3.2	+ 4.8	+ 3.4	+ 1.5	– 0.2	+ 3.2	+ 3.1	+ 2.3	– 0.3	+ 0.8
Italy	+ 0.0	– 2.5	+ 2.5	+ 1.8	+ 2.7	+ 1.5	– 0.1	+ 0.3	+ 2.5	+ 4.4	– 0.2	+ 2.9
Portugal	+ 0.9	– 0.3	+ 3.8	+ 3.8	+ 3.0	+ 0.4	+ 0.8	+ 3.4	+ 2.8	+ 4.1	– 0.2	+ 3.7
Germany	+ 1.0	– 2.6	+ 1.1	+ 1.0	+ 1.4	+ 1.1	– 0.3	– 0.1	+ 0.0	+ 3.7	– 1.3	+ 2.5
Netherlands	+ 1.2	– 1.3	+ 3.4	+ 2.8	+ 2.5	+ 0.8	+ 0.8	+ 2.0	+ 2.2	+ 4.2	– 0.4	+ 3.4
Austria	+ 1.4	– 1.2	+ 2.1	+ 2.8	+ 2.0	+ 1.9	+ 0.1	+ 0.9	+ 0.8	+ 4.1	– 1.2	+ 2.2

Source: European Commission, WIFO calculations. – [1] Real GDP per employment. – [2] Compensation of employees per job (according to National Accounts).

In Germany the inflation rate also exceeded the growth rate of nominal unit labour costs. However, the difference between the rates was substantially larger than in the deficit countries, so that real unit labour costs declined by more than 1 percent. This could be due to the fact that companies largely set prices in accordance with the price level of their competitors, e.g., the average price level of the euro area rather than unit labour costs. Such a "pricing-to-market" can help to increase the share of income from profit and wealth.

Despite differing productivity trends the cause of the divergence in inflation and competitiveness can be found in the differing wage policies in the countries. Comparing the wage trends with a wage rule, according to which wages should be equal to the total of the ECB's inflation target (2 percent) and the average productivity growth of the total economy, it becomes obvious that wage trends were exaggerated in the deficit countries. In Germany, by contrast, wage growth remained below this benchmark.

Both competitiveness and real interest rates are critically determined by wage and price trends. In a monetary union, diverging wage and price trends cause shifts in competitiveness. On the other hand they give rise to divergences of real interest rates and thus affect investment and consumption demand. Both factors induce diverging trends of current account balances.

High inflation disparities between the countries of the euro area should, in theory, result in diverging trends of exports and imports via the "competitiveness channel" and in turn increase unemployment and thus dampen wage and price increases in the deficit countries. However, low real interest rates boost investment and consumption demand in these countries. The effect of this "real interest rate channel"

offsets the effect of the "competitiveness channel" so that substantial imbalances can emerge for an extended period. In the design of the economic and monetary union the relative importance of the "real interest rate channel" compared to that of the "competitiveness channel" was underestimated (*European Commission,* 2006). The effect of the "real interest rate channel" could be enhanced further by that of an "income channel". In Germany real unit labour costs decreased sharply which dampened private consumption expenditures. However, real unit labour costs also diminished in the deficit countries, albeit to a lesser extent.

Due to the direction of impact of these "channels", divergences in competitiveness emerge in the long run. Strong domestic demand and high growth result in dynamic wage increases owing to a favourable labour market situation. Conversely, weak economic growth slows wage increases in the surplus countries. This leads to a self-enhancing dynamic of domestic demand and wage growth combined with the build-up of divergences in competitiveness and high current account deficits. As long as the latter can be financed and domestic demand is strong, this process continues and is accompanied by strong growth and low unemployment. However, as soon as financing costs increase, because debts become too high or domestic demand is bolstered by a house price boom, which will unavoidably collapse, these countries face massive problems.

In the case of the Netherlands and Austria, which both exhibit current account surpluses, the mechanisms described above apply only to a limited extent. In these countries, too, the current account improved markedly, but the surplus is much smaller than in Germany. In Austria the surplus results primarily from the services balance, and tourism in particular. Admittedly the trade balance improved. However, it was nearly balanced in 2007. In the Netherlands unit labour costs rose much faster than in Germany.

Reduction of imbalances due to the crisis

The current financial and economic crisis has partly diminished the current account imbalances in the euro area. From 2007 until 2009 Germany's current account surplus declined by one third. The deficit of Greece was reduced by one fourth, the deficits of Spain and Ireland each fell by almost half. In Italy and Portugal, by contrast, the current account deficits even widened during the crisis (Figure 1).

