

# QUARTERLY REPORT ON THE EURO AREA

**Volume 3 N° 4 (2004)**

**Highlights in this issue:**

- Recent economic developments and short-term prospects
- Price and cost competitiveness in the euro area
- Recent developments in inflation
- Inflation differences between Member States: an update
- Focus: Foreign direct investment in EMU

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## EDITORIAL

Since I presented the Commission's autumn economic forecasts about two months ago, the economic context has evolved considerably. Oil prices reached all-time highs in October before easing again significantly, while the euro has continued to appreciate against the dollar. Disappointing third-quarter growth in France and Germany, which account for half of the euro-area economy, has attracted considerable attention. In addition, business confidence has recently shown some signs of softening.

Those seeking reassurance that the upturn in the euro area is now firmly established will be disappointed by some of the most recent developments. Nevertheless, while the easing of growth momentum in the second half of 2004 suggests that downside risks have not abated, the autumn economic forecasts' basic scenario of growth in the euro area of about 2% this year and next still stands, since it already largely took account of most of the negative forces that have recently been at play. Moreover, some developments were compensated by others. For example, although the euro has appreciated above the technical assumptions on which our growth projections were based, oil prices are now actually significantly below the level assumed for 2005.

While third quarter growth developments may appear worrisome, they should be also put into proper perspective. Firstly, growth was only marginally lower than projected in our autumn forecasts. Secondly, the slowdown comes against the background of more favourable than expected economic developments in the first half of the year. Thirdly, economic activity did not decelerate everywhere in the euro area; indeed it even strengthened in several countries. Finally, changes in third quarter growth were dominated by changes in the two most volatile components of demand – trade and

inventories – and should therefore be interpreted with particular caution.

The key to a sustained recovery in the euro area continues to be a recovery in domestic demand, and while domestic spending has so far failed to shift up a gear, it did register a further, albeit slight, acceleration in the third quarter.

Meanwhile, the appreciation of the euro against the dollar, striking though it may be, should not be taken at face value. What we have seen over the last 18 months in the exchange market is the result of the general weakness of the dollar, rather than any particular strength of the euro. This is different from the period between early 2002 and mid-2003 where the strengthening of the euro not only reflected the weakening of the dollar but also its own broad recovery from the exceptionally low levels that it had reached against all major currencies. This means that, although euro-area exporters have had to cope with a significant deterioration of competitiveness over the last three years, it is mostly the gains registered in the early years of EMU that have been lost. Measured on the basis of unit labour costs, the euro-area's real effective exchange rate is now just above its long-term average. In other words, the euro is strong but its level is not substantially out of line with fundamentals.

The euro appreciation has played a part in cushioning the impact of rising (dollar-denominated) oil prices. However, they have still risen by about 25% in euro terms since the start of the year, and the associated price pressures in the energy sector have kept headline inflation above 2% since the summer. The broader dampening effect of the euro appreciation on consumer price inflation is likely to be felt more strongly in 2005. Thus, although energy-related inflationary pressures could keep HICP above 2.0% in the first few months of 2005,

the strong euro and moderate labour cost growth should bring inflation below 2.0% again in the second quarter.

Moving beyond the immediate economic context, the focus section of this report looks at recent trends in foreign direct investment (FDI) and the potential impact of such flows on the performance of the euro-area economy. Over the last 10 years, FDI flows have been on an upward trend, particularly between euro-area countries, where the increase has been significant. This suggests a distinct EMU effect on top of the broader global trend, as companies have sought to take advantage of the increased integration of the euro-area economy to improve resource allocation and productivity.

FDI flows into the euro area can bring benefits in the form of increased investment, improved efficiency and technological spillovers into the wider economy. FDI flows abroad provide the opportunity for euro-area companies to access foreign markets and for euro-area consumers to ultimately benefit from cheaper goods. Moreover, there is no evidence that such flows are at the expense of domestic investment. However, in order

to fully capture the benefits of FDI, product market competition must be strong enough to ensure that cost savings are passed on to consumers, while labour market policies help workers move rapidly into new jobs.

As a final point I would draw your attention to the fact that the recent economic developments mentioned above yet again underline the need for the euro area to strengthen its internal growth forces. The report by the High Level Group led by Wim Kok has made a valuable analysis of the situation and suggested ways to reinvigorate the Lisbon Strategy in order to achieve more growth and employment. It must now be followed up by in-depth discussions amongst all the stakeholders with a view to building a broader, deeper consensus on the Lisbon Strategy itself and the practical measures to implement it. The Commission will present its own views on how to invigorate the Lisbon Strategy early next year ahead of the Spring European Council.

Joaquín ALMUNIA

MEMBER OF THE EUROPEAN  
COMMISSION



## I. Economic situation in the euro area

Recent developments in economic activity in the euro area have been somewhat disappointing. GDP growth came in a tenth of percentage point slower than expected in the third quarter with a sharp deterioration of net trade offsetting the fastest inventory build-up in the past 10 years. In addition, the latest short-term indicators have been mixed: while business confidence has weakened, some hard data were better than expected in October. Due to a maturing trade cycle and competitive pressures from the appreciation of the euro, the trade engine is losing some momentum. After strong gains in the early years of EMU, the competitiveness of the euro area has deteriorated over the past three years and the real exchange rate is now somewhat above its long-term average. In the meantime, domestic demand excluding inventories has so far failed to shift up a gear, registering only a slight acceleration in the euro area in the third quarter. However, while private consumption remains sluggish, there may be early signs of a pick-up of investment. Overall, recent developments suggest that risks to the short-term growth outlook have not abated, particularly since sharp and disorderly exchange rate adjustments may entail export losses. In contrast, recent news on inflation is more encouraging. Despite high energy prices, inflation pressures remain relatively muted in the euro area thanks to the strong euro and more rapid gains in labour productivity. In addition, inflation differences between Member States, which had widened significantly in the first years of EMU, have narrowed substantially over the past two years.

### 1. Recent economic developments and short-term prospects<sup>1</sup>

#### A more gradual cyclical upswing influenced by special factors

The preliminary national account estimates for the third quarter indicate a deceleration in the pace of expansion of economic activity in the euro area. After having surprised on the upside in the first quarter of 2004 and remaining around potential in the second quarter, quarter-on-quarter GDP growth eased from 0.5% in the

second quarter to 0.3% in the third. This is a tenth of a percentage point slower than projected in the Commission's autumn forecasts. The recovery, which started during the summer of 2003, has lost some momentum. The slowdown in GDP growth in the third quarter was due to a very sharp contraction in net trade. Domestic demand showed strong momentum but this was mostly accounted for by the biggest inventory build-up in more than 10 years. Excluding inventories, domestic spending picked up only modestly, from 0.2% in the second quarter to 0.4% in the third, with strong

Table 1: Euro-area growth components

	2003 Q4	2004 Q1	2004 Q2	2004 Q3	Carryover to 2004	Forecast (1)	
						2004 (2)	2005 (2)
<b>Percentage change on previous period, volumes</b>							
GDP	0.4	0.7	0.5	0.3	1.7	2.1	2.0
Private consumption	0.0	0.7	0.2	0.2	1.0	1.5	1.7
Government consumption	0.5	0.1	0.4	0.8	1.7	1.5	1.1
Gross fixed capital formation	1.0	-0.3	0.3	0.6	1.1	2.2	3.2
Changes in inventories (% of GDP)	0.2	0.1	0.2	0.8	0.6	0.2	0.3
Exports of goods and services	0.3	1.5	3.1	1.2	5.8	6.7	6.2
Imports of goods and services	2.0	0.5	2.8	3.2	6.3	6.2	6.5
<b>Percentage point contribution to change in GDP</b>							
Private consumption	0.0	0.4	0.1	0.1	0.6	0.9	1.0
Government consumption	0.1	0.0	0.1	0.2	0.3	0.3	0.2
Gross fixed capital formation	0.2	-0.1	0.1	0.1	0.2	0.4	0.7
Changes in inventories	0.7	-0.1	0.1	0.7	0.6	0.2	0.1
Net exports	-0.6	0.4	0.2	-0.7	0.0	0.3	0.0

(1) Annual change in %. (2) European Commission Autumn 2004 Forecasts.

Source: Commission services.

<sup>1</sup> The cut-off date for the statistics included in this issue was 13 December 2004.

Table 2: Selected euro-area and national leading indicators, 2003-2004

	SENT. IND <sup>1)</sup>	BCI <sup>2)</sup>	OECD <sup>3)</sup>	PMI <sup>4)</sup>	Reuters Ser <sup>5)</sup>	IFO <sup>6)</sup>	NBB <sup>7)</sup>	ZEW <sup>8)</sup>
Long-term average	101.0	0.00	2.83	52.29	54.79	95.6	-10.82	29.47
Trough in latest downturn	75.9	-2.68	-0.65	42.9	52.6	84.1	-26.5	-14.1
January 2004	98.5	0.15	6.27	52.5	57.3	102.8	-5.6	72.9
February 2004	98.9	0.01	6.06	52.5	56.2	100.2	-6.8	69.9
March 2004	98.9	-0.06	5.85	53.3	54.4	98.8	-4.1	57.6
April 2004	100.1	0.38	5.11	54.0	54.5	97.7	-0.5	49.7
May 2004	100.1	0.28	4.47	54.7	55.8	97.7	-2.5	46.4
June 2004	99.7	0.42	3.65	54.4	55.3	96.0	-2.0	47.4
July 2004	99.8	0.56	3.04	54.7	55.3	97.1	4.1	48.4
August 2004	100.9	0.51	2.69	53.9	54.5	95.9	-2.1	45.3
September 2004	101.0	0.49	2.62	53.1	53.3	95.7	-1.1	38.4
October 2004	101.3	0.51	2.45	52.4	53.5	95.9	-0.5	31.9
November 2004	100.8	0.39		50.4	52.6	94.3	-6.6	13.9

1) Economic sentiment indicator, DG ECFIN. 2) Business climate indicator, DG ECFIN. 3) Composite leading indicator, six monthly change. 4) Reuters PMI, manufacturing. 5) Reuters Services index. 6) Business expectations, West Germany. 7) National Bank of Belgium indicator for manufacturing. 8) Business expectations of financial market analysts, Germany.

government consumption explaining a large part of the acceleration.

Much caution should be exercised when assessing the third quarter national account data. Developments in demand were dominated by large changes in the two most volatile (and revision-prone) components of demand. In addition, the slowdown in economic activity was not broadly spread across euro-area Member States. Germany and France experienced a particularly weak growth rate of just 0.1%. Compared with the second-quarter performance, this implies a significant downward adjustment, of 0.3 and 0.5 percentage points respectively. In contrast, Italian growth remained unchanged at 0.4%, while Spanish economic activity edged upwards to 0.6%, from 0.5% in the second. Meanwhile, growth in the Netherlands moved into positive territory (+0.2%), following the marginal contraction in the previous quarter.

### Recent developments in trade are driven by both temporary and more lasting forces

Net trade subtracted 0.7 of a percentage point from overall quarter-on-quarter GDP growth in the third quarter, whereas it had contributed 0.3 of a percentage point in the previous two quarters.

The main reason for the negative contribution of net trade was the deceleration of export growth from 3.1% in the first quarter to 1.2% in the third quarter. To a large extent, this reflects the

negative impact on euro-area foreign demand stemming from the softening of global growth around the middle of 2004. It may also be the result of a technical correction following the very strong export growth in the second quarter. In addition to these temporary factors, two more medium-term forces are gradually and increasingly eroding the euro-area's export performance.

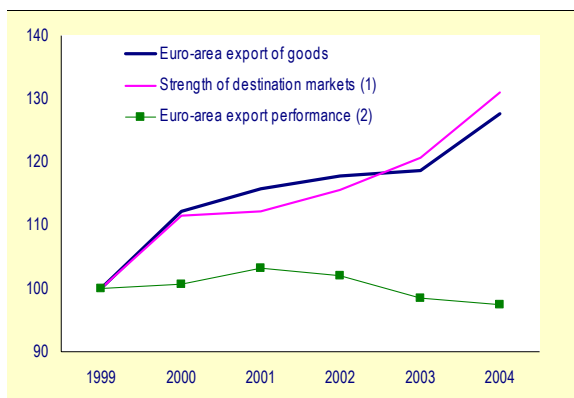
- First, there are signs that the world trade cycle, while remaining in solid expansion, has entered into a more mature phase (see the section on the global economy).
- Second, the appreciation of the euro since 2002 has weighed on external competitiveness. The short-term effects of an appreciation of the euro on the demand for exports are generally estimated to be weak in the euro area with most of the impact being felt in the medium-term. As a result, the lagged effects of the past losses in competitiveness are increasingly weighing on euro-area exports, translating into a loss in export market shares of about 5 percentage points in three years (see Graph 1).

The deterioration of net trade in the third quarter was exacerbated by strong import growth at 3.2%, quarter on quarter. Imports grew very rapidly in both the second and third quarters, a development which is surprising in light of the persistent sluggishness of domestic demand. However, as discussed hereafter, it could be a positive sign for investment insofar as



the increase in imports was partly driven by investment goods.

Graph 1: **Export market shares, euro area**  
(annual data – index 1999 = 100)



(1) Weighted sum of the imports into the various destination markets for total euro-area exports (weighted according to their share of euro-area's exports).

(2) Index for exports divided by the index of the strength of the destination markets.

*Source:* Commission services.

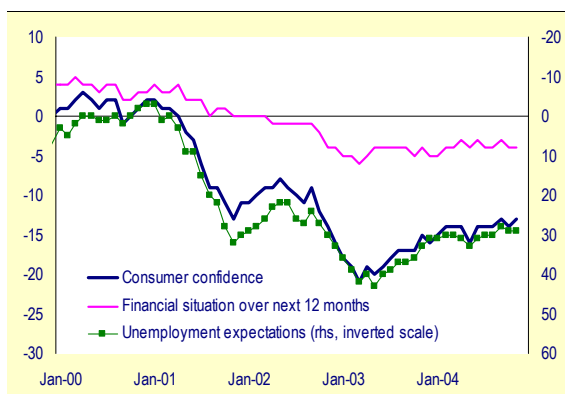
### There are only limited signs of a pick-up in domestic demand

Following a surprising growth rate of 0.6% in the first quarter of the year, euro-area consumer spending eased to 0.2% growth in the second and third quarters of 2004. Factors behind this poor performance include persistent pressures on household purchasing power from inflation above 2% and the unchanged labour market situation.

The unaltered pace of household spending growth between the second and the third quarter is likely to lead to an underestimation of the current underlying strength of private consumption in the euro area. In fact, household spending was “abnormally” strong in some Member States in the first quarter of 2004, thus implying a technical correction in later quarters. Consumption growth in the first quarter was boosted by a particularly strong rise in France and Italy, where it recorded quarter-on-quarter growth rates of 1.0% and 1.1%, respectively. Household spending was inflated by strong discounting in winter sales in a number of countries and, in the case of France, also by an unexpected drop in the personal savings rate.

However, the current short-term dynamics of private consumption remain anaemic and unsatisfactory for a sustained recovery of the euro-area economy. In a number of countries, consumers are very cautious in their spending, as the continuing lack of clear improvement in the labour market has sustained their concerns over unemployment and personal finances. Employment in the euro area has increased only very modestly since the beginning of the recovery in activity and recent indicators do not suggest a rapid pick-up in the last months of the year. For instance, according to the Commission Business Surveys, companies’ assessment of employment conditions in the service sector has improved only slightly since the summer. The unemployment rate, currently at 8.9%, has been stable since April of this year.

Graph 2: **Consumer confidence, euro area**  
(Jan 2000 to Nov 2004)



*Source:* Commission services.

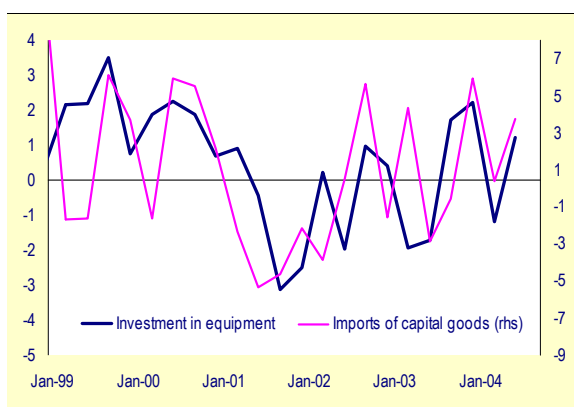
Consumer confidence rose marginally from mid-2004 onwards, but expectations of consumers with regard to their financial situation and unemployment have remained broadly unchanged during the course of 2004. Finally, and on a slightly more optimistic note, retail sales recorded a significant increase in October after three months of contraction and bank lending and consumer lending by banks showed an acceleration over the summer.

The latest news is more positive on the investment side. After having contracted slightly in the first quarter and posted only a moderate 0.3% growth in the second quarter, gross fixed capital formation in the euro area edged up to

0.6% in the third quarter. With the exception of the fourth quarter of 2003, when the surge in capital spending was driven by special developments in some Member States, the third quarter figure represents the strongest growth in investment since late 2000.

Moreover, this figure is likely to underestimate the acceleration of capital spending in the euro area. One indication of this is provided by the composition of imports which, as already mentioned were, surprisingly strong in the third quarter. A breakdown of imports by component is not yet available at the euro-area level. However, country data suggests that the surge of imports was driven by investment goods in some Member States such as Spain, Belgium and, to a lesser degree, France and Italy. In contrast, the growth rate of imports in consumer goods was negative in a number of euro-area countries and subdued for the region as a whole.

Graph 3: Imports of capital goods and investment, euro area (q-o-q changes in % – 1999Q1 to 2004Q2)



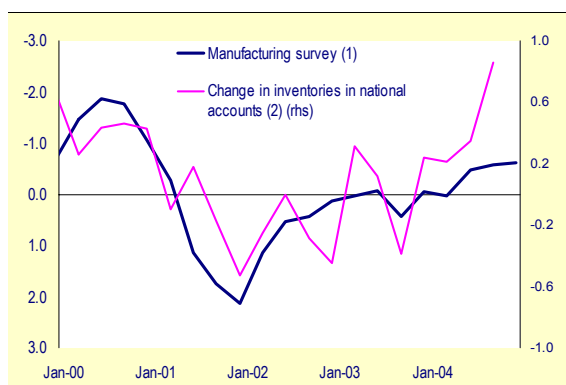
Source: Commission services.

Historical evidence indicates that imported capital goods tend to lead actual investment (Graph 3). Moreover, although the inventory position typically includes errors and omissions from various demand sources, the strong imports of capital goods in some Member States suggest that a large part of the strong inventory build-up in the third quarter is likely to mask delayed investment still recorded as inventories. The fact that, according to the Commission manufacturing survey, the stock of finished products is not judged to be excessive compared

to normal levels also supports the above conclusion (Graph 4).

