



QUARTERLY REPORT ON THE EURO AREA

Volume 6 N° 2 (2007)

Highlights in this issue:

- **Recent economic developments and short-term prospects**
- **The impact of the euro appreciation on domestic prices and the trade performance**
- **Spillovers revisited: fiscal policy and inflation in the euro area**
- **A mid-term review of budgetary policy in the euro area**
- **Focus: EU financial integration and euro-area adjustment**

**EUROPEAN
COMMISSION**

**DIRECTORATE-GENERAL FOR
ECONOMIC AND FINANCIAL AFFAIRS**



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EDITORIAL

Good times are here for the euro area. The economic expansion is solid with GDP growing at an annual rate of 3% in the first quarter of this year and business and consumer confidence running high. Inflation has been stable at around 1.9% since November last year. It also looks like good times are there to stay for some time. The Commission's spring 2007 forecast estimates that the euro-area's economy will grow by 2.6% in 2007. This is an upward revision of ½ percentage point with respect to the autumn forecast. The inflation outlook also remains benign in the light of moderate wage growth, a revival in productivity growth and low imported inflation thanks to the euro's appreciation. Nevertheless, upward risks to prices may materialise as the cycle matures.

The most recent national account data show that GDP growth in the first quarter was mainly driven by the high and accelerating growth rate of investment spending. By contrast, there was a small contraction in consumer spending, reflecting Germany's VAT increase. But as consumer confidence levels have approached an all-time high in the last few months, consumer spending seems to be all set to resume its upward momentum. Finally, the euro-area's export performance continued to benefit from a supportive international environment. However, with the easing of the so far exceptionally strong growth of world trade, the uncertain economic prospects for the USA and the appreciation of the euro, there is some risk that export growth will decelerate.

Econometric estimates presented in this Report show that a real appreciation of the euro has a relatively modest downward effect on the euro-area's export performance: estimates indicate that a 1% real effective appreciation would lower the level of euro-area exports by 0.25% after two years. Between 2001 and 2006 euro-area exporters on the whole did well as buoyant world trade growth dwarfed exchange-rate effects. However, the export performance of the different Member States has been quite heterogeneous. These differences have little to do with differences in Member States' exposures to exchange rate fluctuations, but

show that some countries have clearly been more successful than others in safeguarding their price and non-price competitiveness. This enabled exporters of these countries to better seize the opportunities of a benign international environment and overcome the effects of a euro appreciation.

From a fiscal policy perspective, we should now build on the premise that times are indeed good. Whether times are "good" or not, is important because – according to the reformed Stability and Growth Pact – structural efforts towards the medium-term budgetary objectives should be higher than the 0.5% GDP benchmark adjustment in good times. In practice, however, it is not always easy to identify when good times start. Painful policy mistakes have been made in the past, when policy-makers realized only after the boom that they had missed the opportunity to make progress with fiscal consolidation. Hence, when identifying good times it is better to be safe than sorry. Therefore, according to the revised Code of Conduct, the identification of good times should be based on the examination of overall economic conditions and take a forward-looking approach.

Overall, the current economic and budgetary developments clearly point to a situation of "good times" in the euro area and in most of its Member States. This was explicitly recognised by the Eurogroup in the context of the annual Mid-Term Review of Budgetary developments. Relevant considerations were, for instance, that (i) the output gap is only slightly negative and moving towards positive territory; (ii) the labour market situation is improving rapidly; and (iii) current tax elasticities are high.

Against this background, and as most excessive deficit situations have been corrected, a major challenge ahead is to ensure that the momentum of fiscal adjustment is maintained so as to rapidly progress towards sustainable fiscal positions. In this context, the Eurogroup issued an important statement in April 2007, ahead of national budgetary preparations, saying that "Taking advantage of the favourable cyclical

conditions, most euro area members would achieve their MTOs in 2008 or 2009 and all of them should aim for 2010 at the latest'. Despite progress in 2006, there are, however, sources of concern. First, some doubts can be cast on the durability of the fiscal consolidation made in 2006. While the budget deficit of the euro area came down substantially to 1.6% of GDP, this reduction was driven by large positive surprises in tax revenues which compensated expenditure overruns in some Member States. Second, some countries which have not yet reached their medium-term objectives do not plan sufficient fiscal efforts in 2007 and 2008.

Fiscal consolidation is first and foremost in the interest of the Member States themselves. It creates the necessary scope for the full working of the automatic stabilisers in less favourable cyclical phases. It also allows a reduction of debt levels before the budgetary effects of the retirement of the baby boom generation set in. Finally, rigorous fiscal policies contribute to keeping interest rates low and therefore to the crowding-in of investment and to lower debt servicing costs.

This report also stresses the importance of financial market integration for EMU. In addition to the well-documented positive effect of financial market developments on economic growth, financial integration is also critical for the smooth functioning of EMU. In a monetary union, cross-border financial flows play a crucial role in stabilising income and output at the Member State level, by expanding opportunities for economic agents to smooth consumption and investment over time. This stabilisation role – linked to more efficient resource allocation and enhanced risk-sharing opportunities – is very important for the euro area as cross-border labour mobility tends to be relatively limited and nominal and real wages tend to be sticky downwards. Therefore, euro-area Member States have even more to gain from financial integration than the rest of the EU and we would expect these countries to be

in the vanguard when it comes to creating an integrated financial market for the EU as a whole.

However, while financial market integration is indispensable for a smooth-functioning of a monetary union, there are some possible undesirable side effects that policy-makers need to be prepared for. The elimination of currency risk and the ease of financing imbalances in highly integrated markets have, to some extent, reduced the impact of market discipline on national economic policies. Furthermore, deep and integrated financial markets tend to amplify both favourable events and distortions in national economies. In some euro-area Member States, the drop in risk premia and loosened credit constraints that have resulted from financial market integration and the launch of the euro, have been accompanied by sizeable losses in competitiveness and the build-up of persistent current-account imbalances. Hence, the benefits of financial integration in the economic adjustment process can be optimised only if accompanied by policies that underpin macroeconomic and financial stability. More specifically, it is important to remove structural rigidities and thus enhance economic flexibility, strengthen prudential oversight, and ensure a sound fiscal setting.



Klaus REGLING
DIRECTOR GENERAL



I. Economic situation in the euro area

The latest reading of the national accounts shows that the solid economic expansion continued in the euro area in the first quarter of 2007. Growth was driven by strong spending on investment which accelerated further after an already very healthy reading in the previous quarter. Private consumption contracted slightly in the first quarter on the back of the VAT effect in Germany but considerably less than expected and should recover quickly as the economic expansion continues. Both business and consumer confidence remain at elevated levels with the latter approaching historical highs. The inflation outlook remains benign in the presence of anchored inflation expectations, tame imported inflation and slow progress in unit labour costs, although some upward risks to prices may materialise as the cycle matures. According to the Commission spring 2007 forecast, GDP in the euro area will expand by 2.6% in 2007, an upward revision of ½ percentage point compared to the autumn forecast.

The euro's appreciation since 2001 has had positive implications for euro-area prices and purchasing power but has also weighed on exporters' performance. The analysis shows that any change in the euro exchange rate has a large and rapid impact on euro-area import prices but that the knock-on effect to producer and consumer prices is more muted and slower. The appreciation since 2001 should bring gains in household purchasing power of about 5% in the long run. The analysis also suggests that fluctuations in the real exchange rate have only a relatively modest impact on export performance with a 1% appreciation of the REER reducing the level of extra-area exports by 0.25% after two years. Between 2001 and 2006, exchange rate developments curbed annual growth in extra-area exports by 0.6 pp. This is small relative to the 5% average annual growth in extra-area exports registered over the period and should be seen against the 0.5 pp annual fillip provided by exchange rate developments during the phase of euro depreciation of the second half of the 1990s. The appreciation has played only a limited role in the sharp differences in export performance between Member States in recent years.

This report also revisits the link between fiscal policy and inflation. Simulations show that a fiscal expansion can have quite sizeable effects on inflation although results will depend on whether the expansion is based on increased expenditures or tax cuts. An additional dimension in the euro area is the existence of spillovers across Member States. Simulations also show that inflation spillovers from a fiscal expansion in one Member State to the rest of the euro area can be of a sizeable magnitude and rather persistent for expenditure shocks in large and open countries.

The Mid-Term Review of Budgetary policy in the euro area shows that the budgetary situation continued to improve in 2006. The government deficit was reduced to 1.6% of GDP and the euro area debt ratio recorded its first decline since 2002. The reduction of the deficit was primarily driven by large positive surprises in tax revenue which compensated expenditure overruns in some Member States. Now that most excessive deficit situations have been corrected, a major challenge ahead is to ensure that fiscal adjustment continues so as to progress towards sustainable fiscal positions. In particular, the current budgetary plans of some countries not yet at their medium-term objective fall short of the requirements of the SGP, which calls for significant consolidation efforts in economic good times.

1. Recent economic developments and short-term prospects¹

Solid economic growth continues in the first quarter of 2007

The vigorous economic expansion continued in the euro area in the first quarter of 2007. GDP rose 0.6% q-o-q, somewhat less than in 2006 Q4 but still a healthy 3.0% annual rate. This is fully in line with the Commission's spring 2007 forecast. Growth in the first quarter was broad-based across most euro-area countries. The

momentum was impressive in Spain and Slovenia (1.1% and 2.2% q-o-q, respectively) and above average in most smaller Member States for which data is available. Germany and France were slightly below average (0.5%). Growth in Italy dropped after very strong Q4 (1.1%) to a meagre 0.3% — which is nevertheless still a stronger performance than expected in the Commission forecast.

Strong investment growth drives domestic demand

Growth in Q1 was driven by domestic demand and in particular investment spending as well as changes in inventories. Investment went up by 2.5% q-o-q, compared to an already strong

¹ The cut-off date for the statistics included in this issue was 22 June 2007.

Table 1: Euro-area growth components

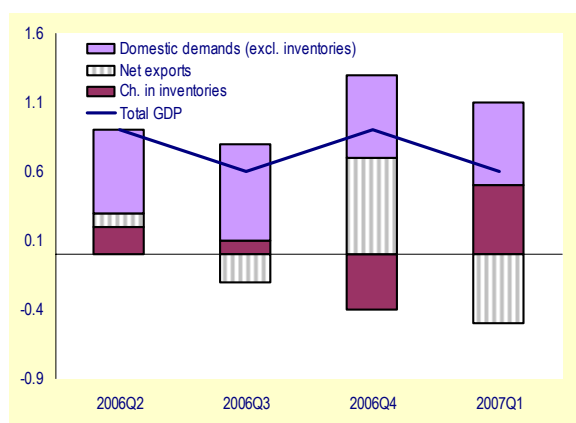
	2006	2006	2006	2007	Carryover to 2007	Forecast (1)	
	Q2	Q3	Q4	Q1		2007 (2)	2008 (2)
Percentage change on previous period, volumes							
GDP	0.9	0.6	0.9	0.6	1.8	2.6	2.5
Private consumption	0.3	0.7	0.4	-0.1	0.6	2.1	2.4
Government consumption	0.1	0.6	0.4	0.8	1.4	1.8	1.8
Gross fixed capital formation	2.1	1.0	1.5	2.5	4.6	4.4	3.6
Changes in inventories (% of GDP)	0.2	0.2	-0.4	-0.9	-0.4	0.7	0.5
Exports of goods and services	1.0	1.4	3.5	0.3	3.8	6.7	6.0
Imports of goods and services	0.8	2.1	1.7	1.6	4.2	6.7	6.2
Percentage point contribution to change in GDP							
Private consumption	0.2	0.4	0.2	-0.1	0.3	1.2	1.3
Government consumption	0.0	0.1	0.1	0.2	0.3	0.4	0.4
Gross fixed capital formation	0.4	0.2	0.3	0.5	1.0	0.9	0.8
Changes in inventories	0.2	0.1	-0.4	0.5	0.0	0.1	0.0
Net exports	0.0	-0.2	0.8	0.5	-0.1	0.1	0.0

(1) Annual change in %. (2) European Commission spring 2007 forecasts.