Gross domestic product and investment decreased in all countries during the crisis (Table 1). Gross fixed capital formation fell dramatically in Ireland and Spain, where the house price booms came to an end, as well as in Greece. In Ireland, Spain and Italy consumer spending also declined sharply, whereas it still rose slightly in Germany, Portugal and Greece. Domestic demand diminished in all deficit and surplus countries, especially in Ireland (–9.0 percent p.a.), Spain (–3.3 percent p.a.) and Italy (–2.6 percent p.a.).

Exports also collapsed. Between 2007 and 2009 they fell by 6 percent to 8 percent per year. Here, Ireland, with its relatively moderate decline, and Italy, whose exports dropped nearly twice as sharply, were the main exceptions. Due to the high degree of openness of the economy the export losses contributed more to the fall of GDP in Germany than elsewhere. As a consequence of the recession imports also declined substantially in all countries, in Germany, however, the decrease of imports was relatively small. Therefore, especially in Germany, but also in Italy and in Portugal net exports contributed to the decline of GDP.

The trend of competitiveness hardly changed in the wake of the crisis. Unit labour costs increased in all countries analysed during 2007-2009. In Germany they increased much faster than on average during 1999-2007, but not due to an accelerated wage growth, but mostly because of a cyclical decline in productivity. The decrease of employment turned out much smaller than the decline in production – mainly because of short-time working schemes – so that labour productivity fell considerably. For the deficit countries the picture is heterogeneous: Ireland was the only country where nominal wages per employee rose much less during the crisis than before. Therefore unit labour costs increased only half as fast as on average during 1999-2007. In all other deficit countries wage trends remained unchanged. However,

in Spain and Greece productivity of the total economy increased during the crisis. Here the decline in employment exceeded the fall in production. Thus, for Spain a moderate increase of unit labour costs resulted, for Greece, Italy and Portugal, by contrast, there was an accelerated increase. In Ireland and Spain the relative losses of competitiveness vis-à-vis Germany diminished slightly, in Greece, Italy and Portugal the gap widened further.

The partial reduction of the current account imbalances can thus be attributed mainly to the drop in German exports and the strong decline of domestic demand in Ireland, Italy and Spain. With the current strong recovery of world trade and economic activity in the USA and the emerging economies, Germany's current account surplus in particular could widen again. The divergences in competitiveness of the euro area countries persist. With the exception of Ireland and Spain a change of wage trends is unlikely both in the deficit countries and in the surplus countries. When economic activity recovers, we can thus expect the divergences in competitiveness to widen further in the euro area.

Crisis not yet overcome in the deficit countries

The bursting of the house price bubbles in Ireland and Spain as well as the global economic slump place a heavy burden on the deficit countries. Private consumption and investment have declined sharply, unemployment has increased markedly and the situation of public finances has worsened massively. Competitiveness had declined considerably in the years before and has not improved during the crisis. Therefore domestic demand cannot be expected to provide any strong stimulus, nor will these economies benefit excessively from the global recovery via increased exports. In addition, the countries are facing ambitious austerity programmes to return to sound public finances.

Greece and Ireland have not yet overcome the recession. In both countries total output has declined since the fourth quarter of 2008: in the first quarter of 2010 Spain reported a slight increase of GDP compared to the previous quarter for the first time since the second quarter of 2008. In Italy and Portugal no sustained cyclical recovery can be observed either. The number of unemployed persons has risen sharply in all countries. In Spain the unemployment rate already approached 20 percent in May, 13 percent in Ireland and about 10 percent in the other deficit countries. A reversal of the trend cannot be observed in any of the countries. Most recently unemployment has increased further.

For price trends the picture is mixed. Ireland has been in deflation since the beginning of 2009. In Spain and Portugal price trends stabilised after a decline last year. However – as in Italy – the inflation rate persistently remains below the ECB's target of 2 percent. Only in Greece prices continue to rise unabatedly. In May the inflation rate exceeded 5 percent. This is partly due to the increase of indirect taxes and the substantial devaluation of the euro vis-à-vis the US dollar and other currencies and the ensuing increase in import prices. Currently core inflation (excluding energy and unprocessed food) in the euro area is only half as high as the increase of the HICP. Therefore the danger of a deflation could be back on the agenda if the exchange rate stabilises.

Rebalancing of competitiveness depends on relative unit labour costs

So far the divergences in competitiveness in the euro area have hardly been reduced. In order to offset at least half of the loss in competitiveness vis-à-vis Germany that has occurred since 1999 within five years, the change of unit labour costs in Greece, Ireland, Italy, Portugal and Spain would have to be 2.5 to 3 percentage points below that of Germany. It would thus have to amount to –2 percent p.a. over the whole period. As a decrease of unit labour costs would immediately be reflected in prices, this would cause deflation in the deficit countries. However, if we assume an annual inflation rate of 0.5 percent in the deficit countries, thus avoiding a deflation, the adjustment of competitiveness would be impossible while unit labour cost trends remain unchanged in Germany.