All in all, there is some evidence, although not yet in all Member States, of a renewed interest in corporate spending, particularly equipment investment. This is also backed by a significant rise in manufacturing new orders in September. If confirmed in the coming quarters, the steady acceleration of corporate spending would provide encouraging signs of a recovery in domestic demand. Caution is, however, needed when assessing the short-term outlook for investment as the negative implications of the renewed appreciation of the euro for corporate investment is difficult to evaluate at this stage.

Graph 4: Inventories, euro area (2000Q1 to 2004Q2)



(1) Assessment of inventories in ECFIN’s manufacturing survey (quarterly averages, normalised) – inverted scale.

(2) Nominal change in inventories as a share of GDP in %.

Source: Commission services.

### Leading indicators point to soft growth in Q4 and continued downside risks

Confidence indicators point to a deterioration of business sentiment in the manufacturing sector and, to a lesser degree, in the service sector.

Manufacturing, which accounts for around a fifth of the euro-area’s total value added, displayed some signs of weakness in the third quarter. After four successive quarters of solid growth, value added in industry (as measured in quarterly accounts) was nearly flat. Manufacturing production indices have also shown a loss of momentum over the summer although they picked up somewhat again in September (for the

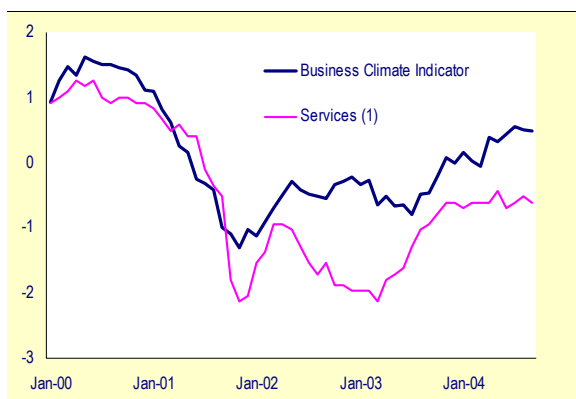




euro area as a whole) and surprised on the upside in October (most notably in Germany and France).

Looking forward, soft growth in the industrial sector is likely in the months to come. DG ECFIN's Business Climate Indicator for the euro area fell in November after having moved sideways in the previous three months. The decrease was driven by a weakening of most components of the indicator, i.e. production trend in the recent past, total and export order books, and stocks of finished products. On a more positive tone, production expectations remained unchanged. Reuters PMI for the euro area has been sending worrying signals for several months now. The indicator fell for the fourth month in a row in November, bringing the headline index very close to the "no-expansion" area. The weakness was broad-based, but particularly significant in the output component of the index.

Graph 5: Business confidence indicators, euro area (Jan 2000 to Nov 2004)



(1) DG ECFIN's service confidence indicator (normalised).  
Source: Commission services.

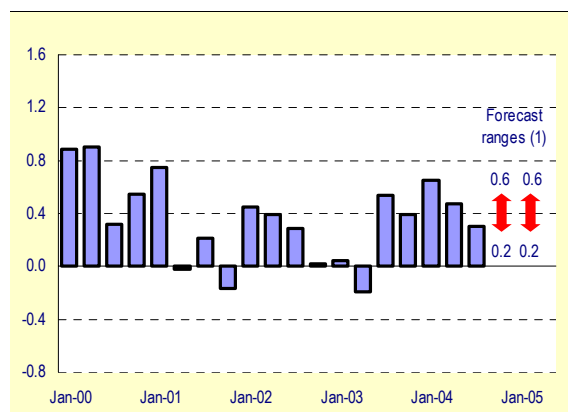
Activity in the services sector, which accounts for about 70% of euro-area value added, continued to expand in the third quarter. However, value added in the services sector grew by a mere 0.2%, down from average quarter-on-quarter growth of 0.5% in the previous four quarters.

Looking forward, recent readings from service sector indicators have been somewhat disappointing. DG ECFIN's confidence indicator for services has been moving sideways

for most of 2004 and the average level of the index in October/November is exactly where it was at the end of last year. According to the PMI survey, economic activity in the services sector fell in November, following a relatively stable reading in October. Nevertheless, the overall level of the PMI for services is still compatible with continuous expansion of economic activity in the sector.

Turning to the short-term prospects for the euro area as a whole, DG ECFIN's indicator-based model for quarterly GDP growth in the euro area projects a range of 0.2% to 0.6% for GDP growth both in the fourth quarter of 2004 and the first quarter of 2005 (Graph 6).

Graph 6: GDP growth, euro area (q-o-q changes in % – 2000Q1 to 2005Q1)



(1) ECFIN's indicator based forecast model.  
Source: Commission services.

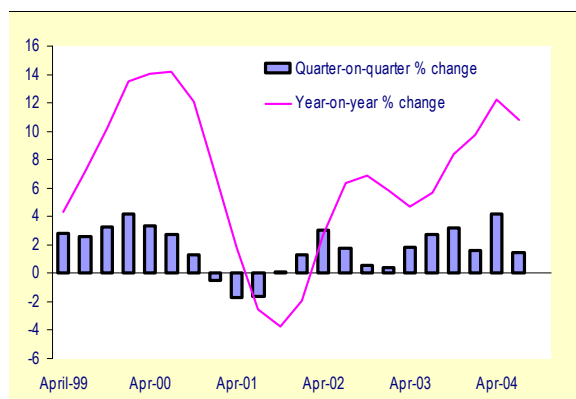
Overall, the easing of the growth momentum in recent months suggests continued downside risks to the scenario presented in the Commission's autumn forecasts of, respectively, 2.1% and 2% GDP growth in 2004 and 2005. These downside risks are compounded by the possible negative impact on exports of a sharp and disorderly adjustment in exchange rate markets. However, this needs to be balanced with positive news on investment side and the fact that some indicators have come in better than expected in October (retail sales in the euro area, industrial production in Germany and France). In addition, world trade has lost momentum but remains relatively robust, oil prices have recently dropped significantly below the level assumed for 2005 in our autumn projections and financial conditions are

accommodative (see section on monetary and financial conditions). Finally, it is worth stressing again that recent national account data are difficult to interpret. At this stage, it therefore appears to be too early to envisage a downward revision of the growth forecasts.

**The global economy enters a phase of slower growth**

Looking closer into the latest developments in the world economy, there are signs that the global recovery has entered a phase of somewhat slower growth compared to the brisk pace recorded early in 2004. According to the latest estimates of CPB Netherlands Bureau of Economic Policy Analysis, quarter-on-quarter world trade growth decelerated from its peak at 4.3% in the second quarter to 1.9% in the third quarter (Graph 7).

Graph 7: World trade in volume (quarterly changes in % – 1999Q2 to 2004 Q3)



Source: CPB Netherlands Bureau of Economic Policy Analysis.

This goes hand in hand with the most recent survey indicators, which also point to a period of more moderate growth over the coming months. The November reading of the quarterly World Economic Survey clearly indicates a deterioration of expectations concerning the near-term outlook, especially for North America and Asia, but also in the euro area. Typical of a relatively advanced phase of a global recovery, current conditions are still deemed favourable, while expectations for the situation six months ahead have fallen. Higher oil prices, continued withdrawal of monetary stimulus in a number of countries (the USA and several emerging market

economies) and attempts by the Chinese authorities to rein in investment in their fast-expanding economy are likely to have contributed to the observed deceleration.

*Recent developments in the United States.* The current US expansion completed its third year on a solid note. Annualised real GDP growth in the third quarter came in at 3.9%, mainly based on strong personal consumption expenditure. Personal saving fell to the record-low level of 0.5% of disposable personal income. In October, consumer spending continued to grow solidly and the saving rate declined further. The Federal Reserve has continued to withdraw monetary policy stimulus by raising the federal funds target rate to 2.25% in December, which is 125 basis points above the level in the first half of the year. Long-term interest rates have not, however, followed suit, resulting in a flattening of the yield curve. The fiscal deficit of general government remained at 4.4% of GDP in the third quarter.

Both producer and consumer prices have picked up this autumn, not least as a result of higher energy prices and the depreciating dollar. In October, the overall and core CPI increased respectively by 3.2% and 2.0% year-on-year. The current account deficit (in the national accounts definition) remained unchanged at 5.4% of GDP in the third quarter. The unemployment rate has been stable at 5.4-5.5% in the July-November period, while the three-month moving average of non-farm payroll growth stood at 178 000 in November which is close to its 1.7% annualized trend rate since the beginning of the year. Productivity growth in the non-farm business sector has decelerated to 1.8% at an annual rate in the third quarter. Most forecasts for the US economy project a deceleration of the expansion in 2005. Early signs of an impending slowdown may be the steady decline in the index of leading economic indicators over the five months to October and the decline in consumer confidence over the four months to November.

*Recent developments in Japan.* Economic growth in Japan was almost flat in the second and third quarters of 2004, a sharp deceleration from the rapid pace recorded in the first quarter of the



year.<sup>2</sup> This cyclical downturn is likely to be relatively short-lived as growth has been negatively affected by temporary factors such as the soft patch in the US and the unusually large number of typhoons and earthquakes. Given the good progress in corporate restructuring and the improvement in the banking sector, growth should start to pick up to around potential once the impact of these temporary factors has faded.

The year-on-year fall in core CPI (excluding fresh food) is currently very close to zero and, if the economy continues to expand at the projected pace, deflation could come to an end in 2005. The Bank of Japan has committed itself to maintaining its current quantitative easing framework until the year-on-year change in core CPI is above zero and is projected to remain positive.

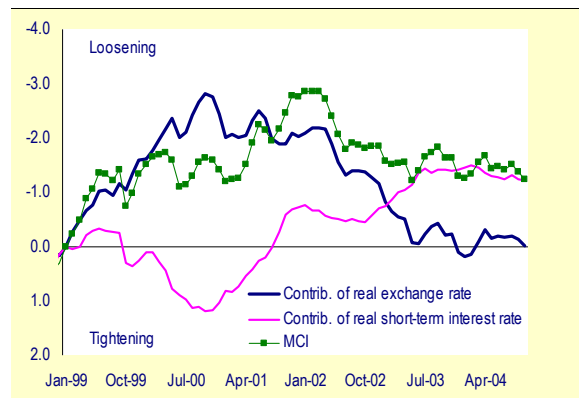
*Recent developments in other parts of the world.* In the rest of the world, GDP growth has been strong in 2004. In Latin America, growth is likely to be close to 5%, supported by high commodity prices, a return of investor confidence and still competitive exchange rates (despite the recent appreciation of some currencies). Asian economies continue to grow at a healthy pace. In China, GDP growth is expected to reach about 9% in 2004. After growing by 9.7% in the first half of the year, raising concerns about overheating in some sectors, the economy now appears to have decelerated somewhat and to be moving towards a more balanced growth path. Measures taken earlier in the year to rein in investment in some sectors seem to have had an effect. The growth composition seems healthier, with net exports and private consumption growth remaining very robust and investment spending cooling down somewhat.

<sup>2</sup> The Japanese authorities recently changed their national accounts methodology, resulting in a downward revision of real GDP growth (by slightly more than 1 percentage point year-on-year in 2003 and in the first three quarters of 2004) and a corresponding upward revision of the GDP deflator.

### Monetary and financial conditions remain accommodative despite a stronger euro

Monetary and financial conditions have remained accommodative over the last months. However, with stable real short-term interest rates – that are still close to zero and at historically low levels – monetary conditions have become slightly tighter due to the rapid appreciation of the euro exchange rate since October (see Graph 8 and Box 1). In the meantime, however, long-term financial conditions have improved on the back of rising equity and bond prices.

Graph 8: Monetary conditions, euro area  
(Jan 1999 to Oct 2004 – index Jan 99 = 0)



Source: Commission services.

The accommodative monetary and financial stance seems to have worked its way into the financial system. In October, loans to the private sector rose by 6.8% year-on-year, after increasing by 6.5% in September. The annual change in M3 came in at 5.8% in October, lower than in September (6.0%) but still exceeding the ECB's reference value of 4.5% for the 40th consecutive month. Furthermore, loans for house purchases increased further to 9.8% from 9% in the second quarter of 2004.

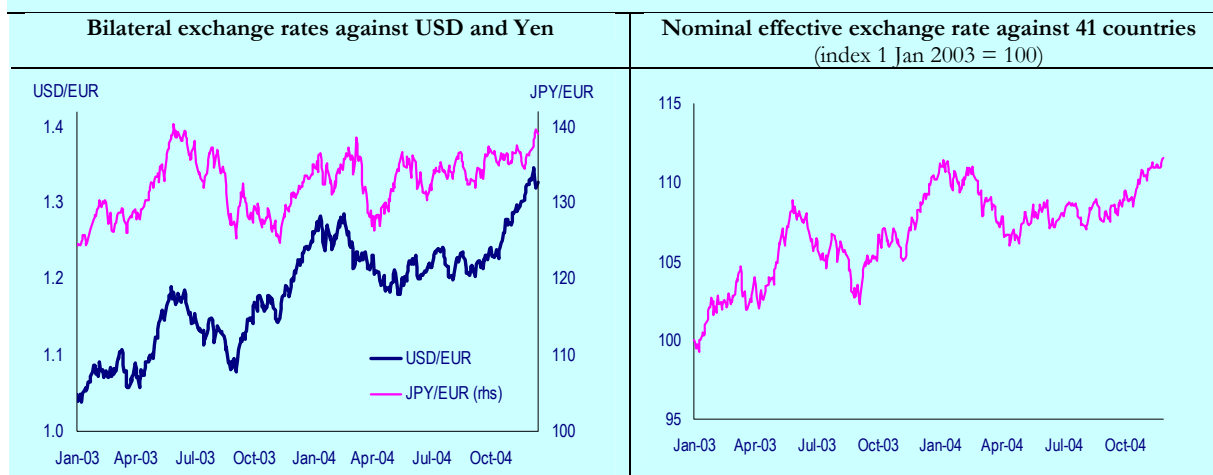
There has been a decoupling of trends in the USA and the euro area in government bond markets. In the euro area, nominal bond yields have been on a general decreasing trend since early summer. Reflecting the market's less positive assessment of economic growth due to oil prices and the recent exchange rate developments, bond yields declined from around

**Box 1: Recent developments in the euro exchange rate**

By December 13<sup>th</sup>, the euro exchange rate was at about \$1.33, which is slightly lower than the historical high of close to \$1.35 reached earlier in the month. In bilateral terms, the euro is now more than 10% above its end-August level and around 17% above its 2003 average. For 2004 as a whole (based on data to mid-December), the euro has on average appreciated by almost 9% against the dollar compared to its 2003 average. Because the euro appreciation is essentially the consequence of a broad-based weakening of the dollar, gains by the euro against other currencies have so far tended to be much less accentuated. For 2004 as a whole (based on data to mid-December), the euro had, on average, gained some 2.4% against the Japanese yen compared to 2003 and it had even lost some 2.1% against the pound sterling.

These movements are also reflected in the fact that, in nominal effective terms the euro stood, by December 13<sup>th</sup>, 3.8% higher than its end-August level (against 41 countries, including Russia and China). This was 6.5 percent higher than the average level of 2003. Over the first 11 months of 2004, the nominal effective exchange rate appreciated on average by 3.6 percent against its average level of 2003.

**The euro exchange rate (1 Jan 2003 to 13 Dec 2004)**



*Source:* Datastream and Commission services.

The recent weakness of the dollar largely reflects financial markets’ concerns about the sustainability of the historically high US current account deficit, although other factors, including high oil prices and tensions in the Middle East, are also likely to have played a role. With the US current account deficit now running at an annual rate of more than 5% of GDP, the US is absorbing nearly two-thirds of the net capital outflows of all countries with current account surpluses. Whilst the counterpart imbalances to the US external deficit of the mid-1980s were largely found in other industrialised economies, today China accounts for about 25% of the total US trade deficit, with other non-industrialised East Asian countries accounting for a further 5%.

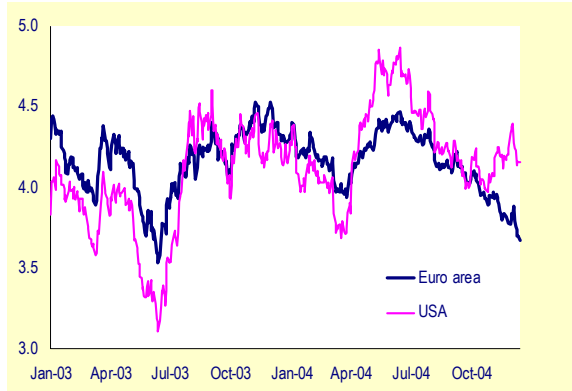
Concerns about how long the USA can continue as both the world’s largest borrower and the world’s largest debtor are not new. But unlike the situation in the late 1990s, when the current account deficit reflected high levels of investment in the US, at present it is seen as the counterpart of high consumption by US citizens (net savings as a percentage of gross national income has fallen from 6 percent in 1999 to around 1 percent today) and a sharp increase in government borrowing following the turnaround in the government’s fiscal position since 2000. Moreover, in the mid-1980s, when the US last had a problem of “twin deficits”, the reduction in the current account deficit – then around 3 percent of GDP – was accompanied by a decline of around 30 percent in the broad dollar index in real terms. The real broad dollar index has fallen by only 15 percent since early 2002 and 5% since 2000 while the US external deficit is nearing 6 percent of GDP.

The way the US current account deficit is being financed also differs from that of the late 1990s, with foreign central bank purchases of US treasury securities playing a more important role than previously. This particular pattern of financing of the US external deficit is the counterpart of the fact that a number of countries, led by China, are pursuing fixed or quasi-fixed exchange rates against the dollar at substantially undervalued levels, and are supporting these pegs through continuous and substantial foreign exchange intervention.



4% at the beginning of October to about 3.7% by December 13<sup>th</sup>. In the USA, the ten-year government bond yield decreased in October. It then increased from 4.0% at the end of October to 4.4% early December before easing again to about 4.2% by December 13<sup>th</sup>. Overall, the spread between euro-area and US bond yields has widened significantly since the beginning of November, a development which can be attributed to a change in markets' perception of the growth outlook and the future steps of monetary policy. For the euro area, financial markets still seem to trade the scenario that the oil price hikes will mainly affect economic growth but not inflation, the probability of which has been reinforced by the recent euro appreciation. For the USA, the positive data releases in recent weeks have strengthened the picture for continued strong growth and the expectation of a further interest rate hike by the Fed.

Graph 9: 10-year Government bond yields, euro area and USA (1 Jan 2003 to 13 Dec 2004 – in %)



Source: Datastream and Commission services.

Equity markets seem to be trading the same positive scenario for the USA as bond markets, as indicated by the rise of the Nasdaq and the Dow Jones by around 13% and 6% respectively since end-September. On the other hand, stock market indices in the euro area increased by some 7% in the same period despite the rather moderate outlook for growth. Compared to their 2003 average levels, the Dow Jones index had gained some 18%, the Nasdaq some 31% and the EURO STOXX some 21% by 13 December.