Source: Commission services.

+ 1.5% in the previous quarter. This translates into an impressive investment growth of 7.2% annually. The breakdown of investment spending by sector is not yet available for Q1. However, growth of value added in the construction sector accelerated to +1.9% in Q1 from an already strong +1.5% in the previous quarter. This indicates that investment in Q1 continued to be underpinned by robust expansion in both construction and equipment.

Graph 1: Contributions to real GDP growth, euro area (q-o-q contributions in % points – 2006 Q2 to 2007 Q1)



Source: Commission services.

The available evidence suggests that the momentum in the construction sector is now primarily driven by business construction rather than housing. Data from Q4 shows that growth in non-residential construction was, at 2.6% q-o-

q, five times as high as growth in residential construction. Other indicators also point to some cooling off in the euro-area housing market. Growth in residential property prices is on a downward trend: it decelerated from close to 8% in 2005 to 6.4% in 2006 and showed a downward dynamic during the course of 2006. In turn, growth in mortgage lending for house purchase, both total lending and lending above a 5-year maturity, is easing – from above 12% in March 2006 to 8.9% in March 2007.

Equipment investment also saw impressive growth against a background of still-favourable financing conditions, sound corporate profits and an overall positive economic outlook. Gross operating surplus of corporations grew, on average, at a solid 4.5% per year over the 2000-2006 period. The profit share of non-financial corporations (i.e. the share of added value created during the production process remunerating capital employed) soared in 2006 Q4, rising by more than one percentage point.

The strength of corporate investment is also visible in corporate borrowing data. The April reading of the ECB bank lending survey revealed that net demand for loans by enterprises was significantly positive in Q1 (although somewhat lower than in the previous quarter) and is expected to remain so in Q2. Factors behind the persistent high positive net demand continued to be dominated by corporate restructuring (M&A)



Table 2: Selected euro-area and national leading indicators, 2006-2007

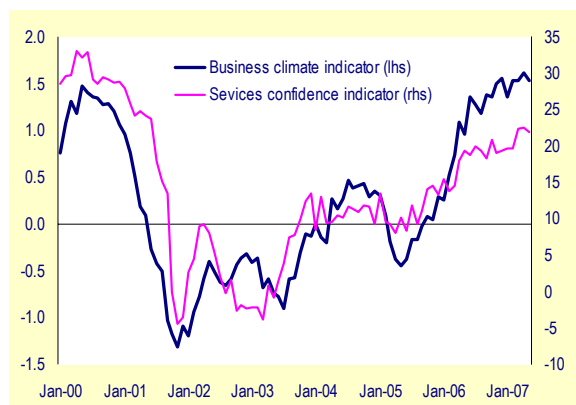
	SENT. IND ¹⁾	BCI ²⁾	OECD ³⁾	PMI Man. ⁴⁾	PMI Ser ⁵⁾	IFO ⁶⁾	NBB ⁷⁾	ZEW ⁸⁾
Long-term average	101.6	0.00	92.6	52.7	54.8	96.8	-7.2	27.2
Trough in latest downturn	88.1	-1.25	-0.77	42.9	46.7	87.3	-26.5	-10.4
June 2006	108.6	1.4	108.7	57.7	60.7	104.2	10.6	37.8
July 2006	109.7	1.3	108.7	57.4	57.9	102.6	5.6	15.1
August 2006	108.7	1.2	108.9	56.6	57.5	101.4	3.3	-5.6
September 2006	110.4	1.4	109.0	56.6	56.7	99.0	5.0	-22.2
October 2006	110.9	1.4	109.3	57.0	56.5	99.3	2.4	-27.4
November 2006	112.6	1.5	109.4	56.6	57.6	100.2	4.1	-28.5
December 2006	112.4	1.6	109.5	56.5	57.2	102.5	2.4	-19
January 2007	110.8	1.4	109.6	55.5	57.9	103.2	1.1	-3.6
February 2007	112.0	1.5	109.8	55.6	57.5	102.6	0.0	2.9
March 2007	113.8	1.5	110.0	55.4	57.4	103.2	-1.0	5.8
April 2007	113.6	1.6	110.0	55.4	57.0	104.3	2.3	16.5
May 2007	114.9	1.5		55.0	57.3	104.8	3.9	24.0
June 2007				55.4*	58.3*	102.8	6.5	20.3

1) Economic sentiment indicator, DG ECFIN. 2) Business climate indicator, DG ECFIN. 3) Composite leading indicator. 4) Reuters Purchasing Managers Index, manufacturing. 5) Reuters Purchasing Manager Index, services. 6) Business expectations, West Germany. 7) National Bank of Belgium indicator for manufacturing. 8) Business expectations of financial market analysts, Germany.

* These are flash estimates

and fixed investment – in stark contrast to the period before the second half of 2005 when corporations mainly borrowed because of corporate and debt restructuring and not for investment purposes.

Graph 2: Business confidence indicators, euro area
(Balance in % – Jan 2000 to May 2007)



Source: Commission services.

Recent business indicators suggest that investment growth will remain strong in the second quarter. Capacity utilisation rates are at their highest level since 1991 and rising while growth in industrial new orders remains quite robust at more than 12% y-o-y in April. The latest reading of industrial production was disappointing, with a 0.8% month-on-month drop in April, but the data should be interpreted with caution as there were probably strong

calendar effects. Furthermore, business confidence is running very high. Despite a small drop in May, the Business Climate Indicator remains close to its all time high. Moreover, the Reuters flash PMI points to rebound of confidence in June. In particular, the PMI showed a strong increase from 57.3 to 58.3 in the services' sector, a level not reached since June 2006.

As was predicted in the March edition of the QREA, enterprises replenished their stocks after the stark depletion registered in Q4 2006 so that changes in inventories contributed positively to Q1 growth.

Private consumption down but set to recover quickly

On a less positive note, household consumption dropped slightly – by 0.1% – in the first quarter after increasing by 0.4% in the last quarter of 2006. This clearly reflects the impact of the VAT hike in January on household consumption growth which, in Germany, dropped by 1.4% in Q1. This was supplemented by a weakening of household consumption in Spain where quarter-on-quarter consumption growth fell by a full percentage point, from 1.3% in 2006Q4 to 0.3% in 2007Q1. A more detailed look at the Spanish figures, however, reveals that the same pattern of a systematic slowdown in consumption in Q1 and the usual strong consumption profile in the

Box 1: Quarterly euro-area accounts for institutional sectors

In June 2007, for the first time, Eurostat and the European Central Bank published sector accounts for the euro area and EU aggregates on a quarterly basis. These statistical data show detailed economic developments by institutional sector: households, non-financial corporations, financial corporations and government. They also provide information on the interactions between these institutional sectors and the rest of the world. Moreover, quarterly financial balance sheets for the euro area are now available. These series cover the period from the first quarter of 1999 to the fourth quarter of 2006. New data for each quarter should be released four months after the reference quarter.

Euro-area sector accounts have been available on an annual basis for some time now but their compilation and dissemination by quarter will significantly improve the short-term analysis of the euro-area economy. It is now, for instance, possible to analyse developments in households' gross disposable income and the contributions of the different components for each quarter. Growth in household disposable income picked up from the first quarter of 2005 to the first quarter of 2006. It then remained broadly constant before decreasing slightly again in the last quarter of 2006, a development which appears surprising in view of the economic recovery. Growth in the households' gross operating surplus (mostly composed of the income of the self-employed), in contrast, accelerated steadily through 2006. The improvement was, however, offset by weak developments in property income, higher taxes and, despite robust growth in employment, a significant deceleration of employees' compensation in the last quarter. The accounts also include useful information on the quarterly contributions of the different components of net entrepreneurial income of non-financial corporations. During the last quarter of 2006, the moderate growth of compensation of employees together with a higher growth of the net value added contributed to a surge in net entrepreneurial income.

Other key indicators such as the household saving rate, the business investment rate and the business profit share are also available in these accounts.

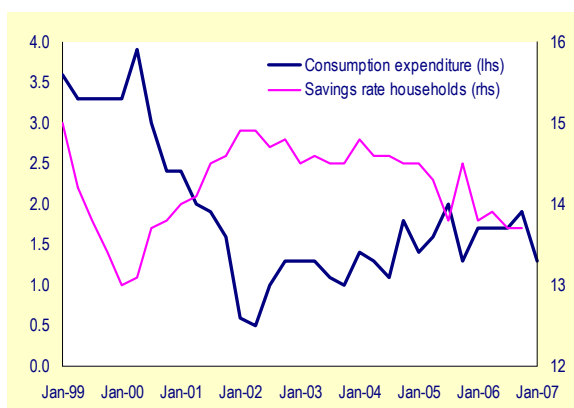
<p>Contribution of components to the growth of gross disposable income of households, euro area (1) (y-o-y changes in %)</p>	<p>Contribution of components to the growth of net entrepreneurial income of non-financial corporations, euro area (y-o-y changes in %)</p>
<p>(1) This includes households and Non-Profit Institutions Serving Households (NPISH) Source: Commission services, ECB.</p>	<p>Source: Commission services, ECB.</p>

It should be noted that, with a few exceptions, the series are neither seasonally nor working-day adjusted.



remaining three quarters had also been recorded in previous years, so that the deceleration in consumption in Q1 should be interpreted with prudence. Overall, the mild contraction in private consumption in the euro area in the first quarter is likely to reflect mostly temporary factors, so that household spending can be expected to regain momentum in the next few quarters.

Graph 3: Household saving rate and y-o-y consumption growth, euro area (in % – 1999 Q1 to 2007 Q1)



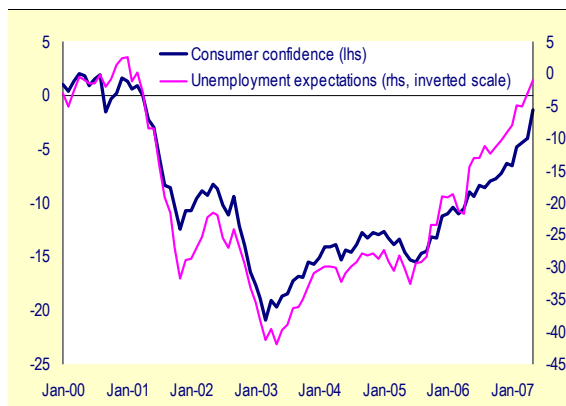
Source: Commission services.