An increase of productivity in the deficit countries would mitigate pressure to adjust nominal wages, because then unit labour costs could fall even in the case of wage

increases. This would facilitate an adjustment process with less strain. However, in view of the current cyclical weakness no strong increase in productivity can be expected in the deficit countries.

Two scenarios for a reduction of the imbalances

In principle two scenarios seem plausible for the future development of the euro area economies and the respective reduction of the current account imbalances. In what follows they are deliberately presented in a pointed manner to illustrate the differences in policy measures and their effects.

Scenario 1: the deficit countries bear the burden of adjustment

In the first scenario the deficit countries bear the burden of adjustment – allegedly – alone. The surplus countries do not change their policies. This scenario corresponds to the wide-spread perception that the deficit countries' problems are exclusively their own fault and that, consequently, they have to solve them alone. A rebalancing of competitiveness in the euro area can only occur if wage and price increases in the deficit countries remain below those of the surplus countries. In view of the very low growth rates in Germany wages and prices would thus have to fall in the deficit countries. However, the adjustment would take years even in case of a deflation of 2 percent per year.

In such a scenario domestic demand in the deficit countries remains weak for several years and unemployment rises. This trend is enhanced by the already announced measures to consolidate the budget. Although this facilitates the required decline in wages, it is accompanied by high social costs and would mean a severe setback to the catching-up process in these economies. Economic activity will not recover and growth will not be resumed until the loss of competitiveness is partly offset and exports will expand again.

During this period the weak growth of the deficit countries will also dampen exports of the surplus countries. The five deficit countries account for roughly one third of the euro area's GDP, Germany accounts for one fourth. In 2008, about 13 percent of German exports were shipped to the five deficit countries. About half were sent to the euro area. The USA, Japan and the BRIC countries (Brazil, Russia, India and China) in total account for roughly 16 percent of German exports. The stimulus for exports caused by the vigorous expansion of the global economy is partly lost due to the economic weakness in the euro area. However, the devaluation of the euro in the wake of the debt crisis improves price competitiveness vis-à-vis the economies outside the euro area and could thus offset the dampening effects. Overall economic growth would be significantly lower in the euro area than in other countries in the world. Following Germany's example the deficit countries could try to expand exports to traditional trade partners outside the euro area (e.g., Latin America in the case of Spain, Turkey in the case of Greece). However, this possibility is limited, because imbalances also have to be reduced on a global scale. The USA will try to balance its current account and the Asian emerging economies will hold on to their export-oriented strategy. For the euro area as a whole an improvement is at best possible vis-à-vis China and the commodity-exporting countries.

The dampened trend of the surplus countries' exports and the decline of the deficit countries' imports gradually effect a reduction of the current account imbalances while overall economic performance remains weak. If wages and prices fall drastically, a deflation cannot be ruled out for the euro area. The repercussions of the economic slump and the fiscal austerity measures on investment and spending for research and education depress the medium-term growth perspectives for the euro area. The envisaged consolidation and the reduction of government debt, too, are likely to be difficult in this environment. As it will be especially the countries with large losses in competitiveness and high budget deficits that will increasingly cut future-oriented spending, the income levels of the euro area countries are in danger of drifting further apart in the medium term.

Scenario 2: domestic demand of the surplus countries increases

In the second scenario the surplus countries boost their domestic demand, e.g., by reducing the fiscal burden on low incomes via lowering taxes and social contributions or via expanding public services, by raising spending on growth-friendly categories such as research and education or by supporting an expansion of business

investment via favourable economic conditions. In addition, wages and prices rise faster than before during a limited period. This enables the deficit countries to adjust their competitiveness faster and avoids deflationary tendencies in the euro area. These measures spur domestic demand and thus raise the surplus countries' imports.

The exports of the deficit countries grow more vigorously than in scenario 1 and thus stimulate the economy much faster. As a consequence labour market trends also turn out more favourable. Private consumption expenditure and investment are increased. The surplus countries' exports, in turn, benefit from the more dynamic expansion in the deficit countries. The rebalancing of the current accounts is achieved at higher growth rates. This reduces the pressure on wages and prices to adjust. Social costs and political opposition can be avoided.

In the transition phase until competitiveness is rebalanced – which happens faster in this scenario – inflation rates of the surplus countries are above the ECB's inflation target. On the other hand the deflationary tendencies in the deficit countries persist. Thus, the average euro area inflation rate could still be 2 percent and the ECB would have no reason to raise interest rates. The combination of a low nominal ECB rate and a higher inflation rate lowers real interest rates in the surplus countries, so that productive investment is promoted and growth also accelerates in the medium term. Faster growth facilitates the consolidation of government budgets without limiting spending on research and education, which are vital for the future development.