Graph 10: Stock indices, euro area and USA (1) (daily data – 01/01/03 to 13/12/04)



(1) Index 01/01/2003 = 100

Source: Datastream.

At this juncture it is striking that there is a decoupling of trends in the US and the euro area in bond markets but not in equity markets. It seems as if there is a mismatch in financial markets' expectations about future growth: in the euro area a pessimistic scenario in bond markets, resulting in low bond yields, and a benign scenario in equity markets, where the upward revision of corporate earnings expectations led to higher stock prices.

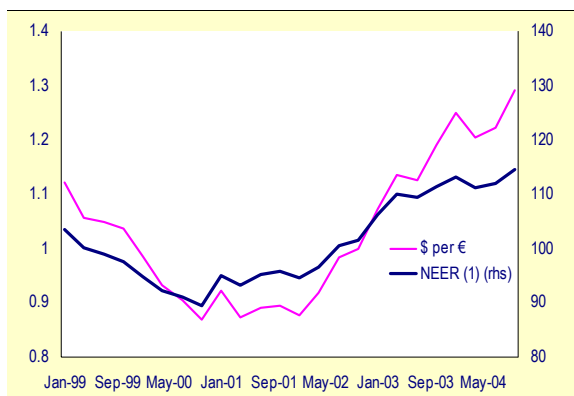
## 2. Price and cost competitiveness in the euro area and its Member States

The strong appreciation of the euro on foreign exchange markets in recent years has affected the external competitiveness of firms in the euro area. This section gives a short analysis of recent trends in price and cost competitiveness in the euro area and its Member States based on the developments of real effective exchange rates (REER) since the start of the current appreciation period.<sup>3</sup> It updates the analysis of the Focus Section in the Quarterly Report on the Euro Area No. 3 2002 and presents recently implemented improvements to ECFIN's indicators of price and cost competitiveness.

### The euro has appreciated significantly since the beginning of 2002...

The euro exchange rate depreciated from the start of Stage Three of EMU until the end of 2000. It remained on a low level throughout 2001 and started appreciating in early 2002. This pattern holds when looking both at the euro's value in US dollar and, by and large, at its nominal effective exchange rate (NEER) (Graph 11).

Graph 11: The euro's nominal effective and bilateral \$ exchange rates (1999Q1 to 2004Q4)



(1) Index 1999=100.

Source: Commission services.

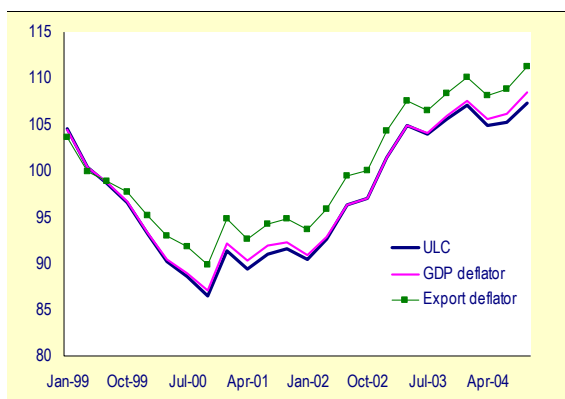
<sup>3</sup> A quarterly overview of data on price and cost competitiveness of the EU and its Member States is published in DG ECFIN's report on price and cost competitiveness available at [http://europa.eu.int/comm/economy\\_finance/publications/priceandcostcompetitiveness\\_en.htm](http://europa.eu.int/comm/economy_finance/publications/priceandcostcompetitiveness_en.htm).

Much of the strengthening of the euro observed since 2002 took place until mid-2003. A period of relative stability between the third quarter of 2003 and the third quarter of 2004 was then followed by a new phase of appreciation in the last months of 2004. Between the third and the fourth quarter of 2004, the euro appreciated by 5.5% against the US dollar and 2.3% in effective terms (based on quarterly averages).<sup>4</sup> Since the beginning of 2002, the euro has appreciated by more than 47% against the US dollar but by – a considerably smaller – 21% in nominal effective terms.

### ...leading to a substantial deterioration in competitiveness...

For euro-area exporters, the appreciation of the euro has translated into a significant loss in competitiveness that more than offset the gains registered in 1999/2000. Measures of the REER show a deterioration of price and cost competitiveness of about 19% since the beginning of 2002 (see Boxes 2 and 3 for explanations on cost competitiveness measures).

Graph 12: Euro real effective exchange rate for various deflators (1999Q1 to 2004Q4 – index 1999=100)



Source: Commission services.

Put into a more medium-term perspective, the euro nominal effective exchange rate is now around 14% above its 1995 to 2003 average. The difference with the 1995-2003 average is, however, significantly smaller in real terms, ranging from 4% (unit labour costs) to 6% (GDP

<sup>4</sup> Data for the fourth quarter of 2004 is based on the technical assumption that all data remain constant at their level of 13 December until the end of the year.



### Box 2: Measuring price and cost competitiveness – some conceptual issues

Several indicators to measure changes in international competitiveness have been developed by DG ECFIN. These are indicators of real effective exchange rates (REER) based on cost or price differentials, as other non-price factors influencing countries' competitive positions do not lend themselves readily to quantification. In DG ECFIN's quarterly report on "Price and Cost Competitiveness" five different deflators are used to calculate real effective exchange rates: consumer prices (CPI and HICP where available), GDP deflators, export prices, unit labour costs in the economy as a whole and unit wage costs in the manufacturing sector.

Each of the five indicators comes with advantages and disadvantages. A REER based on export prices may serve as a useful indicator of a country's external competitiveness. The export prices based REER can be used to obtain a comprehensive picture of competition by exporters, but it provides essentially a short-term picture. Export price indices tend to be a function of the exchange rate itself. Exporters can "price to market" so that short-run variations in the nominal exchange rate are not passed on to the buyers in foreign currency, but are rather allowed to affect the export price expressed in domestic currency and thereby profit margins and not external competitiveness.

REERs based on aggregate price deflators, such as the consumer price index and the GDP deflator, give a more comprehensive and probably more medium-term picture of price competition of domestic producers. For example, because a CPI-based REER index reflects the relative prices of tradables and non-tradables at home and abroad, a change in this index reflects either a change in competitiveness in the market for tradables and/or an incentive to shift resources between the tradable and non-tradables sector. However, this index also includes indirect taxes and, more importantly, the price of imported goods.

To measure cost competitiveness, a REER index defined in terms of relative unit labour costs, can be used. Such a measure compares the relative profitability of non-labour factors producing goods at home and abroad. An advantage of a unit labour cost-based REER index is that it does not pick up temporary fluctuations in profit margins and thus better reflects competitiveness than REERs based on CPIs, GDP-deflators, export prices, import prices and wholesale prices.

Finally, it is worth bearing in mind that indicators of competitiveness based on broad macroeconomic aggregates may conceal important sectoral effects. For instance, excessive rises in labour costs in the non-tradable sector may entail a deterioration of the REER based on total ULC or the GDP deflator without any underlying fundamental deterioration in the competitiveness of the tradable sector (the so-called Balassa-Samuelson effect).

In this article, only three indicators are used to keep the analysis compact. A REER based on unit labour costs of the total economy as a cost competitiveness indicator, a GDP deflator based REER as an indicator for broad price competitiveness and an export price based REER as indicator for (external) price competitiveness.

deflator) and 9% (export price deflator).

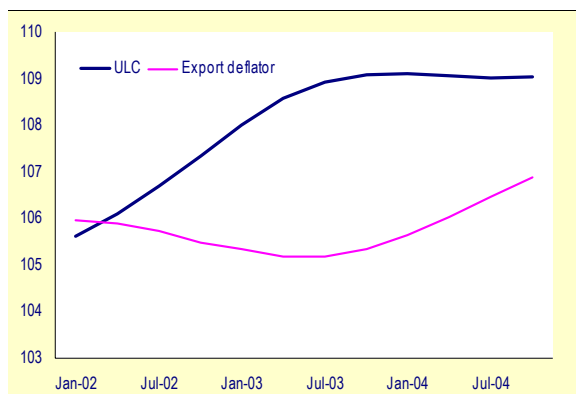
The longer-term picture is similar with the REER based on unit labour costs now 3% higher than its 1980-2004 average (9% in the case of the REER based on the GDP deflator).

#### ...and a squeezing of exporters' profit margins.

Graph 13 plots the evolution of unit labour costs and export prices (expressed in domestic currency) for the euro area over the period 2002 and 2004. While only a rough proxy, the relative slopes of these curves can be seen as an indicator of the changes in exporters' profit margins. Throughout 2002 and the first half of 2003, unit labour costs increased in the euro area reflecting a sharp slowdown of productivity, while exporters adjusted their export prices downwards very gradually. Since the second half of 2003,

increases in unit labour costs came to a standstill, while export prices started to move up.

Graph 13: Profit margins of euro-area exporters (1)  
(2002Q1-2004Q4 – index 1999=100)

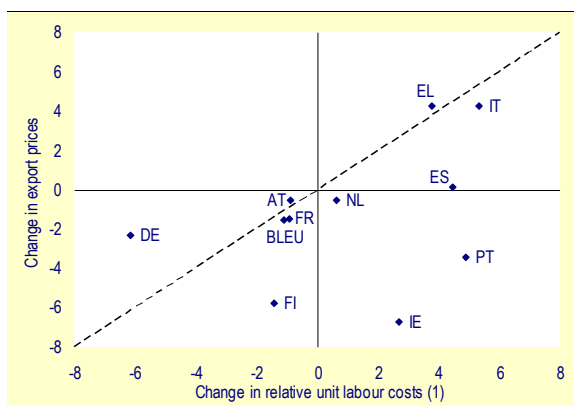


(1) Profit margins are proxied by the difference between unit labour cost in the whole economy and the export price deflator.

Source: Commission services.

The squeeze in profit margins following the euro appreciation was broad-based insofar as it can be observed in most Member States. Graph 14 displays the change of relative unit labour costs and export prices between the first quarter of 2002 and the fourth quarter of 2004.

Graph 14: Change of profit margins of euro-area Member States exporters (in % – 2002Q1 to 2004Q4)



(1) Change in ULC relative to 33 competing countries.  
Source: Commission services.

Almost all Member States experienced a stronger increase in their relative unit labour costs than in

their export prices. This is shown by the fact that they are located to the right of the 45° line on the graph. Only exporters in Germany saw their profit margins slightly improving.

**The deterioration of competitiveness differed among Member States...**

The strong appreciation of the euro over more than two years has left its mark on the competitive positions of all euro-area Member States. Nevertheless, there are significant differences in the magnitude of the deterioration of price and cost competitiveness between the first quarter of 2002 and the fourth quarter of 2004. The first column of Panel A in Table 3 shows the change in the NEER for the Member States for this period. The other columns of Panel A show: first, the losses in competitiveness due to developments in prices (or unit labour costs) in the country considered relative to all its competitors (intra- and extra-euro-area) and, second, the resulting change in the total REER (intra and extra-euro-area) when nominal exchange rate developments are also taken into account. The single currency has eliminated currency risks for intra-euro-area

Table 3: Decomposition of the change of the real effective exchange rate of the euro-area Member States (change in % between 2002Q1 and 2004Q4)

	(A) Total REER (against 11 other Member States and the rest of the world)						(B) Intra-euro-area REER (against other 11 Member States)			
	NEER	Relative change in ULC (1)	REER	Relative change in GDP defl.(1)	REER	Relative change in export deflator(1)	REER	Relative change in ULC (1)	Relative change in GDP deflat (1)	Relative change in export deflator(1)
BLEU	7.8	-1.1	6.6	0.0	7.7	-1.5	6.2	-0.5	0.5	-0.8
DE	10.8	-6.2	4.0	-3.0	7.5	-2.3	8.3	-6.4	-2.9	-1.4
EL	8.9	3.8	13.0	2.5	11.6	4.3	13.6	6.0	4.7	5.6
ES	8.0	4.5	12.9	4.8	13.3	0.2	8.2	5.5	5.8	1.2
FR	9.8	-0.9	8.8	-1.0	8.7	-1.5	8.2	-0.2	-0.6	-0.7
IE	13.4	2.7	16.5	1.6	15.2	-6.7	5.7	3.6	2.1	-5.9
IT	10.6	5.3	16.5	2.1	12.9	4.3	15.3	6.8	3.1	5.8
NL	6.8	0.6	7.5	-0.6	6.1	-0.5	6.2	1.5	-0.1	0.2
AT	6.2	-0.9	5.3	-2.0	4.0	-0.5	5.6	0.5	-1.3	0.3
PT	6.3	4.9	11.5	0.3	6.5	-3.4	2.6	5.6	0.7	-2.8
FI	9.9	-1.4	8.3	-4.5	4.9	-5.8	3.6	-1.1	-4.1	-5.0
EU12	21.1	-2.0	18.7	-1.5	19.3	-1.9	18.8	---	---	---

(1) Change in the ratio of the price or cost index of the country considered to the weighted sum of the price or cost indices of the main competitors (double export weight system).

(2) In the case of EU12, against the rest of the world only.

Source: Commission services.





trade. As a result the appreciation of the REER was smaller at the country level than for the euro area as a whole.

Based on labour costs, Italy, Ireland, Greece, Spain and Portugal registered the largest losses in international cost competitiveness, while Austria, Belgium/Luxembourg and, in particular, Germany registered only limited losses. However, relative changes in the competitiveness depend on the real effective exchange rate concept used and may differ depending on whether one looks at cost or price competitiveness. Hence, for Portugal, Ireland and Finland, the relative competitive performance appears to be much better when assessed on the basis of export prices rather than labour costs.

#### **...due to different trade patterns ...**

The varying magnitude of the loss in competitiveness partly stems from different developments of the nominal effective exchange rate. The appreciation of the nominal effective exchange varied between 6.1% in Austria and 13.4% in Ireland from the first quarter of 2002 to the fourth quarter of 2004 (see Panel A Table 3). The difference stems from the different weights that non-euro-area countries (in particular the US, the UK and Japan) have in the trade patterns of euro-area Member States. In Portugal, for example, trade to the USA and the UK only accounts for less than 15% of all exports<sup>5</sup>, while these two countries account for more than 40% of all exports from Ireland.

#### **...and developments of the price and cost deflators...**

In the group of countries with the greatest deterioration in price and cost competitiveness, Ireland is a special case because much of the appreciation of the REER was caused by the nominal effective exchange rate, i.e. the country's trade structure. The competitiveness losses in Portugal, Spain, Greece and Italy were much

more a reflection of domestic price and cost developments.

At the other end of the range, Germany registered the smallest loss in cost competitiveness of all the Member States despite an unfavourably large share of extra-area trade. The nominal effective exchange rate appreciated by more than 10% (only Ireland had a sharper nominal effective appreciation). This indicates a marked decline of the relative cost deflator.

#### **... driven by different factors.**

A closer look at the underlying factors driving developments in cost competitiveness, other than trade structure shows that there must be a mismatch between wages and productivity in countries with a large deterioration in competitiveness. A reason for this mismatch could be excessive unit labour costs caused by overheating and a failure to adjust to lower growth. An alternative explanation could be productivity shocks and wage rigidities. In some countries, partial indexation of wages on prices may also have played a role. At this stage, it is hard to identify which of these factors have driven the deterioration in cost competitiveness in Portugal, Italy, Spain and Greece.

Exporters also seem to have pursued different pricing strategies as indicated by developments in the spread between export prices and unit labour costs in different Member States. In Ireland and Portugal, the deterioration of cost competitiveness since the first quarter of 2002 did not translate into correspondingly higher export prices. This suggests that, by and large, exporters in these countries have pursued a policy of squeezing their margins in order to maintain market share. Obviously, this policy cannot be sustained for a long period - unless the starting point is one of exceptionally comfortable relative margins.<sup>6</sup> As regards Germany, the comparison of both deflators seems to indicate that German exporters have started to rebuild profit margins.

<sup>5</sup> Measured in double export weights (see Box 3 for an explanation of the double weight system). The weights are calculated for all 33 trading partners per country. See DG ECFIN's report on "Price and Cost Competitiveness" for a complete description of the weights.

<sup>6</sup> In the Irish case another possible explanation is the fact that a Balassa-Samuelson-type effect took place which led to fast growth in unit labour costs in the non-tradable sector of the economy, whereas the export sector remained productive and competitive.

### Box 3: Measuring price and cost competitiveness – some practical issues

A new set of effective exchange rates has been introduced, which were used for the first time in DG ECFIN's report on "Price and Cost Competitiveness" for the second quarter of 2004. Changes were made to the group of reference countries. The calculations of the nominal and real effective exchange rates within DG ECFIN, which used to be calculated against 24 countries, are now based on a reference group of 34 or 41 countries, which better represent the trade pattern of the euro area.

#### 1. The group of reference countries

The calculations were formerly based on a group of 24 industrial countries. These were the 15 EU Member States plus the US, Japan, Switzerland, Norway, Canada, Australia, New Zealand, Mexico and Turkey. In addition, real effective exchange rates for the new Member States were calculated separately on the basis of trade with the same group of 24 countries. This reference group of 24 countries made up for around 58% of extra-EU12 exports. A more accurate representation of the euro required the inclusion of the new Member States and important emerging countries in Asia and Latin America in the calculations of the effective exchange rate of the real trade pattern of the EU12.

A new reference group of 41 was therefore constructed. The ten new Member States, the two candidate countries (Bulgaria and Romania), Russia, China, Brazil, Korea and Hong Kong were added to the original 24. The new group accounts for around 80% of extra-EU12 exports. The countries in this group were chosen on the basis of their importance for EU12 exports. This new group now includes the 15 most important export countries, as opposed to only seven previously.

Due to data constraints, real effective exchange rates based on unit labour costs cannot be calculated for the broad group. Therefore, for the time being, only real effective exchange rates calculated to measure *price competitiveness* will be based on this reference group (broad group). Real effective exchange rates calculated to measure *cost competitiveness* will be based on a smaller reference group of 34 countries (the former IC24 group plus the ten new Member States).

For the calculation of the effective exchange rates, the method of double export weights is used. This method recognises that the 41 countries compete against each other in their own markets and on all other markets around the globe. Under this approach, the export competitiveness weight for any country is derived as a combination of two components: a bilateral export weight, which accounts for direct competition between exporters and domestic producers in a particular export market; and a third-market export weight, which captures competition between exporters from two different countries in a third market. Because USA and Japanese producers have a strong presence in many non-EU12 markets (including Latin America and South East Asia), their weight is significantly higher than indicated by the bilateral trade flows with the EU12. The USA surpasses the UK as the largest competitor, and Japan overtakes Switzerland as the third largest. In most other cases, the differences with the bilateral weights are moderate. China makes a big jump in importance when it comes to double exports. It ranks only 12<sup>th</sup> in the share of total exports of EU12 but becomes the fifth main partner in the double export weight ranking.