One element which should support household spending in the next months is strong consumer confidence. After having been on a steady upward path since mid-2005 and, having increased even more steeply since spring 2007, consumer confidence is now rapidly approaching an all-time high. The most pronounced improvement in consumer confidence from April to May was recorded in France – possibly a reaction to the presidential elections. The positive outlook for consumer spending also continues to be supported by the very positive developments on the labour market. Unemployment receded further to 7.1% in April, almost a full percentage point lower than a year earlier, and employment growth continued to expand robustly, by 0.4% q-o-q in Q1. Consumers' unemployment expectations for the next 12 months improved further in the spring, while business employment expectations improved moderately in the manufacturing industry and significantly in the services sector. Thus both consumers and producers expect the labour market to continue to brighten further.

The main factor which has been weighing on consumer spending in recent quarters is sluggish

disposable income. Despite clear signs of economic recovery, y-o-y growth in nominal disposable income failed to accelerate in 2006 and even decelerated, from 3.3% to 2.8%, during the second half of the year (no data are yet available for the first quarter of 2007). This was mostly attributable to a decrease in the contribution of employees' compensation to the growth of disposable income, which fell from 3.0% to 2.2% despite robust employment growth (see Box 1). The lower-than-expected increase in disposable income was not compensated by a reduction in the savings ratio, which has instead remained broadly stable since mid-2005 (Graph 3). As the recovery unfolds and employment growth continues, disposable income should strengthen in the coming quarters, particularly as non-labour income continues to pick up. The effect on consumption could be reinforced by a drop in precautionary savings, although developments observed since 2005 do not give much ground for optimism in this regard.

Graph 4: Consumer confidence, euro area (Balance in % – Jan 2000 to May 2007)



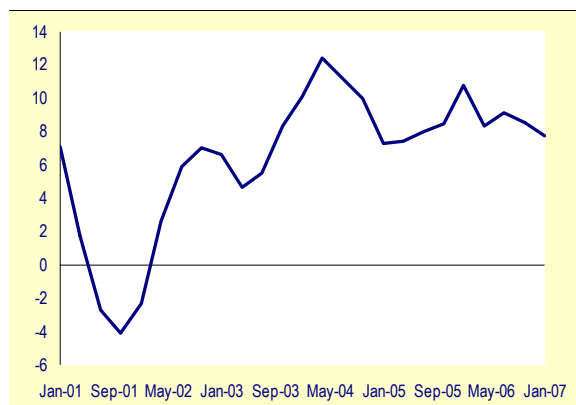
Source: Commission services.

The international environment stays supportive, but showed some signs of cooling off in Q1

Euro-area trade growth decelerated significantly in Q1 with exports rising by a meagre 0.3%, after an impressive 3.5% in Q4. Import growth stayed broadly stable compared to the previous quarter, but because of the drop in export growth, net exports contributed negatively to growth in Q1. Once again, developments in Germany left their trace in the overall euro-area figure. German

exports in Q1 receded (-1.2%) after a very strong Q4 (+6.0%). However, as the German 2006 Q4 figure had been inflated by statistical effects – many exports effected earlier in 2006 entered the foreign trade statistics only in 2006 Q4 – a correction was to be expected.

Graph 5: Growth in global trade
(y-o-y in % – 2001 Q1 to 2007 Q1)



Source: CPB, Commission's calculations.

In addition to statistical effects, the lower figure for exports may also reflect a slight cooling-off of the international environment. According to the latest estimates of the CPB Netherlands Bureau for Economic Policy Analysis, world trade still rose at a solid 7.7% (y-o-y) in Q1, but this is not quite as strong as the figure in previous quarters. Other indicators, however, suggest that the softening of the world economy remains, at this juncture, rather moderate. The global PMI started sluggishly at the beginning of Q1 but recovered later on in the quarter. It was led by stronger trends in production, new orders and employment. This more positive development is set to continue in the second quarter of this year as the April PMI started on a brighter note than in the first quarter. In a similar vein, the April reading of the quarterly World Economic Survey (WES) also pointed to a slight weakening of current global economic developments. Nevertheless, the survey's expectations for the following six months improved slightly in the last two quarters. Finally, export expectations for the months ahead, as recorded in the Commission's manufacturing survey, have weakened somewhat since the end of last year but remain very high by historical standards.

One factor which may be weighing somewhat on the euro area's export performance is the appreciation of the euro. In real effective terms, the euro has appreciated by about 5% since the beginning of 2006. In the Commission's business surveys, manufacturers have reported a deterioration of their competitive position outside the EU since the middle of last year. The impact of the euro appreciation should, however, not be overestimated. Manufacturers' perceived competitiveness still remains at its long-term average and the recent relapse in the indicator partly marks a correction to a sharp improvement between early 2005 and mid-2006. Furthermore, econometric analysis shows that euro-area exports are not very sensitive to exchange rate movements (see Section 2 of this report on the impact of the euro appreciation on domestic prices and exports).

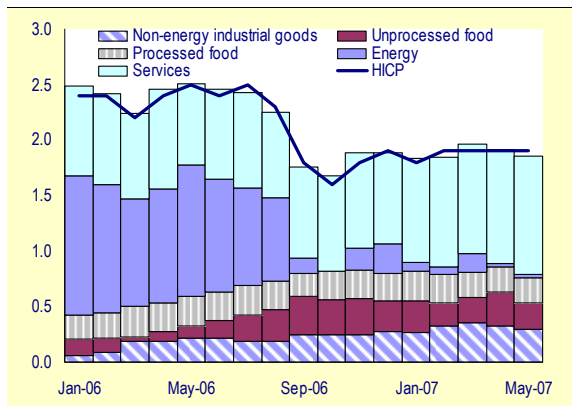
At this juncture, the major element of uncertainty for the global outlook is the situation in the US. After four quarters of below-potential growth, the US economy seems to have reaccelerated in 2007 Q2 helped by an upturn in the inventory cycle and improving net exports. The ISM manufacturing and non-manufacturing indices reached the highest level of the year in May and consumer spending has shown surprising resilience. The unemployment rate has remained close to 4.5%. However, the correction in the housing market continues and is likely to dampen growth further. Spillovers to other parts of the economy, so far largely absent, may yet materialise.

Impact of the VAT hike on inflation rather moderate

Euro-area HICP inflation stood at an annual 1.9% in May, thus broadly stable since November 2006. Services continued to make the highest contribution to inflation, being responsible for a good half of the overall rise in the HICP. Thanks to favourable base effects, energy – despite the recent rebound in crude oil prices – did not contribute much to inflation in the first months of 2007. Benign developments in the prices of energy and unprocessed food have left headline and core inflation running at broadly the same pace since the beginning of the year.



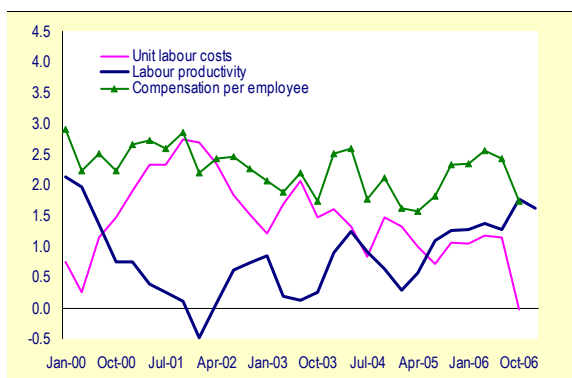
Graph 6: Contributions to headline inflation, euro area
(y-o-y changes in % - Jan 2006 to May 2007)



Source: Commission services.

An analysis of the drivers of inflation shows that the renewed appreciation of the euro since 2006 has kept a lid on imported inflation (see Section 2 for further discussion). Wage inflation has also remained tame so far. Unit labour cost growth decelerated sharply during the second half of 2006, with y-o-y growth falling to zero in the fourth quarter on the back of further wage moderation and a rebound in productivity. Eurostat's hourly labour cost indicator suggests that wage growth remained modest in the first quarter of 2007.

Graph 7: Unit labour costs, labour productivity and wages, euro area
(y-o-y changes in % - 2000 Q1 to 2006 Q4)



Source: Commission services.

In May, inflation was above the euro-area average in Ireland, Greece, Spain and Slovenia and significantly below the average in Belgium, France and Finland. Due to the VAT hike in January, German annual HICP inflation went up by about half a percentage point from the

December figure of 1.4% and stabilised around 2.0% in the period January – May 2007. Hence, the impact of the VAT hike on the overall price level has been rather moderate.

Short-term outlook and risks

Inflation expectations are overall consistent with benign inflation developments in the future. The indicator measuring households' price expectations for the next twelve months in the Commission's Consumer Survey has decreased significantly since the beginning of the year. On the corporate side, managers' expectations regarding price pressures have remained broadly stable in recent months, both in industry (based on the Commission's Business Survey) and in the service sector (based on the PMI survey). In the short run, benign inflation expectations combined with tame imported inflation and slow progress in unit labour costs should help contain price pressures in the euro area. According to the Commission's spring 2007 forecast, overall inflation should remain moderate, averaging 1.9% for 2007 as a whole.

Nevertheless, as the business cycle matures, upward risks to prices will increase. The advanced cyclical position in many euro-area economies could finally translate into upward pressures on wages. Wage growth has, so far, been moderate within the euro area as a whole, but the low euro-area average conceals distinct differences at the country level², so that once the benign wage developments in e.g. Germany and Austria come to an end, the picture in the euro area as a whole is also likely to deteriorate. Moreover, labour shortages are likely to become more acute as the cycle matures and as the underlying trend of robust employment growth persists with more than 5 million jobs projected to be created over the 2007-2008 period.

Overall, economic prospects for the euro area remain bright. The Commission's spring 2007 forecast expects GDP to grow by 2.6% in 2007, an upward revision of ½ percentage point compared to the autumn forecast. Domestic demand is expected to be the main driver of

² See, for example, the analysis in the Quarterly Report on the Euro Area, Volume 6 No. 1 (2007).

growth, on the basis of solid investment growth. Private consumption is – at last – projected to accelerate. Exports, while still developing positively, are expected to contribute less to the expansion than previously. Oil prices are projected to stay high and financing conditions, while continuing to be supportive to growth, will be less so than in previous years.

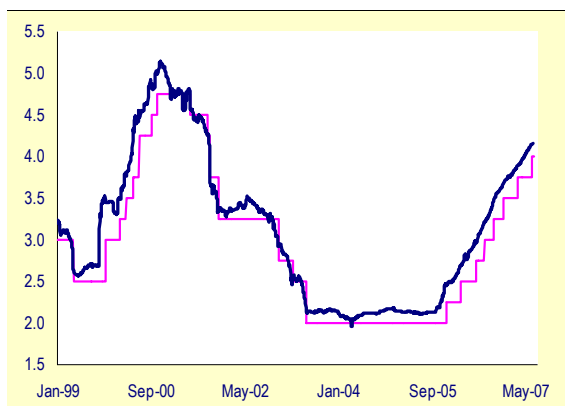
Risks seem to be broadly balanced for 2007 – with upside risks for domestic demand which could prove stronger than projected. On the downside, a more pronounced slowdown in the US could weigh on the euro area's economic development. Although it now seems more likely that the US will see only a limited slowdown, it still remains to be seen how deep the downturn on the housing market really will be. Moreover, a sharper-than-expected US slowdown could be a catalyst for an abrupt unwinding of financial imbalances globally which would in turn weigh on the euro area. In some Member States a sharper slowdown of housing investment could materialise, although current signs point to a gradual cooling-off on the Irish and Spanish housing markets. Finally, oil prices have been on the rise recently and, if geopolitical tensions intensify, they could again become a source of downside risks to growth.