Policy makers could support this by improving fiscal coordination at the European level. Fiscal consolidation paths of individual countries could be allowed to differ to a greater extent than previously. The surplus countries could balance their budgets over an extended period and postpone key consolidation measures. By contrast, a coordination of wage policies is more difficult to implement from a political perspective. Wage increases are not simply decreed, but are the result of collective bargaining. However, an enhanced consideration of wage policies in the European Commission's economic policy recommendations for individual countries might affect the result of wage bargaining. In addition, there are processes at the European level, such as the "Macroeconomic Dialogue", where the social partners are involved. Strengthening these processes might equally contribute to an improved coordination of wage trends across the European Union. Within the euro area Germany as the largest surplus country determines the room for manoeuvre of wage policy. For small open economies such as the Netherlands and Austria a more expansive wage policy only makes sense in the framework of a Europe-wide coordination process, because they are more dependent on foreign trade than a substantially larger country like Germany.

The faster productivity increases in the deficit countries, the faster the rebalancing of competitiveness can take place. Therefore a focus of the EU's cohesion policy on rebalancing productivity and competitiveness could also help to even out the disparities in the euro area.

Summary and conclusions

The emergence of current account imbalances in the euro area is due to divergent wage and price trends in the individual countries. In a common currency area high wage and price increases as in Greece, Ireland, Italy, Portugal and Spain boost domestic demand via low real interest rates. For some time this helps to sustain high growth and low unemployment rates. However, these developments are accompanied by an increasing loss of competitiveness and rising current account deficits. On the other hand, low wage increases as in Germany go hand in hand with a permanent increase of competitiveness and an improvement of the current account. These two trends are two sides of the same coin.

The collapse of the house price booms in Ireland and Spain and the global financial and economic crisis cause serious problems for the deficit countries. In the near future private consumption and investment expenditures cannot be expected to stimulate the economy. Budget deficits widened massively during the crisis and now government budgets have to be consolidated. The developments described above

have substantially impaired competitiveness. Exports are therefore unlikely to increase in the short term. The surplus countries, too, are facing a gloomy growth outlook: domestic demand can hardly grow dynamically given an unchanged wage policy and the envisaged austerity measures. Exports to the deficit countries will hardly expand either, given their weak demand. All in all, the euro area is therefore threatened by a weak growth trend over several years combined with the risk of deflation.

However, the rebalancing of competitiveness could also be achieved in an environment of stronger growth. For this purpose Germany, as a surplus country, would have to boost domestic demand and, respectively, allow higher wage and price increases. In view of the current political debate this perspective seems hardly realistic. A recovery of domestic demand in the surplus countries does not exonerate the deficit country from the necessity to increasingly produce high-quality goods and services for the world market. However, it eases the adjustment process within the euro area and thus strengthens cohesion in the monetary union.

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Imbalances in the Euro Area – Summary

Prior to the economic crisis, distinctive macroeconomic imbalances emerged in the euro area. Greece, Ireland, Italy, Portugal and Spain experienced a considerable deterioration of their international competitiveness and incurred high current account deficits. By contrast, Germany, among other countries, improved its competitiveness and achieved a large current account surplus. These imbalances continue to exist and are likely to threaten the economic recovery, the long-term growth perspectives and the cohesion of the EMU.

High wage and price inflation led to sluggish export growth in the deficit countries. Moreover, high inflation rates reduced real interest rates and consequently stimulated domestic demand. In Ireland and Spain, in particular, they facilitated investments into housing, which led to a boom in the construction sector. Both effects impaired their current account balances. In Germany, on the other hand, low wage and price inflation boosted exports and improved the current account.

The bust of the housing bubbles in Ireland and Spain as well as the global economic crisis brought the deficit countries into a difficult economic situation which is likely to continue. Domestic demand is weak, international competitiveness is low, and the fiscal deficit is high. All countries are already implementing measures to consolidate their budgets. Under these conditions, the deficit countries will suffer from persistent economic stagnation. This in turn leads to weaker imports in the surplus countries and decelerates their economic recovery. Hence, in the years to come economic growth in the euro area will be substantially below that of the rest of the world.

Nevertheless, rebalancing current accounts and international competitiveness would also be feasible at higher economic growth rates. Germany as the largest surplus country needs to contribute by strengthening domestic demand and permitting stronger increases of wages and prices. This, however, does not absolve the deficit countries from improving their industrial base and producing more high-quality goods and services for the global market. Nevertheless, it would ease the adjustment process and strengthen the cohesion in the euro area.

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