#### 2. Reference groups of 34 and 41 – some preliminary results

Between 1999 and 2004 there was hardly any difference between the **nominal** effective exchange rate of the euro against the group of 24 and the other two groups.

In **real** terms, the difference between the wider groups and the standard measure is slightly bigger. Using the GDP deflator and the CPI deflator, the appreciation of the euro was stronger against the group of 24 than against the new groups. This can be explained by the higher inflation in the countries added, dampening the real appreciation of the euro. In the case of the CPI deflator the difference between the narrow and wider groups is slightly more substantial. It is worth noting that there was no difference between the wide and narrow groups in the period between 1999 and the end of 2000. Overall, the effective exchange rate of the euro against the group of 24 and the group of 41 is highly correlated, no matter which of the two deflators is used.



### Significant differences in Member States' intra-euro-area competitiveness performance

The Panel B of Table 3 displays various measures of intra-euro-area competitiveness. For each Member State, measures of the real effective exchange rates are calculated relative to the other 11 Member States rather than against the rest of the world.

In general, the Member States with the highest losses of total international price and cost competitiveness (Panel A of Table 3) also registered the highest losses of intra-euro-area competitiveness (Panel B of Table 3), a major exception being Ireland. From the first quarter of 2002 to the fourth quarter of 2004, Italy, Greece, Portugal and Spain saw the highest losses in both price and cost competitiveness, though in terms of price competitiveness the deterioration was less marked in Portugal.

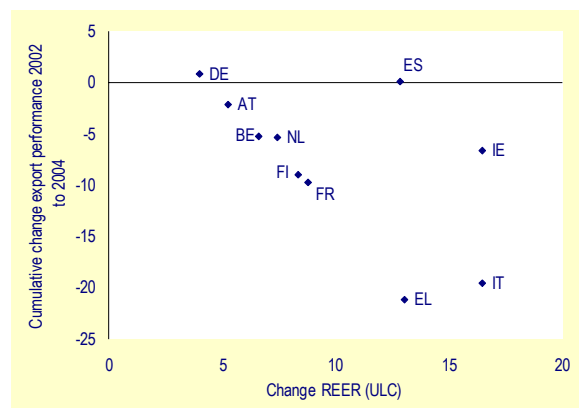
The Member States that experienced only limited deterioration in their international competitiveness saw an improvement of their intra-euro-area competitiveness. Price and cost competitiveness relative to the euro-area average improved markedly in Germany and Finland and to a much lesser extent in France. Austria and the Netherlands registered a slight improvement of their price competitiveness, mainly due to lower inflation, while Belgium/Luxembourg recorded a slight improvement of cost competitiveness.

### Competitiveness losses translated into a loss of market share

Fluctuations in price or cost competitiveness are certainly not the only, nor necessarily the most significant, determinant of trade trends. However, there seems to be a strong correlation between cost competitiveness and the export performance (i.e. including intra- and extra-euro-area trade – see Graph 15).<sup>7</sup> Almost all euro-area Member States lost market shares between 2002

and 2004.<sup>8</sup> Only Germany and Spain gained very slight market shares. In the case of Spain this is a surprising observation as the country has experienced one of the highest deteriorations of international competitiveness of all the euro-area Member States.

Graph 15: Cumulative changes in export performance<sup>(1)</sup> (from 2002 to 2004) and in cost competitiveness (from Q1 2002 and Q4 2004)



(1) See Graph 1 for a definition of the export performance.  
Source: Commission services.

The two countries that registered the strongest losses of market share were Greece and Italy. The Irish case is a more complex one as the loss of market share remained limited despite a substantial deterioration of cost competitiveness. One possible explanation for this phenomenon could be that Irish exporters have squeezed their profit margins in order to keep the loss of market share limited.<sup>9</sup>

<sup>7</sup> For each Member State, export performance is measured by an index of that country's volume of total exports (intra- and extra-euro-area) divided by an index of the weighted sum of the volume of imports into its various destination markets. The weights correspond to the relative size of the destination markets in the country's total exports.

<sup>8</sup> Market shares is measured by "export performance".

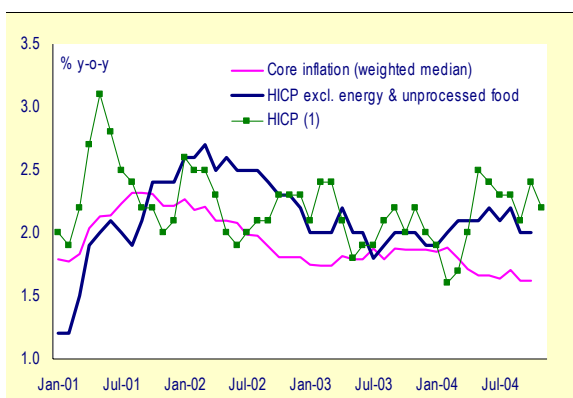
<sup>9</sup> Another possible explanation is that domestic price and cost deflators increased much faster than export prices, reflecting domestic cyclical developments which did not affect the export sector.

### 3. Recent developments in inflation

#### Headline inflation remains above 2%...

Headline consumer price inflation has proved to be quite volatile since the beginning of 2004. After a brief spell of deceleration during the first months of the year, it picked up markedly in the spring and then eased again slightly over the summer before rebounding from 2.1% in September to 2.4% in October. According to Eurostat's Flash estimate, there was another deceleration in November, with year-on-year growth in HICP falling to 2.2%. These fluctuations can largely be traced back to base effects, to changes in crude oil prices and, to a lesser degree, changes in indirect taxation and administered prices.

Graph 16: HICP inflation, euro area  
(y-o-y changes in %, Jan 2001 – Nov 2004)



(1) November data based on Eurostat's flash estimate and are only available for the HICP as a whole.

Source: Commission services.

#### ... but underlying price pressures are relatively muted

While headline inflation has remained above 2%, measures of core inflation suggest that underlying inflationary pressures have been relatively muted. Graph 16 displays two measures of core inflation in the euro area.

A standard measure, the *HICP excluding energy and unprocessed food*, shows a slight acceleration of inflation during the first half of the year followed by a deceleration to 2% in September and October. However, since the beginning of 2004,

this measure of core inflation has been affected by significant hikes in tobacco taxes in several Member States as well as increases in administered prices in the German health sector. It has therefore tended to overestimate underlying inflation trends.

The graph also displays the so-called *weighted median measure of inflation*. The weighted median is constructed so as to avoid distortion by special temporary factors in specific sectors.<sup>10</sup> Over the past few years, it has proven to be a good leading indicator of developments in core inflation. For instance, since 1996, turnarounds in inflation have been visible in the weighted median about 4-5 months earlier than in the HICP excluding energy and unprocessed food. Weighted median inflation has been on a slow but steady deceleration path since March and now stands at 1.6%, suggesting relatively muted underlying inflation pressures.

#### High oil prices are taking their toll

Due to a combination of supply and demand factors, oil prices have been on an upward trend during much of the year. The average monthly price of the Brent climbed to close to 50\$ in October before easing again to 45\$ in November. By mid-December the barrel of Brent was trading at about 40\$. For euro-area users, the spike in oil prices has been somewhat cushioned by the appreciation of the euro but, even when taking this moderation effect into account, the price during the first half of December was still 25% higher than at the beginning of the year.

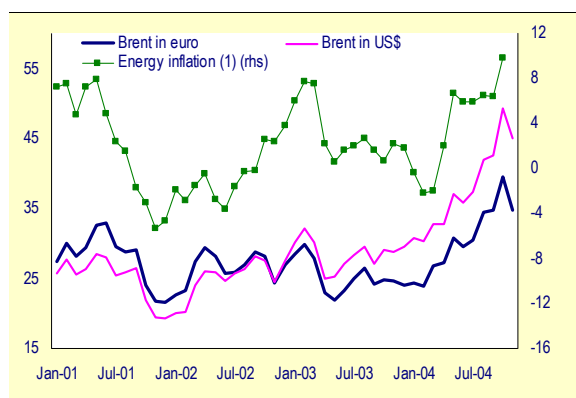
Changes in oil prices tend to feed very rapidly into the energy component of the HICP which accounts for about 8% of the consumption basket used to calculate the HICP. Estimates suggest that a 10% increase in Brent prices in euro translates into an increase of HICP energy inflation of about 1.5-2% within a few months. As a result of higher oil prices and base effects linked to the Iraq war in 2003, year-on-year

<sup>10</sup> It is calculated by ranking the price changes for the various consumption categories from the lowest to the highest (together with their weights in the consumption basket). The median inflation rate is the growth rate where the accumulated weight has reached 50%.



growth in the energy component of the HICP has accelerated sharply since the spring. It was running at close to 10% in October and, unless crude oil prices ease much further in the coming weeks, it will remain high during the first few months of 2005.

Graph 17: Oil prices and energy inflation in the euro area (Jan 2001 to Nov 2004)



(1) Year-on-year changes in the energy component of the HICP (only available to October 2004).

Source: Commission services.

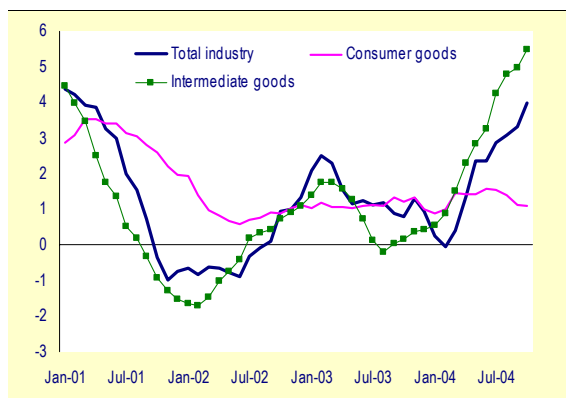
A rise in oil prices affects headline inflation directly via the HICP's energy component but it also feeds into consumer prices indirectly via its impact on the production costs of the sectors using energy. Such spill-over effects are difficult to measure but there is some, albeit limited, evidence that some indirect pass-through is taking place. Since the spring, consumer prices have risen rapidly in transport services, where the pass-through of higher oil costs is generally relatively rapid. However, other consumption categories with a relatively high exposure to oil do not seem to have faced significant inflation pressures so far.<sup>11</sup>

Likewise, evidence of indirect effects in producer price inflation remains limited. Producer prices have increased rapidly in the past few months but this was mainly the result of prices hikes in the energy and the intermediate good sectors. There have not, so far, been any visible signs of pass-through of higher energy costs into consumer good prices, with year-on-year inflation in the sector even registering a

<sup>11</sup> For instance, inflation in the non-durable good sector decelerated in September and October.

deceleration in September and October (Graph 18).

Graph 18: Producer price inflation in the euro area (y-o-y changes in % – Jan 2001 to Oct 2004)



Source: Commission services.

Two factors can explain the limited degree of indirect effects observed so far. First, it takes time for cost increases to be transmitted down the production chain. In this context, further indirect inflation pressures from oil prices are to be expected in the coming months. Second, some powerful disinflationary forces – essentially the appreciation of the euro and moderating unit labour costs – are also at play at the moment and have partly offset the impact of higher oil prices.

### The strong euro has helped contain oil related inflationary pressures...

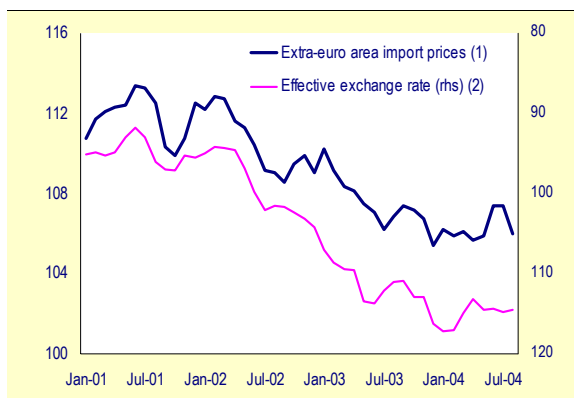
The appreciation of the euro is a significant force for disinflation in the euro area. As shown in Graph 19, there is a close link between developments in extra-euro-area import prices and the effective exchange rate. The appreciation of the euro since 2001 has translated into a significant – although much less than proportional – fall in the extra-euro-area import prices of consumption goods.<sup>12</sup>

Empirical studies on the pass-through of exchange rate fluctuations show that, in the euro

<sup>12</sup> As import price data in national account statistics cover both intra and extra-euro-area trade, the data in the graph are derived from trade statistics. These are generally released with a significant lag with latest import price data only available to June 2004.

area, the impact on import prices is relatively rapid, a conclusion which is also backed by Graph 19. The pass-through into consumer prices is, however, significantly slower with most of the effect occurring after an estimated lag of 1.5 to 2 years.<sup>13</sup> This suggests that the disinflationary effect of the appreciation of the euro registered in 2003 has not been fully felt yet. The renewed phase of appreciation into which the euro has entered since October will add further disinflationary pressures during the course of 2005.

Graph 19: Imported disinflation, euro area (index 1999=100 – Jan 2001 to August 2004)



(1) Price index of imports of consumption goods.  
(2) Inverted scale.

Source: Commission services.

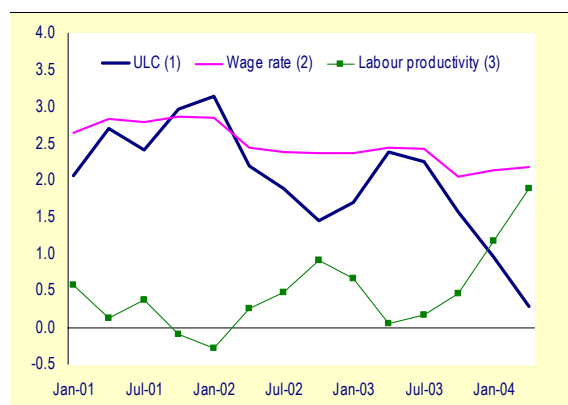
**... and moderating labour costs have also played an important role**

Since the second half of 2003, developments in labour costs have been a major source of inflation moderation in the euro area. Year-on-year growth in unit labour costs decelerated from 2.4% in the second quarter of 2003 to 0.3% in the second quarter of 2004, its lowest rate since 1999 (Graph 20). The sharp slowdown in labour costs follows a strong cyclical rebound in labour productivity. In year-on-year terms, growth in labour productivity stood at 1.9% in the second quarter of 2004, its best performance since the beginning of 2000. To a small extent, unit labour

<sup>13</sup> See the “EU Economy: 2003 Review”, Chapter 1 for a review of some recent empirical studies on the pass-through. Estimations of the extent of the pass-through into consumer prices still vary significantly with a range of 2 to 16% in the studies reviewed.

cost moderation is also the result of a slight deceleration of wage rates (as measured by the ratio of the total wage bill and the total number of employees).

Graph 20: Unit labour costs, euro area (year-on-year changes in % – 2001Q1 to 2004Q2)



(1) Ratio of compens. per employee to real GDP per employee.  
(2) Total compensation per employee.  
(3) Ratio of real GDP to total employment.

Source: Commission services.

**The short-term outlook for inflation reflects these conflicting forces**

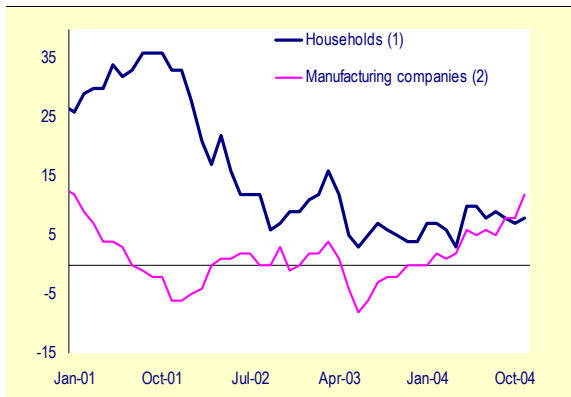
The short-term outlook for inflation is the result of conflicting forces. Headline inflation will remain above 2% during the first months of 2005 due to persistent inflationary pressures from higher oil prices, including increasing indirect effects. However, in the absence of second-round wage effects or further hikes in oil prices, inflationary pressures due to higher oil prices will peter out and be gradually offset by downward pressures on prices stemming from the strong euro, moderate labour costs, persistent slack in the economy and favourable base effects related to increases in taxes and administered prices implemented in 2004.

The Commission’s Autumn 2004 Forecasts projected a deceleration of inflation from 2.2% in the first quarter of 2005 to 1.8% in the second. Since the release of the forecast, oil prices have turned out to be somewhat less high and the euro exchange rate somewhat stronger than assumed in these projections. These developments may translate into slightly stronger



disinflation pressures in the first months of 2005 than initially envisaged.

Graph 21: Expected price changes in surveys, euro area (Jan 2001 to Nov 2004)



(1) Price trends over next 12 months.  
(2) Selling price expectations for the months ahead.  
**Source:** Commission services.

This relatively benign assessment of the short-term outlook for inflation is further backed by recent developments in inflation expectations. The ECB's latest Survey of Professional Forecasters points to unchanged inflation expectations for 2005 – averaging 1.9% for the year as a whole, down from 2.1% in 2004 – According to ECFIN's household survey, households' assessment of price trends over the next 12 months has not changed significantly in the past few months (Graph 21). Selling price expectations in the manufacturing sector have responded more substantially to higher oil prices but the hike stems mostly from the intermediate goods sector. Producers of consumption goods have, so far, not reported any noticeable rise in their selling price expectations.

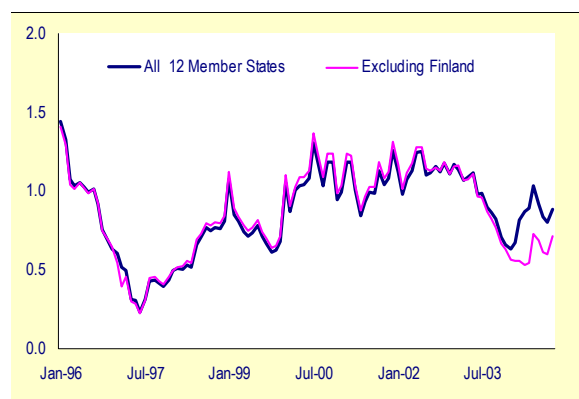
#### 4. Inflation differences within the euro area: an update

Differences in inflation rates between EMU Member States can be a consequence of necessary price adjustments in the absence of exchange rate flexibility but they can also be a symptom of economic imbalances. The issue therefore deserves careful and regular monitoring. It was analysed in depth in the focus section of the Quarterly Report on the Euro Area No.4 2002. The present section provides an update, assessing the developments in inflation differences that have taken place in EMU in the past two years.