Monetary and financial conditions

On 6 June 2007, the ECB Governing Council raised its policy interest rates by 25 basis points. Since December 2005, the ECB's key interest rate has been raised by a total of 200 basis points, from 2% to currently 4%. The ECB decisions to hike interest rates were motivated by upside risks to price stability, identified by the Governing Council through both its economic and monetary analyses, and should anchor medium- to longer-term inflation expectations in the euro area at levels consistent with price stability.

Driven by the strong growth momentum of the euro area and statements by members of the ECB Governing Council, financial market participants have gradually increased their expectations of further rate hikes. While market expectations in March, as derived from future contracts, had priced in an end to the current rate hiking cycle at 4 percent, a policy rate of 4.5 percent is now expected by the first half of 2008.

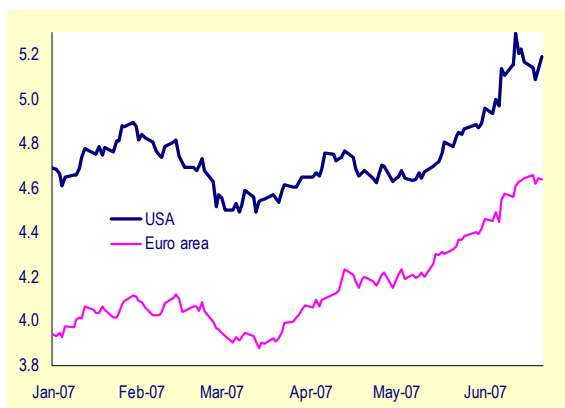
Graph 8: ECB minimum bid rate and 3-month EURIBOR (in % – 4 Jan 99 to 22 June 07)



Source: Commission services.

The changes in policy interest rate expectations have been reflected in long-term interest rate developments in the euro area. Since end-March, 10-year-government-bond yields in the euro area have increased by around 50 basis points, and at the end of June, long-term interest rates were standing at 4.6%, their highest level since October 2002.

Graph 9: 10-year government bond yields (in % – 2 Jan 06 to 22 June 07)



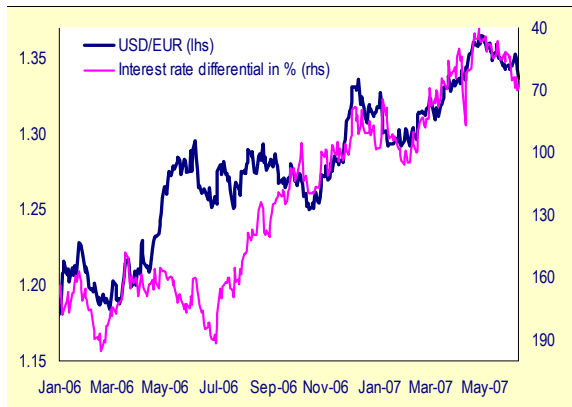
Source: Commission services.

In the US, the increase in 10-year-government-bond yields was less pronounced than in the euro area between the end of March and mid-May, when concerns about the growth outlook and speculation on Fed rate cuts dominated financial markets. At that time, developments in government bond markets were seen as reflecting the ongoing gradual decoupling between the US and euro-area economy. However, since the May meeting of the FOMC, when the policy rate was



left unchanged, bond markets have experienced a significant sell-off, bringing US bond yields to their highest level since May 2002. The sell-off seems to be mainly triggered by changed market perceptions of the US economic outlook, driven by indications of improved economic prospects. Earlier market expectations about possible Fed rate cuts faded away and some analysts even started to speculate on possible rate hikes. While the recent increase in bond yields seems to be fully explainable by macro-economic factors, some commentators have linked it to a receding of global liquidity and a possible repatriation of Asian funds and a shift into euro.

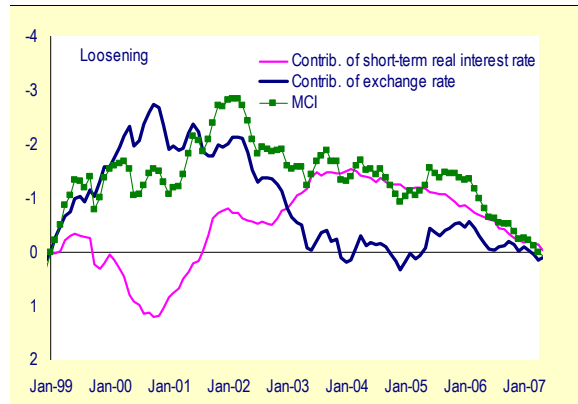
Graph 10: USD/EUR exchange rates and interest rate differential (1 Jan 06 to 22 June 07)



Source: Commission services.

As far as exchange rate developments are concerned, the new appreciation of the euro exchange rate against the US dollar since the beginning of the year, which led to a new record high in late April of USD/EUR 1.365, came to a (temporary) halt in May. Since early May, the bilateral exchange rate has fluctuated within a narrow margin around a level of USD/EUR 1.34. Movements in the bilateral exchange rate, similar to bond market developments, can be mainly explained by interest rate expectations and differences in the assessment of the economic outlook. Since mid-May, financial markets appear to have been giving the prospects of a soft landing in the US at least the same weight as the prospect of the ECB raising rates to 4.5%.

Graph 11: Euro-area MCI and its contributors (Index Jan 1999=100 – Inverted scale – Jan 99 to May 07)



Source: Commission services.

Overall, increasing interest rates and an appreciating currency have led to some further tightening of monetary conditions in the euro area as measured by ECFIN's Monetary Conditions Index (MCI).

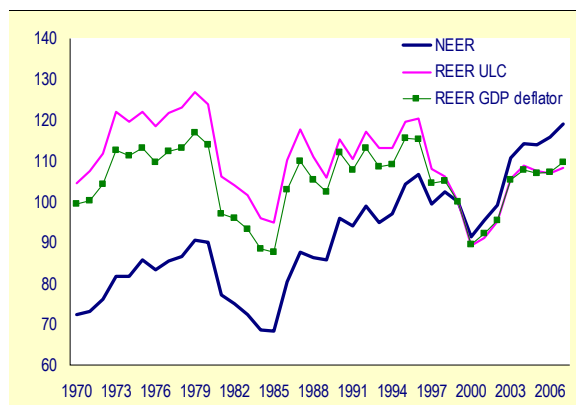
2. The impact of the euro appreciation on domestic prices and the export performance

Following a sizeable depreciation from 1996 till 2000, the euro has been on an appreciating trend since 2000 and has clearly recovered the ground previously lost. While in nominal effective terms the appreciation might appear to be sizeable, the appreciation in real effective terms was less pronounced. This section assesses the effects of the appreciation on household purchasing power and on euro-area trade. These are the two most direct, though by no means the only, channels through which exchange-rate fluctuations may affect economic growth. For instance, an appreciating currency may also impact financial markets (by changing the relative attractiveness of domestic and foreign assets), corporate balance sheets (by reducing the value of companies' foreign financial and non-financial assets) and monetary policy (by reducing imported inflation). Unfortunately, the latter channels do not lend themselves easily to quantification and will not be discussed further here.

2.1. The euro appreciation in historical perspective

Graph 12 shows various measures of the nominal effective exchange rate (NEER) and real effective exchange rate (REER) of the euro over a long-term horizon.

Graph 12: Nominal effective and real effective exchange rates of the euro (1999=100)



Source: Commission services.

There has been a clear upward trend in nominal effective terms since 1970. The trend was interrupted by two periods of noticeable depreciations in 1980-1985 and 1996-2000. After both episodes the euro rapidly appreciated and returned to trend.

The trend appreciation of the nominal exchange rate has not been reflected in measures of the real exchange rate. Owing to a favourable inflation differential between the euro area and its trading partners, measures of the real exchange rates based on the GDP deflator or unit labour cost do not show any long-term trend over the past three decades. However, short-run fluctuations in the external nominal value of the euro have an impact on euro-area price and cost competitiveness as shown by the two episodes of large swings in the nominal exchange rate in the early 1990s and late 1990s-early 2000s.

Table 3 presents the developments of NEER and REER for the latest periods of depreciation (1996-00) and appreciation (2001-06). In real terms, the appreciation since 2001 has not fully offset the depreciation registered between 1996 and 2000, with the result that REER measures are still currently below their previous peak in the mid-1990s. Furthermore, depending on the deflator chosen, the current level of the real effective exchange rate is 4.5% above its long-term average, (when measured by the GDP deflator) or almost 2% below the average (when unit labour costs are used). This suggests that the current level of real exchange rates is not particularly high by historical standards.

Table 3: Nominal and real effective exchange rates, euro area

	% change over the period		Current level compared to long-term average (%) (1)
	1996-2000	2001-2006	
NEER	-14.2	21.4	31.7
REER ULC	-25.8	17.5	-1.8
REER GDP	-22.3	16.3	4.5

(1) Long-term average is the 1970-2006 average.

Source: Commission services.



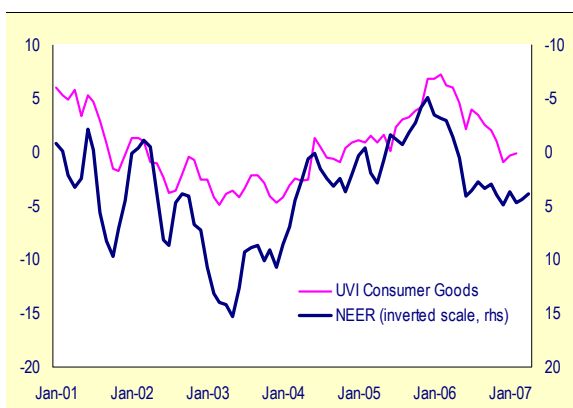
2.2. The euro appreciation and domestic purchasing power

This section examines the extent of the pass-through of the euro appreciation into domestic prices via its effect on imported inflation and consumer price inflation. It first looks at the extent of exchange rate pass-through in the euro area as a whole and then discusses the main reasons for its variation across products, Member States and time. Box 2 presents some results of an econometric examination of exchange-rate pass-through at the euro-area level.

Exchange rate pass-through to import prices

Empirical evidence shows that the pass-through of exchange-rate changes to import prices in the euro area is large and fairly rapid. This can be seen by looking at Graph 13, which charts the development of unit values for import prices and the nominal effective exchange rate (NEER) in percentage changes for the euro area since January 2001. The graph shows a strong negative correlation between the two series. Over the period January to December 2006, for example, while the y-o-y percentage change in the NEER rose from -5% to 5%, import price inflation fell from 7% to 0%. This indicates a pass-through rate for this period of about 70%.