#### Inflation differences between euro-area Member States have narrowed

Graph 22 displays the standard deviation of inflation rates across euro-area Member States. After reaching a bottom in 1997-98, inflation dispersion within the euro area increased in the late 1990s. It remained relatively high in 2000-02 – at least relative to the trough reached in 1997 – before narrowing again in 2003. Developments since the beginning of 2004 have been somewhat mixed. Inflation differences increased rapidly during the first half of the year, and then narrowed over the summer before widening again in October.

Graph 22: HICP Inflation dispersion across euro-area countries (1) (in % – Jan 1996 to Oct 2004)



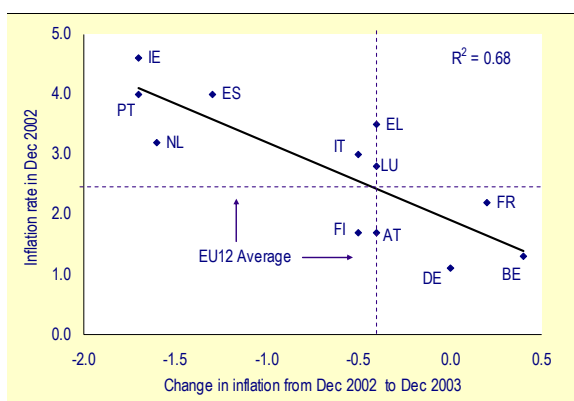
(1) Euro area data exclude Greece up to 2000.  
**Source:** Commission services.

In 2004, measures of inflation dispersion in the euro area were distorted by changes in indirect

taxation and administered prices in several Member States. In particular, cuts in alcohol taxes in Finland entailed a substantial deceleration of inflation in that country and explain much of the observed widening of inflation differences within the euro area during the first half of 2004. This can be seen in Graph 22 which also shows the standard deviation of inflation rates for all Member States excluding Finland. In that case, significant inflation convergence can be observed throughout 2003 and until spring 2004. The convergence trend was reversed only modestly in the last few months of 2004 and stands in sharp contrast with the relatively high level of inflation dispersion observed in EMU over the 2000-02 period.

The inflation convergence process registered since the beginning of 2003 is broad-based and not just a reflection of favourable developments in just a few countries. This is particularly clear for 2003. Graph 23 shows that all Member States with above euro-area average inflation rates at the end of 2002 reported stronger than euro-area average disinflation in 2003 (top-left quadrant of the graph). Conversely, countries with below euro-area inflation reported an acceleration of inflation that year (bottom-right quadrant). With the exception of Finland no country is located in the remaining two quadrants for that year.

Graph 23: A closer look at inflation convergence within the euro area in 2003 (1) (in %)

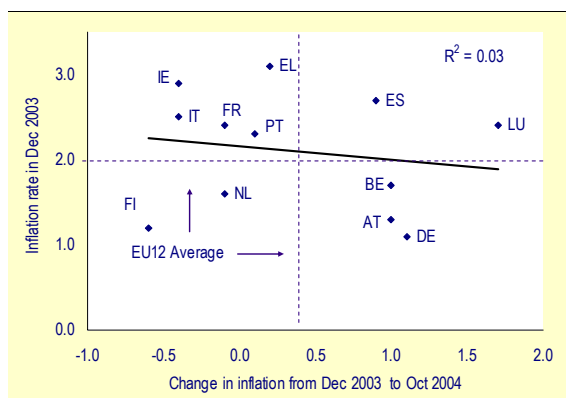


(1) Dotted lines denote euro-area averages.  
 Source: Commission services.

Nevertheless, the convergence trend is somewhat less clear in 2004 (Graph 24). Although a

majority of countries are still located in the two 'convergence quadrants' (top-left and bottom-right) that year, four countries can now be found in the 'divergence quadrants' (Finland, the Netherlands, Spain and Luxembourg).

Graph 24: A closer look at inflation convergence within the euro area in 2004 (1) (in %)



(1) Dotted lines denote euro-area averages.  
 Source: Commission services.

**The recent convergence in inflation was driven by a combination of three factors**

Three factors have dampened inflation divergence in the euro area in the last two years: the unwinding of some of the past price shocks, converging cyclical conditions and the appreciation of the euro.

*The unwinding of past price shocks.* Price shocks in specific sectors such as food or energy can temporarily widen inflation differences, either because they are asymmetric (i.e. they affect some countries and not others) or because they have asymmetric transmission effects (they affect all countries but some countries are more exposed than others).

An analysis of the contributions of individual consumption categories to total inflation dispersion in the euro area is presented in Box 4. It shows that some of the inflation convergence in 2003 can be ascribed to the energy sector, suggesting that the unwinding of the inflation divergences caused by the 2000 oil price shock was quite slow. In contrast, the food sector has made a lasting and substantial contribution to





#### Box 4: A sectoral view of inflation dispersion within the euro area

HICP inflation data can be broken down into a large number of consumption categories ranging from food products to industrial goods and services. The analysis of the respective contributions of these categories to cross-country differences in the overall rate of headline inflation can shed some light on the nature of the inflation divergence/convergence process at work within the euro area.

##### 1. The methodology

The contribution of consumption categories to the total dispersion of inflation rates across Member States is based on a simple decomposition of the variance.

Total inflation in country *i* at time *t* can be proxied by the weighted sum of the inflation rates of individual consumption categories in this country:

$$(1) \pi_i^t = \sum_k \alpha_k \times \pi_{ik}^t = \sum_k \omega_{ik}^t$$

where  $\omega_{ik}^t$  is the contribution of consumption category *k* to total inflation in country *i* at time *t*.

$$(2) \text{VAR}(\pi_{EA}^t) = \text{COVAR}(\pi_{EA}^t, \pi_{EA}^t) = \sum_k \text{COVAR}(\pi_{EA}^t, \omega_{ik}^t)$$

Based on equation (2), the contribution of each consumption category to total inflation variance across Member States can be calculated for each period of time. It depends on the cross-country variance of inflation in that consumption category, the category's weight in the consumption basket and the degree to which cross-country inflation dispersion in that category follows the same pattern as inflation differences for the total HICP.

##### 2. The contributions to inflation dispersion of a few aggregate consumption categories

This methodology has been applied to annual data for a decomposition of the HICP into a few broad consumption categories. The resulting sectoral contributions to the total cross-country variance in headline inflation are presented in the table below. The second column of the table displays the weight of the various consumption categories in total household consumption. The four subsequent columns present the contributions to inflation dispersion of the individual consumption categories for several recent years (1997 is added as it marks the low point for inflation differences in the euro area). The last two columns show the changes in contributions to inflation variance between 1997 and 2002 (on the one hand) and 2002 and 2004 (on the other). This helps in assessing the sources of increased inflation dispersion in the late 1990s and reduced dispersion in 2003-04.

**Contribution of consumption categories to inflation dispersion within the euro area**  
(inflation dispersion is measured by the variance of HICP inflation across the 12 Member States)

	Weights (1)	1997	2002	2003	2004 (2)	1997-2002	2002-2004
<b>Non-energy indust. goods</b>	<b>31.0</b>	<b>0.07</b>	<b>0.15</b>	<b>0.12</b>	<b>0.13</b>	<b>0.08</b>	<b>-0.02</b>
of which:							
Durables	10.6	0.01	0.07	0.08	0.07	0.06	0.00
Semi-durables	12.4	0.05	0.04	0.03	0.08	0.00	0.03
Non-durables	8.0	0.01	0.04	0.01	-0.01	0.03	-0.05
<b>Energy</b>	<b>8.1</b>	<b>0.01</b>	<b>0.15</b>	<b>0.02</b>	<b>0.06</b>	<b>0.14</b>	<b>-0.09</b>
<b>Food</b>	<b>19.5</b>	<b>-0.03</b>	<b>0.24</b>	<b>0.25</b>	<b>0.31</b>	<b>0.27</b>	<b>0.07</b>
of which alcohol and tobacco.	3.9	0.00	0.06	0.11	0.20	0.06	0.14
<b>Services</b>	<b>41.3</b>	<b>0.04</b>	<b>0.63</b>	<b>0.45</b>	<b>0.14</b>	<b>0.59</b>	<b>-0.49</b>
of which:							
Communication	2.9	0.00	-0.01	0.00	0.03	-0.01	0.04
Housing	10.4	0.02	0.05	-0.01	0.00	0.03	-0.05
Recreation	15.0	0.00	0.41	0.33	0.11	0.41	-0.30
Transport	6.4	0.01	0.05	0.05	0.03	0.04	-0.02
Miscellaneous	6.6	0.00	0.13	0.09	-0.03	0.13	-0.16
<b>Total</b>	<b>100.0</b>	<b>0.09</b>	<b>1.17</b>	<b>0.84</b>	<b>0.64</b>	<b>1.08</b>	<b>-0.53</b>

(1) Weight in HICP consumption basket in 2004 in %.

(2) Based on data for January to October.

Source: Commission services.

**3. Main lessons from the breakdown of the data**

Several interesting features emerge from the table:

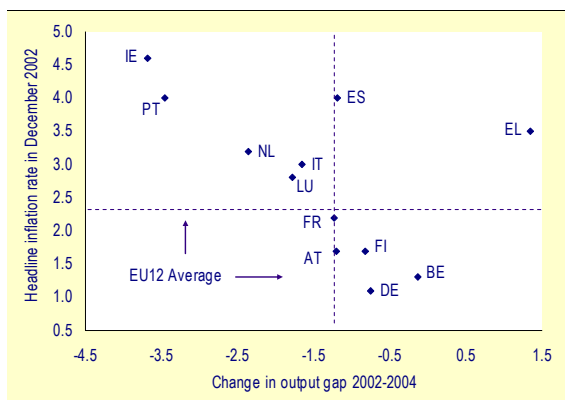
- Looking at the medium-term picture (for instance since 2000), the contribution of consumption categories to cross-country inflation variance within the euro area does not always reflect the weight of these categories in total private consumption. Hence, the food and energy prices sectors tend to make a more than proportional contribution to inflation dispersion. The opposite holds for non-energy industrial goods.
- Service sectors also tend to play a more important role in inflation dispersion than what their weights in the consumption basket would suggest, specially the broad recreation and culture category (in particular services related to hotels and restaurants). However, it is important to note that this gap between contribution and weight in services is entirely attributable to Ireland where the discrepancy between developments in prices in the sheltered and open sectors have been much larger than in others countries.
- Price shocks in the food and energy sectors explain around 40-50% of the increase in inflation differences in the late 1990s and early 2000s, the rest being accounted for by non-energy industrial goods and services. When Ireland is included (as in the table above), the rise in inflation dispersion which is not attributable to food and energy prices essentially stems from the service sector. When Ireland is excluded, industry and services play broadly similar roles in the divergence trend.
- Convergence is observable after 2002 as a result of a reduced contribution of services and, to a lesser degree, of the energy sector. If Ireland is excluded, the convergence trend already begins in 2002 with the energy, industry and service sectors playing similar roles. In any event, it is interesting to note a persistently large contribution of food prices to inflation differences in the euro area.

Looking at recent developments in monthly data (not presented in the table above), two points should be stressed. The 2000 oil price shock was a source of inflation dispersion in the euro area in the early 2000s. *Recent oil price surges* have so far had a more muted impact on inflation dispersion but their contribution has increased since the summer. The *contribution of the food sector* has again increased since the beginning of 2004. This time, however, the increase can mostly be ascribed to alcohol and tobacco prices and reflects changes in indirect taxation rather than shocks in the fresh food sector as in the previous years.

inflation differences in the past few years. In 2003, the waning of the divergence effect of price shocks in the fresh food sector was offset by increased price differences in the alcohol and tobacco sector, mostly reflecting the impact of changes in indirect taxation on tobacco. In 2004, changes in duties on both alcohol and tobacco led to an increase in the contribution of the food sector to total inflation differences.

**Converging cyclical conditions.** Differences in cyclical conditions across euro-area Member States have helped to foster inflation convergence in the euro area in 2003-04. As shown in Graph 25, most of the countries which posted above-euro-area-average inflation at the end of 2002 also suffered from an above euro-area average deterioration in the output gap in 2003-04 (top-left quadrant). By the same token, most countries with below-average inflation rates experienced milder cyclical losses in activity (bottom-right quadrant). The two major exceptions to this rule are Spain and Greece.

**Graph 25: Inflation differences and economic activity, euro-area Member States (1), (in %)**



(1) Dotted lines denote euro-area averages.

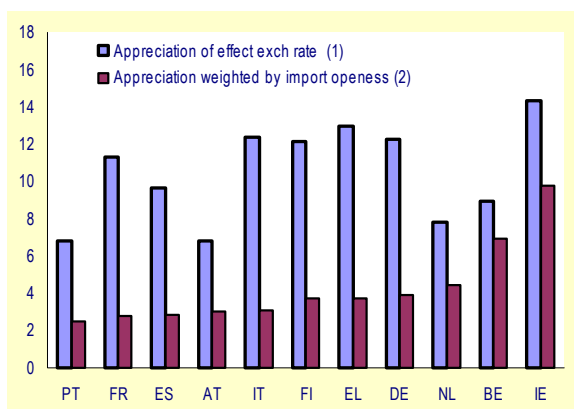
Source: Commission services.

**The strengthening of the euro.** Due to differences in Member States' trade openness, their geographical trade specialisation and the speed of the pass-through, changes in the external value of the euro may have a significant impact on inflation differences. A recent



empirical study has concluded that the euro depreciation played a substantial role in the widening of inflation differences in the euro area in the early years of EMU.<sup>14</sup> The appreciation of the euro since 2002 may now have had the opposite effect.

Graph 26: Changes in effective exchange rates, euro-area Member States (in % – 2000Q4 to 2004Q3)



(1) Cumulative change in nominal effective exchange rate between 2000Q4 and 2004Q3.

(2) Same as in (1) but multiplied by the share of imports in GDP.

Source: Commission services.

However, there is only modest direct evidence of an inflation convergence effect due to the stronger euro in the past few years. Graph 26 displays the cumulative appreciation of the nominal effective exchange rate in euro-area Member States since the beginning of 2001. To account for trade openness, the graph also displays the cumulative appreciation weighted by the share of imports in GDP. Some countries, such as Ireland and the Netherlands, were posting above-average inflation rates in the early 2000s and have benefited from a comparatively stronger disinflation effect caused by the appreciation of the euro in the past three years. However, this is clearly not the case for several other countries with comparatively high inflation (Portugal and Spain). Conversely, several low inflation countries such as Germany and Finland have registered relatively strong imported disinflation over the period.

### Some diverging forces have again been at play since the beginning of the year

Overall, developments in inflation convergence in 2003-04 are encouraging, suggesting that the episode of divergence of the late 1990s was temporary. Nevertheless, some forces causing inflation divergence have again been at play since the beginning of 2004 and will need to be closely monitored in the months to come. The analysis presented in Box 4 indicates that sources of inflation divergence in 2004 can be essentially traced back to the food and energy sectors. They are a consequence of the renewed hikes in oil prices and of changes in indirect taxation in the alcohol and tobacco sectors. Their impact should therefore be largely temporary although past experience suggests that the effect of temporary price shocks on inflation differences may take some time to unwind. It must also be stressed that various forms of wage indexation schemes still exist in several Member States. Such schemes increase the size and the duration of the response of inflation to temporary shocks and therefore tend to aggravate inflation differentials within the euro area in case of higher oil or food prices.

Finally, it is worth recalling that not all forms of inflation differences should be considered as a potential problem in a monetary union. To the extent that they reflect necessary changes in relative prices, inflation differences may in some cases be seen as a crucial part of a longer-term convergence process (as in the case of the catching-up of lower income countries) or a reflection of an adjustment to asymmetric shocks. The contribution of the Netherlands to inflation divergence in 2004 (see Graph 24) should be interpreted in the latter light: overheating there in the late 1990s has led to a serious deterioration in price competitiveness that will need several years of below euro-area-average inflation to restore equilibrium.

<sup>14</sup> Honohan P. and P. Lane (2003) "Divergent inflation rates in EMU", *Economic Policy*, October, pp 357-394.

## *Focus*

### II. Foreign direct investment in EMU

*Foreign direct investment (FDI) has contributed to greater economic integration in the euro area. Despite pronounced consolidation of global FDI activity from 2001 onwards, the FDI flows of euro-area Member States have remained considerably above the level recorded prior to EMU. This is due in particular to relatively strong intra-area FDI activity, suggesting that the euro has given impetus to cross-border ownership and production in the euro area. In consequence, Member States' business cycles should become more synchronous, similar to the effect from rising trade integration. There is no compelling evidence that extra-area FDI outflows could have caused the low level of domestic investment in recent years. Firms aim to increase their profitability through FDI and usually expansion abroad feeds back into domestic activity. The size of the economic benefits from an outflow of FDI also depends on the intensity of competition in product markets and on labour market flexibility because these two factors dictate that lower costs are passed-through to lower consumer prices and that the labour force can be re-allocated to alternative jobs, respectively.*

This focus section discusses trends in foreign direct investments (FDI) in the euro area and across Member States. The intention is (1) to analyse recent developments, asking whether they differ in structure compared to the late 1990s; (2) to see whether EMU has spurred FDI activity in the euro area; and (3) to elaborate on the impact of FDI on the euro area's economic performance, in particular in view of the persistent weakness of its domestic investment.

#### ***1. The concept and motivation of FDI***

FDI can be defined as a cross-border capital transaction that is motivated by the objective of obtaining a lasting interest in a foreign enterprise. The existence of a long-term relationship and of a significant degree of influence on decision-making in the enterprises are seen as criteria of a lasting interest, meaning the ownership of a share of at least 10% in the foreign enterprise in international accounting practice. FDI's could be either greenfield investments, i.e. new investment in the host country, or merger and acquisitions (M&A, also called brownfield investments). Box 5 gives an overview of certain methodological issues relating to FDI.

FDI's implies the transfer of ownership and control rights, which has the potential to unleash efficiency gains in the firm concerned and technology spill over. These - beyond the pure financing dimension - additional channels through which FDI inflows can boost economic

activity have increasingly attracted the attention of modern theories on economic growth.

The lion's share of FDI activity can be attributed to trans-national corporations (TNCs) for which the decision between exporting goods to a foreign country and producing goods in the target country is often a close one. Usually, exporting goods or services requires setting up foreign affiliates dealing with marketing and sales activity. Hence, trade activity implies a certain amount of market-seeking cross-border investment (horizontal FDI). Theory suggests that the decision also to locate some of the production abroad depends on the trade-off between the benefits from proximity to the market and the costs of giving up some economies of scale in production.

A different motivation for FDI is cost-minimisation by locating different stages of the production chain in different countries (vertical integration). This aims to draw advantage from cost advantages in the different economies. Obviously the effects on the country of origin are different between horizontal and vertical FDI.<sup>15</sup>

Information on the world's 100 largest trans-national corporations (TNCs) in Table 4 shows that the euro area is well represented, with 42

<sup>15</sup> A third form is the so-called diversifying FDI, which is driven by the motivation to reduce firm-specific risks by being active in different markets.