Graph 13: Unit values for imports and NEER, euro area (y-o-y % of change, Jan 2001 to April 2007)



Source: Commission services.

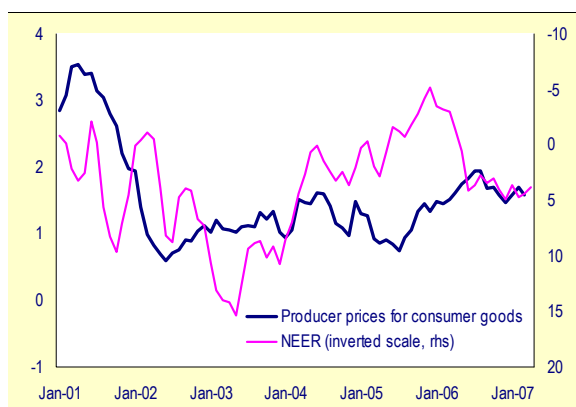
Box 2 reports the results of a simple econometric investigation into the pass-through of exchange rate changes to import prices, as well as to producer and consumer prices, in the euro area.

Results for the period January 1997 to February 2007 show that an average pass-through rate to import prices of about 25% can be estimated in the short run. In the long run, this increases to 69%. This is comparable to empirical estimates found in the academic literature, which generally finds pass-through rates of 50 to 70%.

The impact on producer and consumer prices

Evidence shows that the exchange rate pass-through to producer and consumer prices is smaller and significantly slower than that to import prices. Graphs 14 and 15 show the development of producer prices and consumer prices (HICP excluding energy and unprocessed food) against the NEER over the period January 2001 to April 2007. It is hard to see a relationship between these variables from visual observation. However, results from the econometric investigation (Box 2) show there is a statistically significant relationship. For producer prices, the short-run exchange rate pass-through effect is about 1%, increasing to about 23% in the long run, while for consumer prices the short-run effect is about 1%, increasing to 19% in the long run. Thus, the further along the chain of distribution, the slower and more muted the pass-through.

Graph 14: Producer prices and NEER, euro area (y-o-y % of change, Jan 2001 to April 2007)

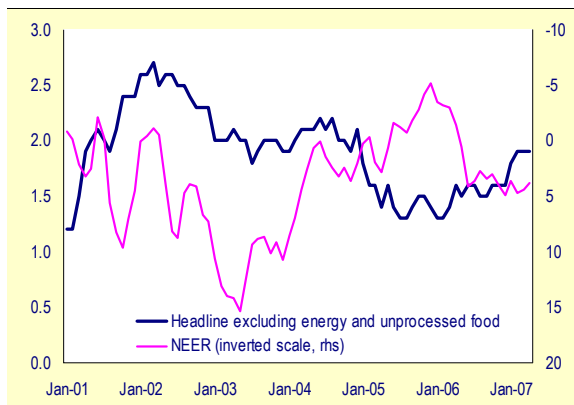


Source: Commission services.

In terms of household purchasing power, the effect of exchange rate fluctuations can be significant. Based on the equation in Box 2, the appreciation of the euro since 2001 should entail a long-term cumulated gain in purchasing power

of about 5%, with some of these benefits still to materialise due to the long lags involved.³

Graph 15: Consumer prices and NEER, euro area
(y-o-y % of change, Jan 2001 to April 2007)



Source: Commission services.

Exchange rate pass-through variation and its causes

Exchange rate pass-through varies across a number of dimensions (products, countries, and time), due to both macro- and microeconomic factors. Macroeconomic factors include such things as the prevailing economic situation, the policy environment and credibility of monetary policy, while micro factors include industry-specific market structure and product characteristics. In addition, pass-through is affected by whether the shock is permanent or temporary as well as the extent and composition of trade between countries.

Evidence shows that pass-through varies substantially across products. A recent CEPII working paper studies the extent and sources of varying pass-through rates across products.⁴ The paper uses a highly disaggregated database to study the product dimension, through the estimation of 'pricing-to-market' coefficients.⁵

³ The figure is calculated by multiplying the 19% long-term elasticity estimated in Box 2 by the size of the nominal appreciation since 2001 (about 25% based on annual averages).

⁴ Gaulier, G. et al. (2006), 'Structural Determinants of the Exchange-Rate Pass-Through', CEPII Working Paper No 2006-03, (February).

⁵ In pricing-to-market foreign producers and intermediaries adjust their profit margins to keep their selling price in line with those of their domestic competitors.

Results show that on average 11.5% of a currency shock is absorbed into foreign companies' mark-ups during the year following an exchange rate change. However, this hides considerable heterogeneity across products. The paper identifies a number of structural determinants of this heterogeneity. Firstly, pricing-to-market is found to be stronger when goods are traded on referenced markets, presumably because referencing eases arbitrage and forces firms to keep their prices in line with prices on the import market. Secondly, pricing-to-market is stronger for final consumption goods, probably due to higher competitive pressures in those markets. Finally, pricing-to-market is found to be lower in smaller or more concentrated markets, where the risk of demand is less pronounced, and when exporters hold a large market share.

Pass-through also varies across countries. Previous analysis has shown, for example, that for import prices short-run pass-through rates vary between almost 80% for some countries, such as Finland and Italy, and less than 40% for others, such as Greece, Ireland, and Austria.⁶ Exchange rate pass-through variation across countries can largely be attributed to divergences in the degree of openness to extra-euro-area imports.

Finally, evidence shows that pass-through rates have significantly declined across the board over the past few years.⁷ This decline is generally attributed to the emergence of a low and stable inflation environment as well as a rise in import penetration.⁸

⁶ See Campa, J.M. and J.M. González (2002), 'Differences in exchange rate pass-through in the euro area', Banco de España, Servicio de Estudios, Documento de Trabajo No 0219, (July).

⁷ See for example Sekine, T. (2006), 'Time-varying exchange rate pass-through: experiences of some industrial countries', BIS Working paper, No 202 (March).

⁸ In the case of imports, the result is purely empirical as economic theory is agnostic about the sign of the effect of increased imports penetration on the pass-through. It may be interpreted as evidence that the pass-through is lower in more competitive markets.



Box 2: An econometric investigation of exchange rate pass-through in the euro area

This box presents the results of a simple econometric investigation into exchange rate pass-through in the euro area. The data used are monthly values for import prices (unit values for imports), producer prices for consumer goods, consumer prices (HICP excluding energy and unprocessed food), oil prices and the NEER for the euro area versus IC36, all measured in annual rates of change, for the period January 1997 to February 2007. Results are presented in the table below.

For import prices, the model with the best fit was for unit values for imports on its own first-order lagged values, as well as that for the NEER. Initially, lagged oil price inflation was included as an explanatory variable, but this was found to be insignificant. The results for this model show that these two variables can explain 92% of the variation in euro area import prices. They also show that, in the short run, an exchange rate pass-through effect of about 25% can be estimated, increasing to 69% in the long run.¹ For producer prices, the model with the best fit included the first-order lag of producer prices and the NEER lagged 4 periods. The estimated exchange rate pass-through effect was just over 1% in the short run and about 23% in the long run. Finally, for consumer prices, best fit is achieved by including lagged consumer prices and the NEER lagged 13 periods. The short run pass-through effect at 13 months is less than 1%. In the long run it is 19%.

In conclusion, it can be said that the analysis contained herein confirms the basic results achieved in the academic literature that exchange rate pass-through is relatively strong and rapid for import prices but becomes slower and more muted along the distribution chain. Obviously, the analysis here is limited. Further work could expand the analysis along a number of lines. Firstly, a more sophisticated model could be used. Secondly, one could look at the country dimension. Thirdly, the pass-through to different price indices could be analysed. Finally, one could also allow for time-varying coefficients.

Exchange rate pass-through in the euro area

(1) Pass-through to import prices

Constant	0.999***
Unit values for imports (-1)	0.643***
NEER(-1)	-0.246***
Adj-R ²	0.926

(2) Pass-through to producer prices

Constant	0.066**
Producer prices (-1)	0.960***
NEER (-4)	-0.009***
Adj-R ²	0.955

(2) Pass-through to consumer prices

Constant	0.054
Consumer prices (-1)	-0.974***
NEER (-13)	-0.005***
Adj-R ²	0.934

Note: ***, **, * denote significance at 1, 5 and 10 percent levels, respectively.

Source: Commission services.

¹ Long run rates of pass-through are calculated as $\frac{\alpha_1}{1-\alpha_0}$, where α_1 is the coefficient estimate on the lagged exchange rate variable and α_0 is the coefficient on the first-order lagged dependent variable.

2.3. The euro appreciation and trade performance

The euro appreciation has taken only a modest toll on aggregate euro-area exports

While economic theory suggests that exchange rate fluctuations should have an impact on the export performance, the magnitude of this effect depends on a range of factors related, inter alia, to the sectoral composition and quality structure of exports.

To assess the overall sensitivity of euro-area exports to changes in the euro exchange rate, an export equation was estimated (see Box 3). The equation relates extra-area exports to world demand and the real exchange rate. Estimation results suggest that fluctuations in the real exchange rate feed through into the export performance relatively rapidly. However, the corresponding elasticity is low. A 1% appreciation of the real exchange rate reduces the level of extra-area exports by 0.2% after one year and about 0.25% after two years with no further significant additional impact afterwards.

The equation can be simulated to assess the contribution of the various determinants to export growth. These contributions are displayed in Table 4 for the latest periods of broad depreciation (1996-00) and appreciation of the euro (2001-06). The contribution of the real exchange rate was fairly symmetric over the two periods, adding 0.5% to annual export growth in the second half of the 1990s and shaving off 0.6% of annual growth over 2001-06 (equivalent to slightly above 0.1% in terms of euro-area GDP, other things being equal).⁹ In the latter case, most of the negative effect on growth was felt in 2003 and 2004. For both periods, the effect of the real exchange rate was dwarfed by the much larger effect of world demand.

⁹ The average effect of the REER over 2001-06 includes some positive effects from the depreciation in the late 1990s that were still being felt in 2001 and early 2002. Excluding these lagged effects, the impact of the appreciation of the euro since 2001 was somewhat higher, averaging about 0.8% annually instead of 0.6% for the 2001-06 period.

Table 4: Sources of growth in extra-area exports, euro area (average annual growth in %) (1)

	1996-00	2001-06
Extra-area exports (actual)	7.7	5.4
Extra-area exports (simulated)	8.4	5.0
of which:		
REER (2)	0.5	-0.6
World trade (2)	8.3	5.9
Other (2)	-0.4	-0.4
Unexplained	-0.6	0.4

(1) The contributions are based on the estimated export equation presented in Box 3.

(2) The contribution of a variable takes into account lagged effects of this variable.

Source: Commission services.

Fluctuations in the euro exchange rate can also affect import demand via two channels. By raising households' purchasing power, an exchange rate appreciation will foster private consumption and import demand (in other words some of the benefits identified in the previous section will leak into imports). The appreciation will also encourage substitution from domestic products towards cheaper imports.¹⁰ However, econometric analysis presented in Box 3 suggests that the latter effect is small and the relation of import prices to domestic prices is not a major determinant of import growth.

Large differences in Member States' extra-area export performance...