*Box 5: Measurement issues*

FDI data is compiled in the balance of payments, where FDI represent an important component of the financial account. In this section, FDI data from three different sources is used and although the data series are broadly similar, they are not identical. (i) The UNCTAD data set contains annual data for most countries of the world but not for the euro-area aggregate net of intra-area flows. The series start in 1970 for FDI flows, 1980 for FDI stocks and 1987 for M&A. (ii) The ECB publishes data on extra-euro-area FDI flows and stocks. Data on flows is available from 1999 onwards on a monthly basis and decomposed into three sub-components, namely whether they are financed through equity capital, retained earnings or other forms of capital, which in practice mostly amounts to inter-company loans. (iii) Eurostat provides annual FDI flows for the Member States and a number of other countries. It provides a breakdown in the form of financing, sectors and partner country, which allows an analysis of bilateral flows. The data is not, however, complete and in some cases, when total FDI was not available, the sum of equity capital and other capital was used as a proxy. FDI stocks and income are also available in Eurostat and the ECB data, but not M&A.

A general consensus emerged that the majority of FDI flows in the late 1990s were actually M&As rather than new investments. The share of M&A in FDI seems to have fallen considerably since 2001, both worldwide and in the euro area. However, different accounting practices between FDI and M&A prevent a precise breakdown of FDI into greenfield and brownfield investments.<sup>1</sup>

FDI is an imperfect but so far the best available indicator for the internationalisation of production in terms of coverage, timeliness and international comparability of the data. A difference between both emerges for instance when an international company expands activity abroad but finances this with capital in the source country because this transaction is not counted as FDI. Another trend in the internationalisation of production that is not covered in FDI statistics is the spread of cross-border franchising contracts and other forms of intra-firm agreements.

<sup>1</sup> On these differences and trends in M&A activity, see DG ECFIN Mergers and Acquisitions note, October 2004, [http://europa.eu.int/comm/economy\\_finance/publications/structural\\_policies/2004/ma1en.pdf](http://europa.eu.int/comm/economy_finance/publications/structural_policies/2004/ma1en.pdf).

Table 4: **Key characteristics of trans-national corporations** (1) (2002 – billions of USD and '000s of employees per TNC)

	<b>World TOP 100</b>	<b>Euro-area firms in TOP 100 (42)</b>
Foreign assets	33.2	29.9
Total assets	68.9	61.5
Foreign sales	27.5	30.6
Total sales	47.5	40.6
Foreign employment	70.4	74.9
Total employment	143.3	146.3
<i>Transnationality index</i> (2)	0.52	0.58

(1) The data refers to non-financial TNCs; variables on foreign activity are linked to the home country, not to the EU12.

(2) The index is the average of foreign to domestic assets, foreign to domestic sales and foreign to domestic employment.

Source: UNCTAD.

firms in the top 100 TNCs. The average euro-area firm in this sample has a larger share of foreign assets and sales than the average world firm, whereas the share of employment is about equal. The transnationality index calculated by UNCTAD, which is the average of foreign to

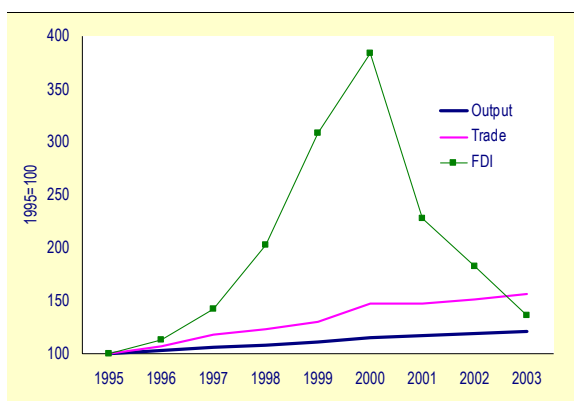
domestic assets, foreign to domestic sales and foreign to domestic employment, suggests that a large share of the activity of these TNC is linked to the home basis. According to this index, euro-area TNC's are more international than those in other countries because of a higher share of foreign sales. However, this result is somewhat misleading as it reflects the high degree of regional economic integration in the euro area. This is not captured in the index which links the home base to the home country rather than the euro area.

**2. Global and euro-area trends in FDI**

In the 1990s, the world economy experienced a significant surge in economic integration. Between 1995 and 2000, world trade grew by more than 8% per annum on average in real terms and world FDI inflows grew by as much as 25% per annum in real terms, well above the expansion of real world GDP of just above 3 % on average over the same period. The extraordinary pace of investment globalisation in

the late 1990s proved, however, to be unsustainable and has been followed by a pronounced consolidation of FDI flows from 2001 onwards (Graph 27).

Graph 27: Trends in world output, trade and FDI (constant prices – 1995 to 2003)



Source: IMF, UNCTAD, Commission services.

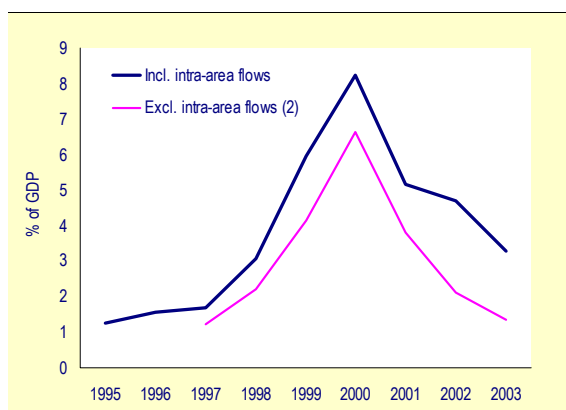
Three main factors explain the sharp increase in global FDI flows observed in the 1990s:

- In many countries, political and economic stability increased while the political attitude towards openness improved considerably. Barriers to trade and cross-border investment were considerably reduced and the number of regulatory changes favourable to FDI accelerated in the second half of the 1990s. Related measures like the EU single market programme encouraged the internationalisation of production whilst financial market integration, deregulation and liberalisation fostered the holding of foreign ownership rights.
- Technical progress reduced the information and transaction costs relating to direct investment abroad and made it easier to manage internationally dispersed transactions. The observation that international investment flows increased much more strongly than world trade indicates that trans-national companies' transaction costs of international ownership fell more strongly than their transaction and transportation costs of goods, suggesting that technical progress in ICT plays a crucial role in stimulating FDI.

- The global equity price bubble of the late 1990s facilitated the financing of FDI and in particular of cross-border M&A activity through equity issuance or equity exchange. Inflated equity prices also caused an artificial boost to FDI data because FDI often implies the acquisition of foreign equity. Thus, it is not surprising that the value of FDI transactions recorded in the balance of payments fell in tandem with equity prices after the bubble burst.

A similar pattern of surging flows in the late 1990s followed by strong consolidation is visible in data for the euro area and euro-area Member States, suggesting that the three factors which shaped global investment also strongly affected euro-area FDI flows. However, Graph 28 shows that the level of euro-area FDI in 2003 was comparable to the level reached in 1998/99 and well above the level recorded in earlier years. In other words, the decline in trans-national investment in the past few years has been more moderate at the euro area level than at the global level. This suggests a stronger underlying trend increase in euro-area FDI flows, a development which can largely be related to intra-area flows. In 2003, total euro-area FDI inflows were more than 3% of GDP compared to a level of extra-area FDI inflows of slightly above 1%.

Graph 28: Euro-area Member States' FDI flows (1) (1995 to 2003)

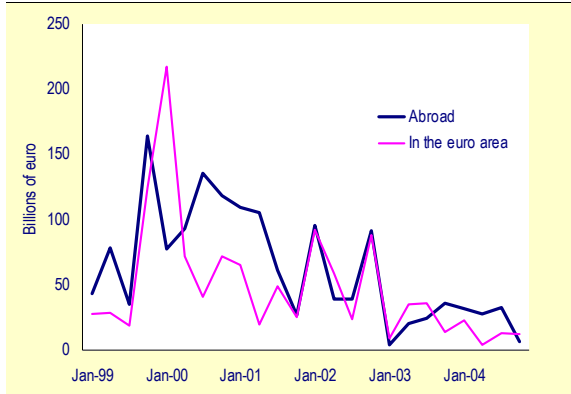


- (1) Average of FDI abroad and foreign FDI in the economy.
- (2) Data only available from 1997.

Source: UNCTAD, ECB, Commission services.



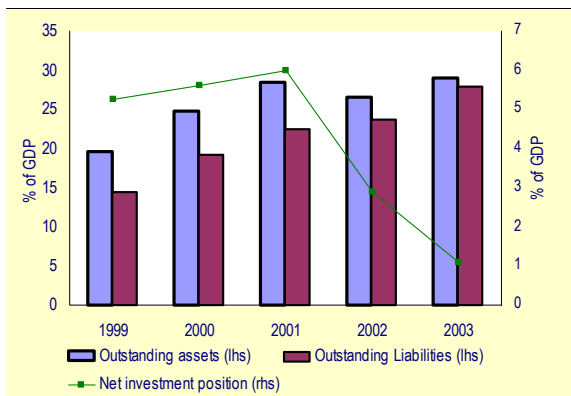
Graph 29: Extra-euro-area FDI flows  
(1999Q1 to 2004Q3)



Source: ECB.

The euro area as a whole has recorded a persistent net outflow of FDI. In particular, the first three years of EMU featured high FDI abroad, when net FDI outflows amounted to more than 100 billion euro in 1999 and 2001.<sup>16</sup> Since 2002, net flows have become more balanced, with the magnitude declining by 2003 to less than 5% of their peak in 2001. Both foreign direct investment outside the euro area and foreign investment by non-residents in the euro area have decreased considerably since then, shrinking by 2003 to ¼ of their peak level in 2000.

Graph 30: Euro-area foreign direct investment position, stocks in % of GDP



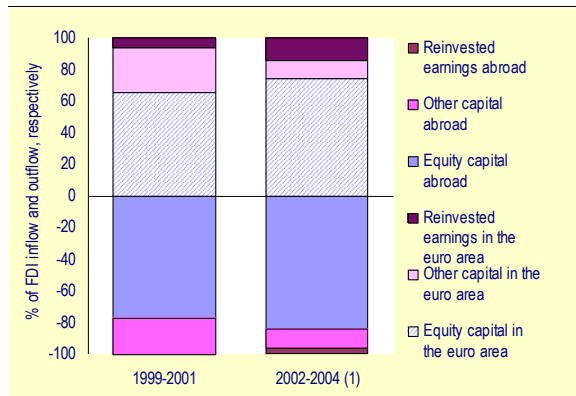
Source: ECB.

<sup>16</sup> Economic interpretation of the FDI data is complicated by the occurrence of M&A transactions, of which some were so large that they dominate the data and give rise to considerable volatility in the time series.

The resulting euro-area investment position rose to above 25% of GDP for both FDI assets and liabilities (see Graph 30). The area's net foreign direct investment position reached 410 billion euro at the end of 2002, equivalent to 6% of GDP, and declined to 80 billion euro at the end of 2003.

Despite the background of lower equity prices, the financing structure of euro-area FDI has in the meantime moved towards a larger share of equity financing in both investment abroad and in the euro area. Graph 31 shows that in particular the share of financing through other capital, which in practice means through inter-company loans, is smaller in 2002-2004 than in 1999-2003 whereas the share of reinvested earnings has increased but remains small.

Graph 31: Structure of euro-area FDI



(1) 2004 is data until September. Inflows (+) and Outflows (-).  
Source: ECB.

### 3 Has EMU spurred FDI activity?

A number of theoretical arguments suggest that EMU could have fostered FDI. The elimination of both transaction costs relating to exchange rates and of nominal exchange rate volatility among Member States is a prominent factor that influences both trade and cross-border investment decisions. Economic theory, however, is ambiguous about the sign of the effect because trade and FDI can be substitutes. On the one hand, lower exchange rate volatility reduces the risk of producing export goods at home compared to producing them abroad. Thus, it could lead to a reduction in FDI. On the

other hand, the uncertainty caused by exchange rate volatility has a negative effect on investment in the presence of sunk costs. A second set of determinants is related to policy measures that aim at economic integration through reducing transaction costs. Firms are able to tap a larger market through cross-border sales or investment (market-size effect). Pressure to exploit these opportunities is likely to be stronger the more intensive the competitive pressure from other enterprises and the more production relies on economies of scale. Finally, harmonisation of regulation reduces information costs, which is seen as a further important determinant of cross-border investment.<sup>17</sup>

Available empirical research tends to confirm the importance of these determinants. Among them, the positive impact of both lower exchange rate-related transaction costs and exchange rate volatility on cross-border investment seems to be the more doubtful explanation although some recent papers find evidence in favour of this effect.<sup>18</sup> The size of the market, as proxied by the level of GDP, usually turns out to be significant in empirical estimates and even the modelling of information asymmetries as a determinant of the extent of cross-border equity holdings yield the expected results.<sup>19</sup>

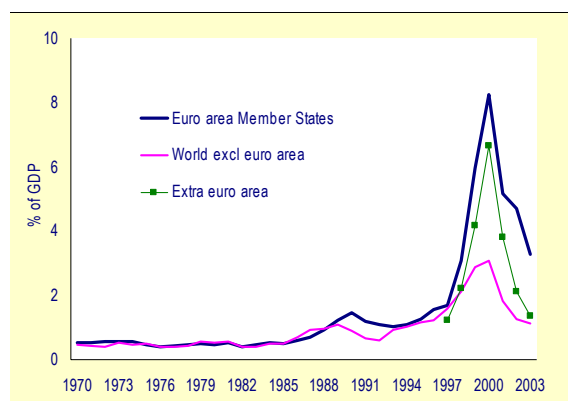
<sup>17</sup> See, for example, Lane, P. and G.M. Milesi-Ferretti (2004), "International investment patterns", IMF Working Paper 04/134. Mody, A. et al. (2003), "The role of information in driving FDI flows", NBER Working Paper No 9662.

<sup>18</sup> See, for instance Wei, S.-J. and C. Choi (2004), "Currency blocks and cross-border investment", unpublished IMF Working Paper and Bénassy-Quéré, A. et al. (1999), "Exchange rate strategies in the competition for attracting FDI", CEPII document de travail No 99-16, who found that low exchange rate variability fosters FDI. Sekkat, K. and O. Galgau (2002), "The impact of the single market on FDI in the EU", mimeo, Université Libre de Bruxelles find a significant effect of short-term volatility on FDI in only a few manufacturing sectors (petroleum, rubber, chemical and plastic products) but not for manufacturing or services as a whole.

<sup>19</sup> Market size was identified as having a stronger impact on FDI than on trade in goods in Nicoletti, G. et al. (2003), "Policies and international integration: influences on trade and FDI", OECD Economics Department Working Paper No 259. For the second effect, see Mody, A. et al. (2003).

Regional integration has been a major driver of FDI in the EU in the 1990s, which is fully consistent with both theoretical conjecture and empirical evidence. Graph 32 shows that FDI activity, here measured as the average of inflows and outflows relative to GDP, was similar in both the euro area and the world economy until the late 1980s.

Graph 32: Euro area and world FDI intensity (1)  
(1970 to 2003)



(1) FDI intensity as measured by the average of FDI abroad and foreign FDI in the economy. Euro area Member States includes intra-area flows.

Source: UNCTAD, ECB, Commission services.

The timing of differences between both series seems to be linked to the single market programme and EMU. For example, FDI intensity in the euro area outpaced activity in the rest of the world after the launch of the single market programme. A wider wedge between both series emerged in the run-up to EMU. Euro-area FDI flows increased to 8% of GDP in 2000 from 1.5% in 1996. This compares with an increase from 1.2% in 1996 to 3% of GDP in 2000 for the rest of the world. The difference between the aggregate including intra-area flows and extra-area flows suggests that the upsurge until 2000 was strongly driven by extra-area flows, in particular by a number of large-scale M&As.

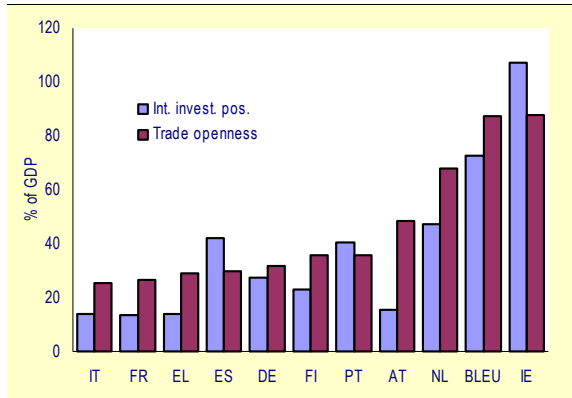
The gap in the world and euro-area FDI/GDP ratio narrowed after 2000, though much less so if the aggregate of the euro-area Member States is looked at rather than the euro area as a whole. The reason is the still high level of intra-area FDI





flows, which ties in with the finding that EMU stimulated intra-area trade in particular.<sup>20</sup>

Graph 33: Cross-border investment position and trade openness (1) (average 1999-2002)



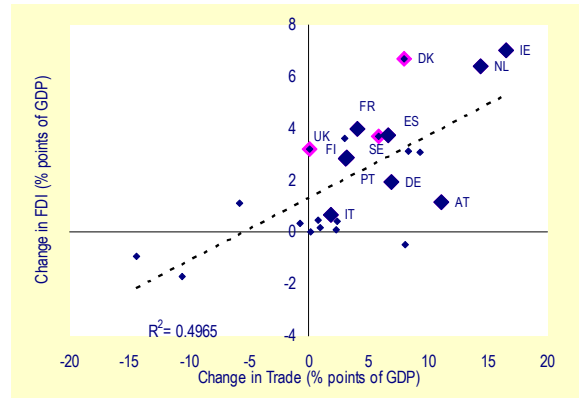
(1) Average of external assets and liabilities for the investment position and of inflows and outflows for trade openness. BLEU is joint data for Belgium and Luxembourg.  
**Source:** Commission services, UNCTAD.

Because of the notion of trade as being a strong motivation for firms to conduct FDI and the similarity of the determinants of trade and cross-border investment in the literature, a broadly comparable ranking of countries in both forms of openness might be expected. Graph 33 shows that this is approximately the case for the euro-area Member States on average for 1999-2002, with two major outliers. Austria has a smaller international investment stock than its degree of trade openness suggests whereas the reverse holds true for Spain.

Graph 34 suggests that the increase in both trade and FDI intensity over 1995-98 and 1999-2002 is strongly correlated in a sample of European and other economies. The trend-line is upward sloping and the R<sup>2</sup> indicates that almost 50% of the variation in the increase in FDI-integration is explained by the increase in trade openness. Thus, if EMU stimulated trade in the euro area, as suggested by a number of empirical papers, it would follow that it also stimulated cross-border investment. Comparing the position of the dots reveals that the increase in both dimensions of openness was higher in euro-area Member States

than in other European and non-European economies.