This section takes a disaggregated approach and looks into the export performance of individual euro-area Member States in order to examine further the effects of the euro's appreciation.

Graph 16 shows extra-area export growth in selected euro-area countries. There are significant differences among Member States. Whereas Italy's and Ireland's extra-area exports have been almost flat since 2000, Austria's and Germany's export volumes have increased by 50 - 60%. The difference in export performance between the two ends of the spectrum has become particularly pronounced since 2003. The rest of

¹⁰ Some of these cheaper imports will also be used as inputs in the production process and result in improved price competitiveness for exporters.



Box 3: Estimating export and import equations for the euro area

This box presents an update of an estimated export equation first described in an earlier issue of the Quarterly Report on the Euro Area(*) and adds some information on the estimation of an import equation.

A major shortcoming of euro-area trade data in quarterly national accounts (QNAs) is that they cover both intra-area and extra-area trade flows. Hence, export and import fluctuations in QNAs reflect both changes in external variables (competitiveness and world demand) and changes in euro-area domestic demand (intra-area trade). To overcome this limitation, an extra-area exports and an extra-area import series were constructed by applying the share of extra-area exports (imports) in total exports (imports) of goods (as obtained from Eurostat's trade data) to total euro-area exports (imports) of goods and services (as obtained from the QNAs). The resulting series are not without their own shortcomings (in particular, they tend to be significantly more volatile than the series of the QNA) but they yield a better fit in estimated equations.

The estimated export equation is presented in the table below. It is specified as an error correction mechanism. A cointegration relation between exports, world demand and the REER was identified with Johansen's maximum likelihood method (see left part of the table). Several measures of the real effective exchange rate (REER) were tested with the best fit obtained with the REER based on export prices. The real exchange rate only enters the long-run equation but, given the relatively large size of the coefficient on the error correction term in the short-term dynamics, exchange-rate fluctuations affect exports relatively rapidly (most of the effect of an exchange-rate shock is reflected in the export performance after three quarters). The response of exports to changes in the external value of the euro is relatively muted: a 1% appreciation of the real exchange rate leads to a 0.2% drop in the level of extra-area exports compared to the baseline after one year and a 0.25% drop after two years.

Estimated export equation for the euro area (1989:1-2006:4)

<i>Long-term equation</i> <i>Endogenous variable: Log(exports of goods and services)</i>		<i>Short-term dynamics</i> <i>Endogenous variable: ΔLog(exports of goods and services) (3)</i>	
<i>Variable</i>	<i>Euro area</i>	<i>Variable</i>	<i>Euro area</i>
Log(REER) (1)	-0.282	ΔLog(World demand)	0.846
Log(World demand) (2)	1.000	Error-correction term	-0.386
Linear trend	0.000925	Constant	2.457
		R_squared	0.54

(1) REER based on export prices. (2) World trade is based on data from the OECD and the CPB. Long-term coefficient is constrained to 1.

(3) All coefficients meaningful at the 1% level.

Source: Commission services

Estimated import equation for the euro area (1989:1-2006:3)

Endogenous variable: ΔLog (extra-area imports)

Variable	Euro area (2)
ΔLog(domestic demand)	1.873 *
ΔLog(extra-area exports)	0.533 *
ΔLog(RIP-5) (1)	0.120 **
R_squared	0.50

(1) Relative import prices defined as the ratio of extra-area unit value index for imports to the GDP deflator.

(2) * and ** denote significance at the 1% and 10% levels respectively.

Source: Commission services

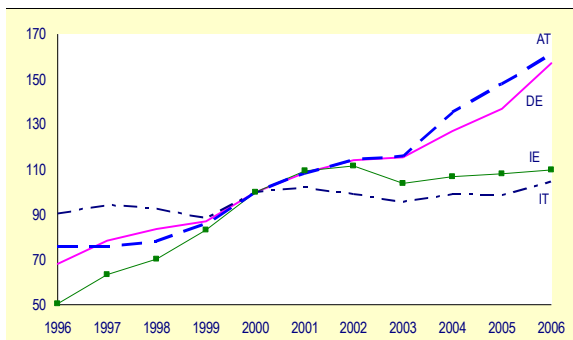
The estimated import equation is presented in the adjacent table. It relates extra-area imports to the domestic demand, exports and a relative price term (the ratio of the unit value index for extra-area imports to the GDP deflator). No meaningful cointegration relation could be identified and the equation was estimated in first differences. The estimated coefficient on the price term comes with the correct sign but with a borderline significance (at the 10% level only) and should therefore be interpreted with prudence. According to the estimated coefficient, a 10% decrease in the relative price entails a 1.2% fall of imports. The corresponding elasticity to the real exchange rate should, however, be lower. Firstly, the analysis in section 2.2 showed that the pass-through of exchange-rate changes to unit values is less than unity (about 70% in the long run). Secondly, changes in the real exchange rate are also likely to affect domestic prices used as the denominator of the

relative price term. Both effects should play in the same direction, suggesting that a 10% real appreciation will entail a 5-6% drop in the relative price term and a 0.6-0.7% drop in extra-area imports. The exchange rate elasticity of imports is therefore likely to be considerably lower than in the case of exports (but of course this only covers import substitution effects and not indirect income effects due to increased purchasing power which are captured via the domestic demand term of the equation).

(*) Focus on "The impact of the euro appreciation on economic activity", Quarterly Report on the Euro Area, Vol. 3 No.1 (2004).

the euro-area Member States fall somewhere in between.¹¹

Graph 16: Extra-area export performance of selected euro-area Member States (volume indices 2000=100)



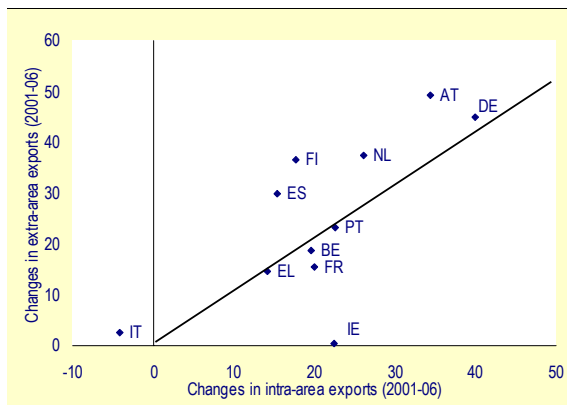
Source: Commission services.

Graph 17 compares Member States' intra- and extra-area export performance. It plots export growth to the euro area (horizontal axis) and outside the euro area (vertical axis) over the 2001-06 period. The upward sloping line depicts equal change in extra- and intra-euro area exports. Countries located above the line recorded larger extra-area export growth than intra-area export growth over the period considered. It is noteworthy that in spite of the euro appreciation, extra-euro-area export growth was larger than intra-euro-area export growth in more than half of the Member States.

Another interesting feature of the chart is that it shows a clear correlation between intra- and extra-area export growth. Countries that performed well in terms of extra-area trade tended to perform well also within the euro area. Similarly, countries with weak intra-area export growth also recorded weak extra-area export growth. This suggests that differences in Member States' exposure to the fluctuations of the euro (which only affects extra-area exports) are not the main reason behind the different export

performance, an issue which is discussed in more details in the next paragraph.

Graph 17: Intra- and extra area export growth, euro-area Member States (volumes, 2001-2006, in %)



Source: Commission services.

... are difficult to relate to differences in Member States' exposure to euro fluctuations...

There have been significant differences in Member States' exposure to the appreciation of the euro since 2001. Graph 18 shows the change of nominal effective exchange rates (NEER) of euro-area Member States over the period 2001-2006. Nominal effective appreciation of the individual Member States was more contained than that of the euro area as a whole. The difference comes from the fact that, contrary to the NEER for the euro area as a whole, the NEER for individual countries covers both extra-euro-area trade (exposed to currency fluctuations) and intra-euro-area trade (not exposed to currency fluctuations). The NEER appreciation at the country level ranged from just above 5% in Austria to 12% in the case of Ireland.

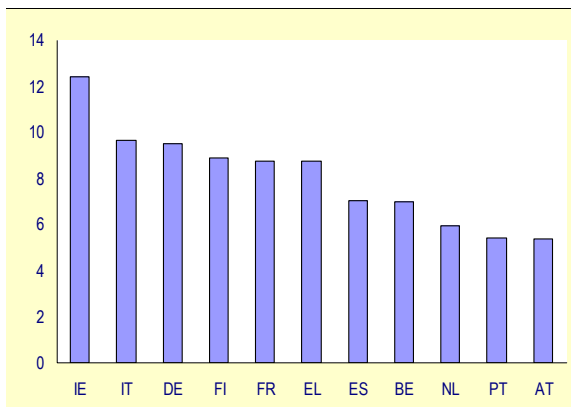
However, differences in the exposure to euro appreciation seem to have made only a modest contribution to differences in Member States' extra-area export performance. Since 2001, changes in competitiveness at the Member State level have indeed been primarily determined by developments in domestic cost conditions, with exposure to the euro fluctuations playing only a relatively modest role. This can be seen in Graph 19 which compares changes in the NEER and the REER over 2001-2006 across euro-area Member States. The relationship between the

¹¹ Data on intra- and extra-area exports presented in this section are based on National Accounts' export of goods. The breakdown into intra- and extra-area exports was calculated using intra-extra shares derived from Eurostat's External Trade Statistics. External Trade Statistics are compiled from Customs and Intrastat declarations and can sometimes diverge substantially from national accounts data, in particular due to differences in the treatment of transit trade.



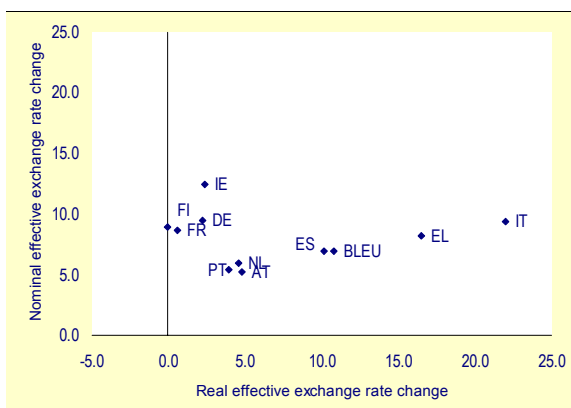
two variables is weak. Over the period considered, the NEER appreciated by 5% to 12%, depending on the Member State considered. In the meantime, the range of changes in competitiveness was much larger at about 0 to 22%. Countries with similar exposure to nominal exchange rate fluctuations recorded very different developments in terms of competitiveness. On the other hand, countries that faced comparable levels of real appreciation witnessed different magnitudes of nominal exchange-rate changes.

Graph 18: Changes in nominal effective exchange rates, euro-area Member States (2001-2006, in %)



Source: Commission services.

Graph 19: Real and nominal effective exchange rate changes 2001-2006 (1)



(1) REER based on the export price deflator.

Source: Commission services.

More formally, the cross-country variance of changes in the REER can be decomposed into its NEER component and a price/cost component. Over 2001-06, the decomposition shows that less than 15% of Member States' differences in

REER can be related to differences in the NEER (i.e. differences in the exposure to the euro fluctuations).