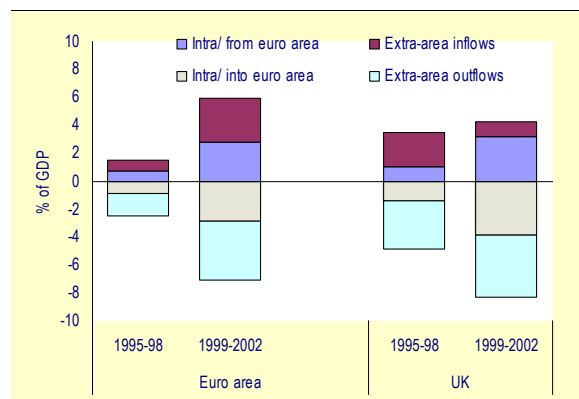
Graph 34: Change in FDI and trade openness (1) (1995-1998 versus 1999-2002)



(1) FDI and trade openness are averages of inflows and outflows. Euro area excluding BLEU and EL. The pink dots are the other EU Member States (excl. HU), US, JP, NO, RO, BG and TR.  
**Source:** Commission services.

Whether the increase in FDI is related to EMU or a lagged effect of the single market is difficult to detect in a comparison of trends in the euro area with those three EU-15 countries that have not adopted the euro. Graph 35 shows the FDI/GDP ratio for the 4-year periods 1995-98 and 1999-2002 for the euro area and the UK.

Graph 35: FDI flows in the euro area (1) and the UK



(1) Euro area excluding EL and IE.  
**Source:** Commission services.

<sup>20</sup> See Quarterly Report on the Euro Area No.3 2003.

Table 5: Empirical estimates of the EMU effect on FDI

	Data	Method	Results
Petroulas (2004)	Bilateral inward FDI, 18 OECD countries, 1992-2001	Panel estimation with EMU dummies, control with IV estimate; control for GDP, stock market value, real exchange rate, complex common time trend	Euro raised intra-area FDI by 17% and by only 9-12% to and from non-Member countries
Manchin (2004)	Acquisition of majority shareholdings 1991-2001, EU-15, USA, CN, NO, CH,	Panel regression with fixed effects, EU and EMU dummies; control for GDP per capita, population, distance, stock market capitalisation, legal system, public activity	No evidence of more intense M&A activity (number and value) between euro-area Member States
Economist Intelligence Unit (2004)	60 countries 1995-2002, FDI inflows	Time series panel regression, control for GDP, business environment, distance, wages, geographical, EU and EMU dummies	EMU raised annual FDI inflows by more than a third.
De Sousa/Lochard (2004a)	23 OECD countries 1982-2002, outward bilateral FDI stocks	Panel estimation with fixed effects, control for GDP, exchange rate volatility and labour market characteristics, EMU dummy	Euro raised intra FDI flows by 42% compared to FDI among non-EMU countries.
De Sousa/Lochard (2004b)	22 OECD countries, 1982-2002, bilateral trade, FDI outward stock	Gravity model for trade with bilateral FDI as independent variable, OLS, IV and fixed-effects estimations; control for GDP, distance, exchange rate volatility, FTA, EU and EMU dummies	Half of the increase in trade in EMU stems from an increase in FDI

Note: The effect of EMU on trade is estimated to vary between 5-50%, depending on the study considered. See Quarterly Report on the Euro area No.3 2003 for a discussion.

**Sources:** Petroulas, P. (2004), "The effect of the Euro on foreign direct investment", Mimeo, University of Stockholm. Manchin, M. (2004), "Determinants of European cross-border mergers and acquisitions", European Commission DG ECFIN Economic Papers No 212. Economist Intelligence Unit (2004), "World investment prospects 2004: The revival of globalisation?", EIU London. De Sousa, J. and J. Lochard (2004a), "Does the single currency affect FDI?", Mimeo, University of Paris I and University of Rennes. De Sousa, J. and J. Lochard (2004b), "The currency union effect on trade and the FD channel", Mimeo, University of Paris I and University of Rennes.

It is evident that FDI activity was much higher in the UK in the first period while FDI penetration was about equal in both economic entities in the second period, possibly meaning that the euro has allowed the euro area to catch up to the initially higher UK level.<sup>21</sup> Sweden and Denmark, the other two "out" countries, witnessed a development similar to the one in the euro area.

Formal tests of whether EMU has had an effect on FDI flows are similar to those applied on the trade effect, i.e. the usual determinants of trade/FDI are run on bilateral trade/FDI flows to see whether an EMU dummy is significant. Although this kind of research has only been recently addressed by academics (see Table 5), first results suggest that EMU exerted a positive effect on FDI if the estimate controls for other

determinants, for instance the effect of the single market (EU dummies in Table 5).

A further focus of recent empirical research has been on FDI and international business cycle comovement. Jansen and Stockman (2004) find that countries with comparatively intensive FDI relations also have more synchronised business cycles. Furthermore, FDI is associated with the vulnerability to foreign output spill over that occurs with a lag, while international trade has immediate effects. Trade linkages quickly transmit a shock between economies and then shut down, i.e. stop transmitting, whereas the FDI channel implies a lasting effect for up to half a year.<sup>22</sup>

<sup>21</sup> Interpreting the data is complicated by a single large-scale M&A transaction (Vodafone/Mannesmann) between the UK and the euro area that inflates euro-area inflows from non-euro-area countries and UK outflows into the euro area in the second period.

<sup>22</sup> Jansen W.J. and C.J. Stockman (2004), "FDI and International Business Cycle Comovement", De Nederlandsche Bank, Amsterdam.



#### 4. Did outward FDI divert investment from the euro area?

The net outflow of FDI from the euro area suggests that the representative trans-national corporation expects higher returns from its activity abroad than from investment in the euro area. It also means the absorption of domestic savings, which could have been used for domestic investment. This section elaborates on the impact of FDI abroad on the home region. The effect crucially depends on two factors: the motivation behind FDI and - especially in the case of vertically-integrated FDI - the functioning of adjustment processes in the home economy.

Since 1999, the euro area has invested about 1400 billion euro abroad, which is 17% on average of the domestic investment registered between 1999 and the first half of 2004. Such a comparison, however, does not take into account that the euro area also received FDI from abroad. The net FDI outflow amounted to just 330 billion euro, i.e. 4.5% of investment

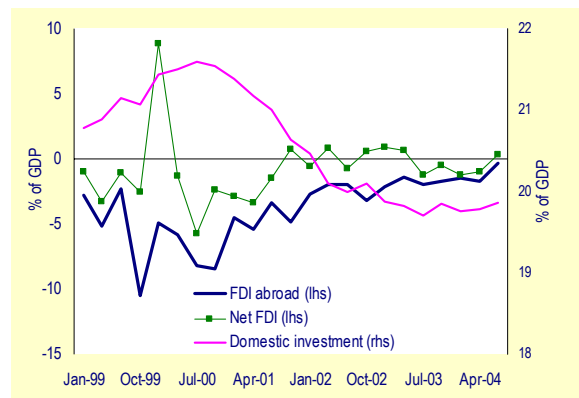
However, there is a conceptual difference between gross fixed capital formation (investment) and FDI because the latter comprises both greenfield investment and M&A. FDI inflows in M&A lead to a transfer of ownership rights but not to an increase in the euro-area capital stock. If 50% of the net FDI inflows were in M&A, the net capital outflow of savings, i.e. net of FDI inflows in greenfield investment, would be equal to about 11% of domestic investment per annum.

The 17% of investment of FDI abroad therefore represents a biased figure. It could only be considered a measure of the maximum amount available for additional domestic investment. The figure of 4.5%, on the other hand, is a lower bound (assuming that FDI inflows are all greenfield investment or that M&A inflows free domestic savings that are transformed into domestic investment).

Graph 36 suggests that the argument of investment-diverting FDI is flawed. FDI outflows from the euro area – absolute and in net terms – were high during the boom period 1999-2000 when investment was also buoyant. Since

2001, outward FDI flows have moderated and the investment share has come down. This observation provides support for the overall belief that FDI activity is pro-cyclical, being high in a buoyant economic environment with high domestic investment and vice versa. Thus, FDI abroad and capital formation seem to be complements rather than substitutes.

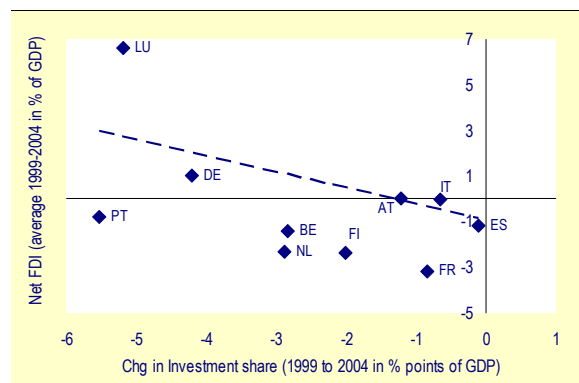
Graph 36: Investment and FDI (1), euro area (1999Q1 to 2004Q2)



(1) (-) indicates a capital outflow.

Source: ECB, Commission services.

Graph 37: Net FDI and the change in domestic gross fixed capital formation, euro area (1999 to 2004)



Source: Commission services.

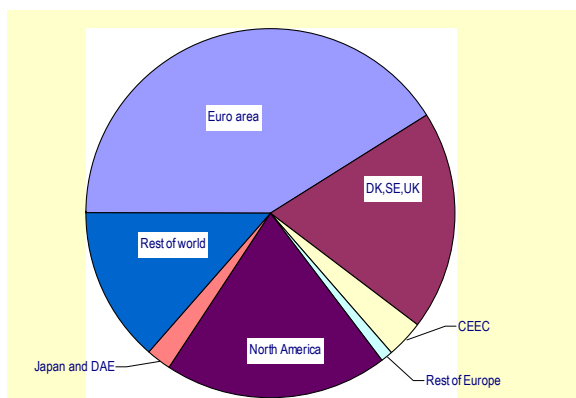
Graph 37 compares the net outflow of FDI from the euro-area Member States with the deterioration in the countries' investment share between 1999 and 2004.<sup>23</sup> It does not allow the conclusion that higher net outflows mean a stronger decline in the investment share. Rather

<sup>23</sup> There is no systematic relationship between net FDI outflows and the level of investment.

the opposite seems to be true. France is the country with the highest FDI outflow relative to GDP in 1999-2004. A relatively small drop was recorded in its investment share whereas in Germany the investment share deteriorated considerably despite net FDI inflows.

Apparently, the overall impact of outward investment on domestic activity depends on the objective behind investment abroad. Horizontal FDI achieves better access to foreign markets and stimulates trade with the target country. The effects for the source country of vertical FDI, characterised by the re-location of parts of the value chain, are more complex, implying benefits in terms of lower costs and higher profitability, which need to be balanced against the reduction in domestic employment (see Box 6). It is the latter effect in particular that often dominates headlines in economic news.

Graph 38: Euro-area FDI outflows by target region,(1)  
(average 1999-2002)



(1) Excluding reinvested earnings for BLEU, EL, ES.  
**Source:** Commission services.

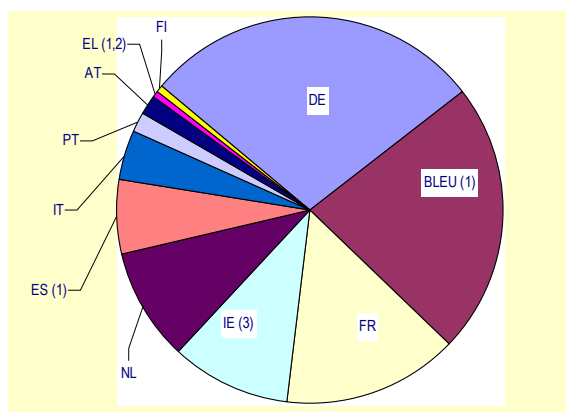
To what extent is FDI driven by lower costs in the target countries? As Graph 38 demonstrates, most of the euro-area FDI abroad flows to other industrial countries. According to the still provisional 2003 data, two thirds of all FDI outflows remained in the EU-15. Only about 22% was invested outside the EU-15, North America and Japan, and could be assumed of being driven by considerations of taking advantage of low labour costs.

The share of FDI going to North America has approximately halved since the economic boom

of 1999-2000 when a fifth of all FDI from euro-area countries targeted North America. The decline in the share of FDI flowing in particular to the USA seems to have been absorbed entirely by a higher share of intra-area FDI. According to the data available so far, neither the share of FDI flowing to the new Member States nor to Eastern Asia or the rest of the world was higher in 2001/02 than in the period 1998-2000.<sup>24</sup>

Among intra-area FDI flows, the Southern European countries are not among the major recipients of FDI. The largest share of intra-area FDI was invested in 1999-2002 in Germany, BLEU, France and the Netherlands. This suggests that domestic market size and distance to big markets have been a more important determinant of FDI flows than differences in labour costs.

Graph 39: Targets of intra-area flows  
(average 1999-2002)



(1) Excluding reinvested earnings.  
(2) average 2000-01.  
(3) average 2001-02.  
**Source:** Commission services.

## 5 Policy implications

The macroeconomic consequence of high cross-border investment activity is a stronger relationship of economic activity across borders and in particular among euro-area Member States. As euro-area trans-national corporations earn a higher share of profits abroad, they are

<sup>24</sup> The 2003 data is still provisional and incomplete. It points to a US share of 9% of all euro-area FDI abroad.



*Box 6: The benefits from outsourcing for the source country*

Though the benefits from FDI are similar to those of trade, little quantitative analysis is available on the benefits for the source country (on the impact on the host country, see Box 2). Empirical work established that job losses due to FDI are small compared to changes in total employment (see Bernanke 2004 for the USA and Konings 2004 for the EU). However, this should not neglect the fact that it entails hardship for the workers concerned from the off-shoring of production.

**Table : The distribution of income generated by 1 USD spent on a service job in India in US cent**

	Host	Source
Wages paid to local workers, profits of local agents, local taxes	33	
Corporate savings		58
Additional exports to source countries as input for the services		5
Repatriated earnings		4
<b>Sum of direct benefits</b>	<b>33</b>	<b>67</b>
Redeployed labour		45-47
<b>Sum of total benefits</b>	<b>33</b>	<b>112-114</b>

Source: Baily/Farrell (2004).

In a recent contribution for an international consultancy agency, Bailey and Farrell give an intriguing illustration of how the benefit from relocating a service job from the USA to India is distributed among the source and the host country. They calculate that India captures 33% of the corporate spending, benefiting from local wages etc. The direct benefits accruing for the source countries in the form of corporate savings, additional exports and repatriated earnings are twice as high. Under perfect competition, the company would be forced to fully pass-through its cost savings to lower prices, implying that it is the consumer who benefits most from the investment abroad. A further benefit for the source economy accrues in the form of redeployed labour. The authors quote estimates for the USA according to which the workers set free through off-shoring move to another job and this reallocation of jobs adds value of 45-47 cent for every US dollar invested in Indian services.

This example gives an illustration of the different effects involved. It also highlights two factors that are crucial for the source country to draw maximum benefits from investment abroad. Product market competition must be sufficiently intense so that consumer prices decline and consumers benefit. And labour markets need to be adaptable in order to prevent the redundant labour force in the domestic economy from becoming unemployed. On both accounts the euro area compares unfavourably with the USA, implying less economic benefits from FDI than on the other side of the Atlantic.

**Reference:**

Bernanke, B.S. (2004). 'Trade and Jobs', Remark at the Distinguished Speaker Series, *Fuqua School of Business*, <http://www.federalreserve.gov/boarddocs/speeches/2004/20040330/default.htm>.

Konings, J. (2004), "The employment effects of foreign direct investment", *EIB Papers*, Vol. 9, No. 1, pp. 87-108.

Baily, M.N. and D. Farrell (2004), "Exploding the myths of offshoring", *McKinsey Quarterly*, July, <http://www.mckinseyquarterly.com>.

more exposed to fluctuations inactivity and prices in the host countries. Returns from investment abroad represent a larger share of consumer and corporate income, implying that cross-border capital flows have become a more important channel for the international transmission of shocks than in the past decade.

This means that, all things being equal, business cycles tend to become more alike across borders. While this makes the euro area more vulnerable to global shocks, it also gives rise to benefits from international risk-sharing, entailing a

smoothing of shocks. Since FDI flows have intensified in particular within the euro area, these mechanisms foster more synchronised business cycles among Member States than prior to EMU.

FDI is often a precondition for access to foreign markets. In general, foreign direct investment ensures a more efficient allocation of factors on a global scale, making more and cheaper products available for consumption. In order to fully harvest the microeconomic benefits from FDI, product market competition, flexible labour

markets and efficient financial markets are crucial.

- Consumers benefit more the more competition enforces the pass-through of lower costs into lower consumer prices. Euro-area companies need to be sufficiently competitive and able to adapt to structural change.<sup>25</sup>
- The globalisation of production inevitably leads to industrial restructuring. Although job losses in the industries concerned are small compared to aggregate employment, they cause severe costs for the individuals hit. Designing adjustment policies that help displaced workers in the short term and promote strong investment in human capital and efficient skill-matching mechanisms would be an important means of accruing the maximum benefit from FDI.<sup>26</sup>
- To fully exploit the beneficial effect of the single currency on FDI, Member States may have to address the remaining hindrances on the foreign acquisition of companies.

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<sup>25</sup> See European Commission (2004), “Fostering structural change: an industrial policy for an enlarged Europe“, COM(2004)274.

<sup>26</sup> See Chapter 5 in European Commission (2004) “Employment in Europe report 2004”, [http://europa.eu.int/comm/employment\\_social/employment\\_analysis/employ\\_2004\\_en.htm](http://europa.eu.int/comm/employment_social/employment_analysis/employ_2004_en.htm).