The analysis above shows that differences in Member States' exposure to fluctuations in the euro only play a modest role in explaining Member States' differences in price/cost competitiveness and thereby differences in export performance since the beginning of the decade. In addition, it should be noted that price/cost competitiveness is not the only determinant of export performance (in Graph 19 this factor explains less than 60% of the differences in Member States' export growth). Other factors that have contributed to the observed heterogeneity in export performance include the sectoral and geographical composition of exports as well as non-price competitiveness (e.g. quality improvements and technological advances).¹²

... so are the changes in profit margins

When faced with a currency appreciation, domestic exporters can reduce their profit margins in order to avoid excessive rises in their prices on foreign markets and protect their market shares.

To check the relation between profit margins and the recent euro appreciation, Graph 20 plots changes in profit margins for each Member State's entire economy¹³ (horizontal axis) against changes in nominal effective exchange rates (vertical axis) over the period 2001-2006. In order to better reflect the impact of the nominal appreciation on the domestic economy, NEER changes have been weighted by Member States' export-to-GDP ratio.¹⁴ The data presented in Graph 20 show no correlation between changes in profit margins and the adjusted NEER measure. This result suggests that the

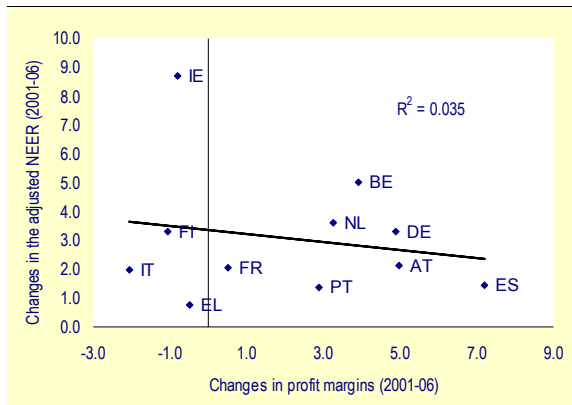
¹² As those factors are largely independent of the euro appreciation, they are not analysed here. For an analysis of the determinants of the euro-area export performance, see Quarterly Report on the Euro Area No 1/2005.

¹³ i.e. including the exporting and the non-exporting sectors.

¹⁴ The reasoning for this adjustment is that in a more open economy the share of companies that is exposed to the currency fluctuation is larger and so is the share of affected profit.

appreciation of the euro has not had a significant effect on changes in the profit margins.

Graph 20: Change in profit margins(1) and in nominal effective exchange rates adjusted for country openness(2) (2001-2006)



(1) Profit margins are measured by the inverted real unit labour costs for the entire economy.
 (2) NEER changes adjusted by the export-to-GDP ratio (average over 2001-2006).

Source: Commission services

2.4. Conclusion

The euro's appreciation since 2001 has had positive implications for euro-area prices and purchasing power but has also weighed on exporters' performance.

Regarding the former effect, the analysis shows that a change in the euro exchange rate has a large and rapid impact on euro-area import prices but that the knock-on effect to producer and consumer prices is slower and more muted. Exchange rate pass-through varies across products (due to differing product characteristics and industry-specific market structures), regions and time (due to the general economic condition and environment). In addition, it may be affected by whether market participants believe a shock to be permanent or temporary. Overall, econometric work suggests that the appreciation of the euro since 2001 should bring gains in household purchasing power of about 5% in the long run.

As to its impact on trade, that analysis shows that fluctuations in the real exchange rate feed through into the export performance relatively rapidly but with a relatively modest effect: a 1%

appreciation of the real exchange rate reduces the level of extra-area exports by 0.25% after two years. Between 2001 and 2006, exchange rate developments reduced annual growth in extra-area exports by 0.6 percentage points. This is not negligible but should be put in perspective. In the same period, buoyant world trade boosted euro-area export growth by about 6% annually. Furthermore, the real appreciation since 2001 follows a period of even greater depreciation in the second half of the 1990s, when exchange rate developments boosted extra-area exports by about 0.5 percentage points annually.

The appreciation since 2001 also seems to have had only a modest effect on exporters' profitability. In recent years, there has been considerable heterogeneity in export performance at the Member States' level. This heterogeneity, however, primarily reflects differences in national price and non-price competitiveness developments rather than a euro effect. Due to differences in the geographical composition of extra-area trade, some Member States have been more exposed than others to the euro appreciation. However, differences in exposure have played only a modest role in explaining differences in export growth.

Finally, the euro appreciation has also, to some extent, fostered extra-area imports primarily because it has stimulated domestic demand by raising purchasing power, and also because it has encouraged import substitution, though econometric analysis suggests that the latter effect is small.



3. Spillovers revisited: fiscal policy and inflation in the euro area

Safeguarding price stability in the Economic and Monetary Union (EMU) requires an appropriate fiscal policy stance at national level. The very architecture of the EMU rests on this crucial understanding of the interactions between fiscal and monetary policy-making. To the extent that national fiscal policies have a sufficiently strong effect on domestic demand and in turn on area-wide price developments they may also affect the rest of the single currency area. It is therefore important to understand the channels through which fiscal policy can impact on inflation and, in particular, how strong these channels are in practice.

There is a broad strand in the empirical literature that suggests that, in contrast to the 'Ricardian' paradigm, whereby fiscal policy should not affect aggregate demand, fiscal shocks do have an impact on activity and in turn on inflation.¹⁵ Moreover, as regards the specific setup of the EMU, there is also a general theoretical consensus that fiscal and monetary policy interactions may give rise to policy conflicts in the short term, as the area-wide inflation rate is determined together with the aggregate of national output levels.¹⁶ What is less clear is the actual strength of the impact of fiscal policy on inflation. The available evidence is still mixed, especially as regards the spillovers to other Member States in a monetary union.

Channels through which fiscal policy can impact upon inflation

In an economy characterised by nominal rigidities and liquidity-constrained consumers, different types of fiscal policy measures produce different types of effects on prices in terms of both timing and size. Under normal circumstances, an increase in government expenditure, for instance, including the

government wage bill, or the reduction of net income taxes, leads first to an excess of aggregate demand over output. The impact on prices sets in gradually as the economy adjusts to higher demand. In stylised fashion, such an adjustment involves an expansion of employment, which creates pressure on wages and in turn on prices. Prices continue to rise until demand is back in line with the level of potential output. At the end of the adjustment process, the general price level will be higher. The size of the short-run effect on output and inflation (and at times also the sign) depends on a number of factors.

(i) *The degree of openness of an economy*: Part of a fiscal expansion leaks through imports, where the size of the leakage increases with the import content of domestic demand.

(ii) *The type of fiscal policy measure*: An increase in government consumption is generally expected to have a stronger impact on demand than tax cuts of the same size, because tax cuts work via disposable income of households, part of which is generally saved.

(iii) *The planning horizon of economic agents*: If economic agents are forward-looking, they will assess the sustainability of a fiscal expansion. Where the fiscal expansion is deemed to be unsustainable, future tax increases will be anticipated and hence expenditure plans adjusted accordingly; i.e. government consumption will crowd out private spending.

(iv) *The share of liquidity-constrained consumers*: If a large share of consumers cannot borrow against future income, for instance because of imperfections in the capital markets, the short-term impact of a fiscal expansion (contraction) on output and inflation can be stronger than in an economy in which consumers have 'free' access to capital markets.

(v) *The monetary policy regime*: Expansionary fiscal policy can be countered by the tightening of monetary policy. The degree of tightening will depend on the objectives of the monetary authority. A central bank that focuses exclusively on a specific inflation target will step in more strongly than a central bank that also performs interest rate smoothing (i.e. that tries not to impose strong and sudden changes in the interest rate on the economy).

¹⁵ For a brief list of the literature, see Woodford, M. (2001) 'Fiscal Requirements for Price Stability', *Journal of Money, Credit and Banking*, Vol. 33, No. 3, pp. 669-728.

¹⁶ See, for instance, Dixit, A. and L. Lambertini (2001) 'Monetary-fiscal policy interactions and commitment versus discretion in a monetary union', *European Economic Review* No. 45, pp. 977-997.

Box 4: Simulating effects of fiscal policy on inflation – Evidence from the literature

In the literature, two different approaches are used to simulate the effects of fiscal policy and inflation: Structural Vector Autoregression Models (SVARs) and structural macro-econometric models. The main difference between the two is that SVARs are largely data-driven: they do not impose strong a priori restrictions upon relationships between the macroeconomic variables included in the model. In practice, evidence from SVAR models is limited and does not support clear-cut conclusions. Conversely, macro-econometric models have been widely used to assess the impact of fiscal shocks on inflation. The results of macro-econometric models reported in the table below can be summarised as follows:

- An increase in government spending by 1% of GDP leads to an increase in consumer prices of less than 1% compared to the baseline while, in the case of increases in indirect taxes, the price effect is more significant (1-1.5%).
- The impact on inflation of fiscal policy shocks tends to increase in the first two years after the shock, and then to stabilise afterwards.

Impact of fiscal shocks on countries' own consumer price indices Evidence from alternative macro-models (% change compared with baseline)

Country	Model	Shock			
		Government purchases (1% of GDP increase)		Indirect taxes (1% of GDP increase)	
		Year t	Year t+1	Year t	Year t+1
Belgium	National Bank of Belgium	0.10	0.29	1.6	1.99
Belgium	QUEST-II (EC)	0.10		1.66	
France	Interlink (OECD)	0.20		1.40	
France	QUEST-II (EC)	0.14		1.50	
Germany	Bundesbank	0.04	0.17	1.17	1.2
Germany	Interlink (OECD)	0.20		1.30	
Germany	NiGEM (NIESR) *	0.02	0.31		
Germany	Marmotte (CEPII) *	0.71	0.69		
Germany	Multimod-III (IMF) *	0.68	0.78		
Germany	QUEST-II (EC)	0.12		1.49	
Italy	Banca d' Italia	0.06	0.33	0.79	1.39
Italy	Interlink (OECD)	0.20		0.80	
Italy	QUEST-II (EC)	0.12		1.38	
Portugal	Banco de Portugal	0.07	0.18	1.10	1.59
Spain	Banco de Espana	0.20	0.62	1.05	1.46
Spain	QUEST-II (EC)	0.08		1.44	
Euro area	Area Wide Model (ECB)	0.16	0.56	0.85	1.17
Euro area	Interlink (OECD)	0.20		1.20	

Source: Henry et al. (2004), except for * whose source is Gros and Hobza (2001).

Existing work aimed at assessing the impact of national fiscal policy measures on the rest of the euro area, i.e. the magnitude of inflation spillovers, is relatively scarce. Among the few exceptions are Gros and Hobza (2001) and In't Veld (2004). The few available studies point to a positive but small spillover, where an increase in government purchases in Germany of 1% of GDP leads in the first year to higher consumer prices in other euro-area countries, ranging from a 0.5% to 0.2%.

References:

- Gros, D. and A. Hobza (2001) 'Fiscal policy spillovers in the euro area. Where are they?' CEPS Working Document No. 176.
 Henry, J., P. Hernandez de Cos and S. Momigliano (2004), 'The short-term impact of government budgets on prices. Evidence from macroeconomic models', ECB Working Paper Series No. 396, forthcoming in *Journal of Policy Modeling*.
 In't Veld, J. (2004) The Spillover Effects of German Budgetary Consolidations within EMU: Simulations with the QUEST Model, mimeo European Commission, Directorate-General for Economic and Financial Affairs.