### III. Recent DG ECFIN publications

#### 1. Policy documents

EUROPEAN ECONOMY. No. 3. 2004

**Public finances in EMU - 2004**

[http://europa.eu.int/comm/economy\\_finance/publications/european\\_economy/public\\_finances2004\\_en.htm](http://europa.eu.int/comm/economy_finance/publications/european_economy/public_finances2004_en.htm)

EUROPEAN ECONOMY. No. 4. 2004

**The 2004 Broad Economic Policy Guidelines BEPGs. COM(2004)238 final**

[http://europa.eu.int/comm/economy\\_finance/publications/european\\_economy/broadeconomypolicyguidelines2004\\_en.htm](http://europa.eu.int/comm/economy_finance/publications/european_economy/broadeconomypolicyguidelines2004_en.htm)

EUROPEAN ECONOMY. No. 5. 2004

**Economic Forecasts, Autumn 2004**

[http://europa.eu.int/comm/economy\\_finance/publications/european\\_economy/forecasts\\_en.htm](http://europa.eu.int/comm/economy_finance/publications/european_economy/forecasts_en.htm)

EUROPEAN ECONOMY. No. 6. 2004

**The EU Economy: 2004 Review**

[http://europa.eu.int/comm/economy\\_finance/publications/the\\_eu\\_economy\\_review\\_en.htm](http://europa.eu.int/comm/economy_finance/publications/the_eu_economy_review_en.htm)

EUROPEAN ECONOMY. OCCASIONAL PAPERS. No. 8. April 2004

**The Portuguese economy after the boom**

[http://europa.eu.int/comm/economy\\_finance/publications/occasional\\_papers/occasionalpapers8\\_en.htm](http://europa.eu.int/comm/economy_finance/publications/occasional_papers/occasionalpapers8_en.htm)

EUROPEAN ECONOMY. OCCASIONAL PAPERS. No. 9. October 2004

**" Country Study: Denmark – Making work pay, getting more people into work**

[http://europa.eu.int/comm/economy\\_finance/publications/occasional\\_papers/occasionalpapers9\\_en.htm](http://europa.eu.int/comm/economy_finance/publications/occasional_papers/occasionalpapers9_en.htm)

EUROPEAN ECONOMY. OCCASIONAL PAPERS. No. 10. November 2004

**Rapid loan growth in Russia: A lending boom or a permanent financial deepening?**

[http://europa.eu.int/comm/economy\\_finance/publications/occasional\\_papers/occasionalpapers10\\_en.htm](http://europa.eu.int/comm/economy_finance/publications/occasional_papers/occasionalpapers10_en.htm)

Communication by the Commission on "Strengthening economic governance and clarifying the implementation of the Stability and Growth Pact" (COM(2004)581)

[http://europa.eu.int/comm/economy\\_finance/publications/sgp/com2004581\\_en.htm](http://europa.eu.int/comm/economy_finance/publications/sgp/com2004581_en.htm)

Communication by the Commission on "The situation of Germany and France in relation to their obligations under the excessive deficit procedure following the judgement of the Court of Justice" (COM(2004)813)

[http://europa.eu.int/comm/economy\\_finance/about/activities/sgp/edp/com\\_com\\_2004\\_en.pdf](http://europa.eu.int/comm/economy_finance/about/activities/sgp/edp/com_com_2004_en.pdf)

#### 2. Analytical documents

EUROPEAN ECONOMY. ECONOMIC PAPERS. No. 209.

Rachel Griffith (Institute for Fiscal Studies, IFS, and Centre for Economic Policy Research, CEPR) and Rupert Harisson (IFS)

**The link between product market reform and macro-economic performance**

[http://europa.eu.int/comm/economy\\_finance/publications/economic\\_papers/economicpapers209\\_en.htm](http://europa.eu.int/comm/economy_finance/publications/economic_papers/economicpapers209_en.htm)

EUROPEAN ECONOMY. ECONOMIC PAPERS. No. 210.

Lars Jonung and Martin Larch

**Improving fiscal policy in the EU: the case for independent forecasts**

[http://europa.eu.int/comm/economy\\_finance/publications/economic\\_papers/economicpapers210\\_en.htm](http://europa.eu.int/comm/economy_finance/publications/economic_papers/economicpapers210_en.htm)

EUROPEAN ECONOMY. ECONOMIC PAPERS. No. 211.

Rainer Wichern

**Economics of the Common Agricultural Policy**

[http://europa.eu.int/comm/economy\\_finance/publications/economic\\_papers/economicpapers211\\_en.htm](http://europa.eu.int/comm/economy_finance/publications/economic_papers/economicpapers211_en.htm)

EUROPEAN ECONOMY. ECONOMIC PAPERS. No. 212.

Miriam Manchin

**Determinants of European cross-border mergers and acquisitions**

[http://europa.eu.int/comm/economy\\_finance/publications/economic\\_papers/economicpapers212\\_en.htm](http://europa.eu.int/comm/economy_finance/publications/economic_papers/economicpapers212_en.htm)

EUROPEAN ECONOMY. ECONOMIC PAPERS. No. 213.

Hielke Buddelmeyer (Melbourne Institute of Applied Economic and Social Research & IZA), Gilles Mourre (Directorate General for Economic and Financial Affairs) and Melanie Ward (European Central Bank, CEPR and IZA)

**The determinants of part-time work in EU countries: empirical investigations with macro-panel data**

[http://europa.eu.int/comm/economy\\_finance/publications/economic\\_papers/economicpapers213\\_en.htm](http://europa.eu.int/comm/economy_finance/publications/economic_papers/economicpapers213_en.htm)

EUROPEAN ECONOMY. ECONOMIC PAPERS. No. 214.

Scott L. Baier (Clemson University) and Jeffrey H. Bergstrand (University of Notre Dame)

**Trade agreements and trade flows: Estimating the effect of free trade agreements on trade flows with an application to the European Union - Gulf Cooperation Council Free Trade Agreement**

[http://europa.eu.int/comm/economy\\_finance/publications/economic\\_papers/economicpapers214\\_en.htm](http://europa.eu.int/comm/economy_finance/publications/economic_papers/economicpapers214_en.htm)

EUROPEAN ECONOMY. ECONOMIC PAPERS. No. 215.

Pilar Bengoechea (Directorate-General for Economic and Financial Affairs) and Gabriel Pérez Quirós (Bank of Spain)

**A useful tool to identify recessions in the euro area**

[http://europa.eu.int/comm/economy\\_finance/publications/economic\\_papers/economicpapers215\\_en.htm](http://europa.eu.int/comm/economy_finance/publications/economic_papers/economicpapers215_en.htm)

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Alfonso Arpaia and Giuseppe Carone

**Do labour taxes (and their composition) affect wages in the short and the long run?**

[http://europa.eu.int/comm/economy\\_finance/publications/economic\\_papers/economicpapers216\\_en.htm](http://europa.eu.int/comm/economy_finance/publications/economic_papers/economicpapers216_en.htm)

EUROPEAN ECONOMY. ECONOMIC PAPERS. No. 217.

Andrea Montanino, Bartosz Przywara and David Young (Directorate General for Economic and Financial Affairs)

**Investment in education: the implications for economic growth and public finances**

[http://europa.eu.int/comm/economy\\_finance/publications/economic\\_papers/economicpapers217\\_en.htm](http://europa.eu.int/comm/economy_finance/publications/economic_papers/economicpapers217_en.htm)

EUROPEAN ECONOMY. ECONOMIC PAPERS. No. 219.

Daniel Grenouilleau (Directorate General for Economic and Financial Affairs)

**A sorted leading indicators dynamic (SLID) factor model for short-run euro-area GDP forecasting**

[http://europa.eu.int/comm/economy\\_finance/publications/economic\\_papers/economicpapers219\\_en.htm](http://europa.eu.int/comm/economy_finance/publications/economic_papers/economicpapers219_en.htm)

### ***3. Regular publications***

**Euro area GDP indicator** (Indicator-based forecast of quarterly GDP growth in the euro area)

[http://europa.eu.int/comm/economy\\_finance/indicators/euroareagdp\\_en.htm](http://europa.eu.int/comm/economy_finance/indicators/euroareagdp_en.htm)

**Business and Consumer Surveys** (harmonised surveys for different sectors of the economies in the European Union (EU) and the applicant countries)

[http://europa.eu.int/comm/economy\\_finance/indicators/businessandconsumersurveys\\_en.htm](http://europa.eu.int/comm/economy_finance/indicators/businessandconsumersurveys_en.htm)

**Business Climate Indicator for the euro area** (monthly indicator designed to deliver a clear and early assessment of the cyclical situation)

[http://europa.eu.int/comm/economy\\_finance/indicators/businessclimate\\_en.htm](http://europa.eu.int/comm/economy_finance/indicators/businessclimate_en.htm)

**Key indicators for the euro area** (presents the most relevant economic statistics concerning the euro area)

[http://europa.eu.int/comm/economy\\_finance/indicators/key\\_euro\\_area/keyeuroarea\\_en.htm](http://europa.eu.int/comm/economy_finance/indicators/key_euro_area/keyeuroarea_en.htm)

**Monthly and quarterly notes on the euro-denominated bond markets** (looks at the volumes of debt issued, the maturity structures, and the conditions in the market)

[http://europa.eu.int/comm/economy\\_finance/publications/bondmarkets\\_en.htm](http://europa.eu.int/comm/economy_finance/publications/bondmarkets_en.htm)

**Price and Cost Competitiveness**

[http://europa.eu.int/comm/economy\\_finance/publications/priceandcostcompetiteveness\\_en.htm](http://europa.eu.int/comm/economy_finance/publications/priceandcostcompetiteveness_en.htm)





## IV. Key indicators for the euro area

<b>1 Output</b>		2001	2002	2003*	Jun-04	Jul-04	Aug-04	Sep-04	Oct-04	Nov-04
Industrial confidence <sup>1.1</sup>	Balance	-10	-12	-11	-4	-4	-4	-3	-3	-3
Industrial production <sup>1.2</sup>	mom % ch	0.2	-0.9	0.2	-0.1	0.2	-0.6	0.5		
		2001	2002	2003*	03Q3	03Q4	04Q1	04Q2	04Q3	04Q4
Gross domestic product <sup>1.3</sup>	Qtr. % ch				0.5	0.4	0.7	0.5	0.3	
<b>2 Private consumption</b>		2001	2002	2003*	Jun-04	Jul-04	Aug-04	Sep-04	Oct-04	Nov-04
Consumer confidence <sup>2.1</sup>	Balance	-6	-11	-18	-14	-14	-14	-13	-14	-13
Retail sales <sup>2.2</sup>	mom % ch	1.3	1.3	0.1	1.9	-0.2	0.8	0.1		
		2001	2002	2003*	03Q3	03Q4	04Q1	04Q2	04Q3	04Q4
Private consumption <sup>2.3</sup>	Qtr. % ch	1.9	0.6	1.1	0.2	0.0	0.6	0.2	0.2	
<b>3 Investment</b>		2001	2002	2003*	03Q3	03Q4	04Q1	04Q2	04Q3	04Q4
Capacity utilization <sup>3.1</sup>	%	83.5	81.2	80.7	80.3	80.9	80.5	80.6	81.4	81.7
Gross fixed capital formation <sup>3.2</sup>	Qtr. % ch	-0.3	-2.7	-0.4	0.1	1.0	-0.3	0.3	0.6	
Change in stocks <sup>3.3</sup>	% of GDP	-0.2	-0.1	0.0	-0.5	0.2	0.1	0.2	0.8	
<b>4 Labour market</b>		2001	2002	2003*	Jun-04	Jul-04	Aug-04	Sep-04	Oct-04	Nov-04
Unemployment <sup>4.1</sup>	%	8.0	8.4	8.9	8.9	8.9	8.9	8.9	8.9	
		2001	2002	2003*	03Q3	03Q4	04Q1	04Q2	04Q3	04Q4
Employment <sup>4.2</sup>	Ann. % ch	1.4	0.5	0.1	0.0	0.0	0.0	0.1		
Shortage of labour <sup>4.3</sup>	%	7.8	3.8		2.0	2.0	3.0	3.0		
Wages <sup>4.4</sup>	Ann. % ch	2.8	2.9	2.5	2.3	2.1	2.2			
<b>5 International transactions</b>		2001	2002	2003*	Jun-04	Jul-04	Aug-04	Sep-04	Oct-04	Nov-04
Export order books <sup>5.1</sup>	Balance	-14	-22	-24	-11	-8	-9	-10	-10	-11
Exports of goods <sup>5.2</sup>	Bn. EUR	767.4	776.9	1038.6	100.0	100.7	85.7	97.5		
Imports of goods <sup>5.3</sup>	Bn. EUR	802.2	781.6	970.4	91.1	87.9	82.7	94.4		
Trade balance <sup>5.4</sup>	Bn. EUR	-34.8	-4.7	68.2	9.0	12.8	3.0	3.1		
		2001	2002	2003*	03Q3	03Q4	04Q1	04Q2	04Q3	04Q4
Exports of goods and services <sup>5.5</sup>	Qtr. % ch	3.4	1.7	0.2	2.6	0.3	1.5	3.1	1.2	
Imports of goods and services <sup>5.6</sup>	Qtr. % ch	2.1	-1.6	2.1	1.3	2.0	0.5	2.8	3.2	
		2001	2002	2003*	Jun-04	Jul-04	Aug-04	Sep-04	Oct-04	Nov-04
Current account balance <sup>5.7</sup>	Bn. EUR	-12.3	9.6		3.0	0.4	0.5	-3.2		
Direct investment (net) <sup>5.8</sup>	Bn. EUR	-104.6	-90.4		-13.8	-8.5	9.3	5.3		
Portfolio investment (net) <sup>5.9</sup>	Bn. EUR	36.5	38.0		31.7	-30.7	6.3	39.6		
<b>6 Prices</b>		2001	2002	2003*	Jun-04	Jul-04	Aug-04	Sep-04	Oct-04	Nov-04
HICP <sup>6.1</sup>	Ann. % ch	2.3	2.3	2.1	2.4	2.3	2.3	2.1	2.4	2.2
Core HICP <sup>6.2</sup>	Ann. % ch	1.9	2.5	2.0	2.2	2.1	2.2	2.0	2.0	
Producer prices <sup>6.3</sup>	Ann. % ch	2.2	1.7	1.6	2.4	2.9	3.1	3.3	4.0	
Import prices <sup>6.4</sup>	Ann. % ch	102.2	102.4	102.5						
<b>7 Monetary and financial indicators</b>		2001	2002	2003*	Jun-04	Jul-04	Aug-04	Sep-04	Oct-04	Nov-04
Interest rate (3 months) <sup>7.1</sup>	% p.a.	4.3	3.3	2.3	2.1	2.1	2.1	2.1	2.2	2.2
Bond yield (10 years) <sup>7.2</sup>	% p.a.	5.0	4.8	4.1	4.3	4.2	4.1	4.0	3.9	3.8
ECB repo rate <sup>7.3</sup>	% p.a.	3.25	2.75		2.00	2.00	2.00	2.00	2.00	2.00
Stock markets <sup>7.4</sup>	Index	4047	3053	2420	2791	2730	2647	2749	2794	2883
M3 <sup>7.5</sup>	Ann. % ch	5.3	5.6	7.8	5.2	5.4	5.7	5.8		
Credit to private sector (loans) <sup>7.6</sup>	Ann. % ch	7.9	7.7	5.0	6.0	6.2	6.0	6.3	6.6	
Exchange rate USD/EUR <sup>7.7</sup>	Value	0.90	0.95	1.13	1.21	1.23	1.22	1.22	1.25	1.30
Nominal effective exchange rate <sup>7.8</sup>	Index	91.5	95.1	106.4	108.4	108.9	108.9	109.6	110.8	112.3

Number	Indicator	Note	Source
<b>1</b>	<b>Output</b>		
1.1	Industrial indicator confidence	Industry survey, average of balances to replies on production expectations, order books, and stocks (the latter with inverted sign)	ECFIN
1.2	Industrial production	Volume, excluding construction, wda	Eurostat
1.3	Gross domestic product	Volume (1995), seasonally adjusted	Eurostat
<b>2</b>	<b>Private consumption</b>		
2.1	Consumer indicator confidence	Consumer survey, average of balances to replies on four questions (financial and economic situation, unemployment, savings over next 12 months)	ECFIN
2.2	Retail sales	Volume, excluding motor vehicles, wda	Eurostat
2.3	Private consumption	Volume (1995 prices), seasonally adjusted	Eurostat
<b>3</b>	<b>Investment</b>		
3.1	Capacity utilisation	In percent of full capacity, manufacturing, seasonally adjusted, survey data (collected in each January, April, July and October).	ECFIN
3.2	Gross fixed formation capital	Volume (1995 prices), seasonally adjusted	Eurostat
3.3	Change in stocks	In percent of GDP, volume (1995 prices), seasonally adjusted	Eurostat
<b>4</b>	<b>Labour market</b>		
4.1	Unemployment	In percent of total workforce, ILO definition, seasonally adjusted	Eurostat
4.2	Employment	Number of employees, partially estimated, seasonally adjusted	ECB/ Eurostat
4.3	Shortage of labour	Percent of firms in the manufacturing sector reporting a shortage of labour (unfilled job openings) as a constraint to production, seasonally adjusted	ECFIN
4.4	Wages	Not fully harmonised concept, but representative for each Member State (mostly hourly earnings)	ECFIN
<b>5</b>	<b>International transactions</b>		
5.1	Export order books	Industry survey; balance of positive and negative replies, seasonally adjusted	ECFIN
5.2	Exports of goods	Bn. EUR, excluding intra euro area trade, fob	Eurostat
5.3	Imports of goods	Bn. EUR, excluding intra euro area trade, cif	Eurostat
5.4	Trade balance	Bn. EUR, excluding intra euro area trade, fob-cif	Eurostat
5.5	Exports of goods and services	Volume (1995 prices), including intra euro area trade, seasonally adjusted	Eurostat
5.6	Imports of goods and services	Volume (1995 prices), including intra euro area trade, seasonally adjusted	Eurostat
5.7	Current account balance	Bn. EUR, excluding intra euro area transactions; before 1997 partly estimated	ECB
5.8	Direct investment (net)	Bn. EUR, excluding intra euro area transactions	ECB
5.9	Portfolio investment (net)	Bn. EUR, excluding intra euro area transactions	ECB
<b>6</b>	<b>Prices</b>		
6.1	HICP	Harmonised index of consumer prices	Eurostat
6.2	Core HICP	Harmonised index of consumer prices, excluding energy and unprocessed food	Eurostat
6.3	Producer prices	Without construction	Eurostat
6.4	Import prices	Import unit value index for goods	Eurostat
<b>7</b>	<b>Monetary and financial indicators</b>		
7.1	Interest rate	Percent p.a., 3-month interbank money market rate, period averages	Datastream
7.2	ECB repo rate	Percent p.a., minimum bid rate of the ECB, end of period	Datastream
7.3	Bond yield	Percent p.a., 10-year government bond yields, lowest level prevailing in the euro area, period averages	Datastream
7.4	Stock markets	DJ Euro STOXX50 index, period averages	Datastream
7.5	M3	Seasonally adjusted moving average moving average (3 last months)	ECB



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7.6	Credit to private sector MFI loans to euro area residents excluding MFIs and general government, (loans)	monthly values: month end values, annual values: annual averages	ECB
7.7	Exchange rate USD/EUR	Period averages	ECB
7.8	Nominal effective exchange rate	Against 13 other industrialised countries, double export weighted, 1995 = 100, increase (decrease): appreciation (depreciation)	ECFIN

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**Contributors to this issue are:**

Recent economic developments and short-term prospects

*Carsten Brzeski, Oskar Grevesmühl and Dario Paternoster*

Price and cost competitiveness in the euro area

*Carsten Brzeski*

Recent developments in inflation

*Eric Ruscher*

Inflation differences between Member States: an update

*Eric Ruscher*

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