Direct effects of fiscal policy on inflation via taxes

A number of fiscal policy measures on the revenue side of the budget may have a direct effect on prices. The clearest case is a change in

indirect taxes. An increase in indirect taxation is generally expected to lead to a more or less immediate increase in HICP inflation where the size of the impact depends on how much firms are able to pass on to consumers. The pass-through tends to be high (low) if demand is



rather inelastic (elastic). The direct impact is likely to be followed by an offsetting effect via aggregate demand as higher taxes reduce real disposable income.

A less immediate impact on prices can be expected from increases in direct taxation (i.e. corporate and personal income tax) because taxes are not part of the HICP basket. Higher corporate income tax is likely to be passed on gradually to consumer prices whereas higher income tax may actually have a dampening effect on prices as it primarily compresses consumption and aggregate demand.

Effects of national fiscal policy in the EMU

The combination of a common monetary policy and national fiscal policies in the EMU introduces an additional dimension to the link between fiscal policies and inflation. If a member of the single currency area pushes its output above potential by means of an expansionary fiscal policy and if the ensuing increase in the price level has a measurable effect on the rate of inflation of the currency area as a whole, the monetary authority may tighten its policy stance in a bid to bring overall inflation back to its target. By doing so, it will not only affect output in the country that runs an expansionary fiscal policy; the aggregate level of economic activity of other countries will be affected as well.

The size of such spillovers crucially depends on the size and the trade exposure of the country running expansionary fiscal policy. The spillover effect mostly plays through the *trade channel*. Since part of the output and price effect of expansionary fiscal policy will leak through imports, a higher size and higher degree of openness of the economy will produce a larger positive spillover onto trade partners and dilute the output and inflation effect across or outside the currency area.

In EMU, the trade channel interacts with two additional channels which operate in opposite directions: the real interest rate channel and the competitiveness channel.

(i) *The interest rate channel*. Higher inflation coupled with a common area-wide nominal interest rate

reduces the real cost of capital and hence promotes investment and consumption of durables. This tends to amplify the demand effects of the fiscal expansion both domestically and in other Member States.

(ii) *The competitiveness channel*. The initial effect of the fiscal expansion on domestic activity is progressively eroded as higher domestic inflation affects the competitiveness of the country, hampering its export performance.

A detailed analysis of how adjustment has been proceeding in the euro area was presented in European Commission (2006).¹⁷ One of the main conclusions was that, in the EMU, the real interest rate channel together with nominal or real rigidities in the economy can give rise to a longer and possibly deeper impact of shocks on output and inflation as compared to a situation with decentralised monetary policy. During such a protracted adjustment, large current account imbalances may build up. There is also a larger risk of running pro-cyclical fiscal policy in economic good times as both potential output and structural tax revenues may be overestimated.¹⁸ If the corresponding windfalls are spent, fiscal policy will be too expansionary and limit the room for manoeuvre during subsequent downturns.

Fiscal policy and inflation in the EMU: empirical evidence

Model simulations are an established way of gauging the macroeconomic effects of economic policy measures. The results presented in the following paragraphs are based on a two-country version of the macro-econometric model of the Directorate-General for Economic and Financial Affairs of the European Commission (QUEST-III), a Dynamic Stochastic General Equilibrium (DSGE) model, estimated for the euro area. The model exhibits a number of price and wage

¹⁷ European Commission (2006) 'The EU Economy 2006 Review', European Economy No. 6, Brussels.

¹⁸ Potential output is, loosely speaking, estimated as a sort of moving average of actual and projected GDP. Consequently, protracted adjustment processes will affect the assessment of potential output and with it the estimated level of sustainable government revenues and expenditure.

rigidities and assumes that a fraction of private households are liquidity-constrained, i.e. they cannot borrow against their future income. These features generate positive effects of fiscal policy on output and consumption (see Box 4 for a review of the estimated effects of fiscal policy on inflation found in the empirical literature).¹⁹

The purpose of the simulation is to provide an account of the impact of fiscal policy both on the inflation rate of the country implementing fiscal policy measures and on the inflation rate of the rest of the euro area.

Two different types of fiscal policy measures are simulated: an increase in government purchases and in value added taxes. As regards government purchases, the focus is on temporary changes.²⁰ As regards increases in value added taxes, alternative reactions of monetary policy are explored. The simulations are performed with respect to the 2007 baseline scenario.

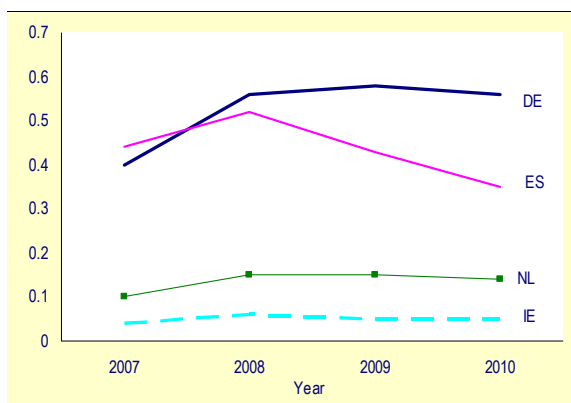
In a bid to capture the country dimension in terms of both size and degree of openness, simulations are performed for different economies: Germany, Spain, Ireland and the Netherlands. Germany is a large and open economy; Spain is a medium-sized country with relatively little openness; Ireland is small and open; while the Netherlands is a medium-sized and open economy.

When interpreting the results of the simulations, two caveats should be born in mind. First, fiscal policy may affect inflation through a number of additional channels not captured by the model, including possible contagion effects from public-sector wages to private-sector wages, changes in administrated prices or in the efficiency of public procurement. Second, the simulated fiscal shocks are expansionary but the model is symmetric and

contractionary shocks would have opposite effects of similar order of magnitudes on inflation.

Expenditure shocks. The simulations show that in the first two years, inflation (as measured by the consumer price deflator) always rises in the country where government expenditures are increased by 1% of GDP for one year. The impact tends to taper off gradually after two years. The magnitude of the impact of expenditure shocks on inflation is highly country-specific, being at its largest in a large open economy like Germany (more than 0.5%) and smallest in a small open economy like Ireland (about 0.02 %) (differences are mostly explained by the different degree of openness.

Graph 21: Impact on domestic prices of a temporary increase in government purchases of 1% of GDP (1) (% change from baseline level of consumer price deflator)



(1) Government expenditures are increased for one year. Source: Commission services.

Spillover effects on inflation in the rest of the euro area appear to be on average positive but only in a few cases of sizeable magnitude. In line with expectations, the size of spillovers appears to increase with the size of the economy engaging in the fiscal expansion. The largest spillover was in the case of a temporary expenditure shock of 1% of GDP in Germany, which led to an increase in inflation in the rest of the euro area of about 0.4%. The explanation is that fiscal shocks in bigger countries trigger trade effects of a bigger magnitude. It also appears that spillover effects tend to grow over time and stabilise, which is mainly related to the impact of imported inflation: higher import prices feed into wages and then domestic prices.

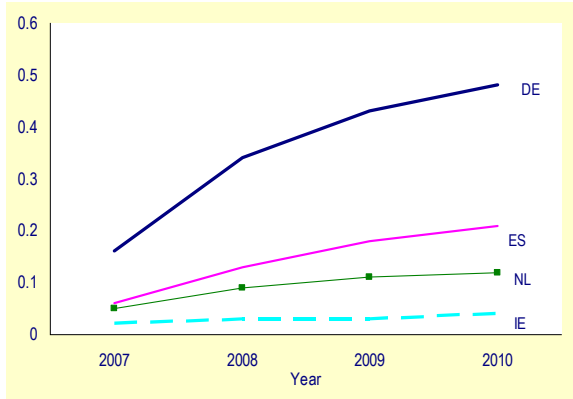
¹⁹ For a detailed description of the model, see Langedijk, S. and W. Roeger (2007), 'Adjustment in EMU: A model-based analysis of country experiences', European Economy, Economic Paper No. 274.

²⁰ The dynamic nature of the model imposes intertemporal budget constraint in the long term. Any expenditure increase or tax reduction must be reversed at some point. As a result, the effect of fiscal policy on output and inflation is smaller for a longer-lasting increase in government expenditure, as the forward-looking share of consumers anticipates future tax increases and adjusts consumption accordingly.



Graph 22: Impact on the rest of the euro-area prices of a temporary increase in government purchases of 1% of GDP in a given country (1)

(% change from baseline level of consumer price deflator)

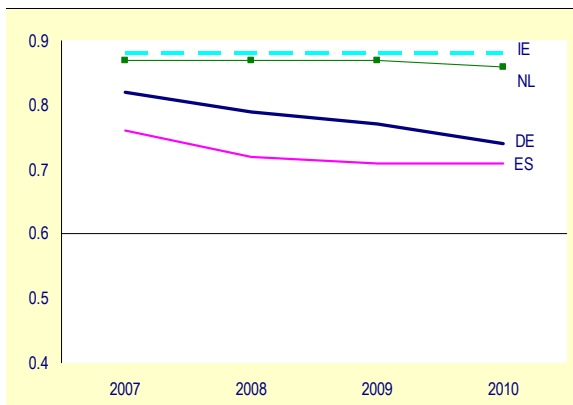


(1) Government expenditures are increased for one year.
Source: Commission services.

Increase in value added taxes (VAT). An increase in value added taxes impacts on the national consumer price index. However, due to an imperfect pass-through onto consumer prices and to lower aggregate demand, consumer prices net of VAT fall. The impact is fairly constant over time where the monetary authority fails to react to higher inflation, ranging from 0.7% to 0.9% of the consumer price deflator (Graph 23).

Graph 23: Impact on domestic prices of an increase in value added taxes of 1% of GDP (1)

(% change from baseline level of consumer price deflator)



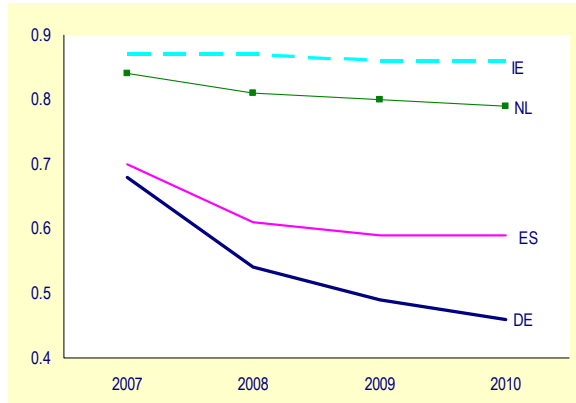
(1) Monetary authority does not react to inflation effect.
Source: Commission services.

Unsurprisingly, the impact on inflation declines and fades over time if the monetary authority steps in (Graph 24). The degree of monetary tightening and its impact on domestic inflation

clearly reflects the relative weight of the country implementing the VAT increase.

Graph 24: Impact on domestic prices of an increase in value added taxes of 1% of GDP (1)

(% change from baseline level of consumer price deflator)

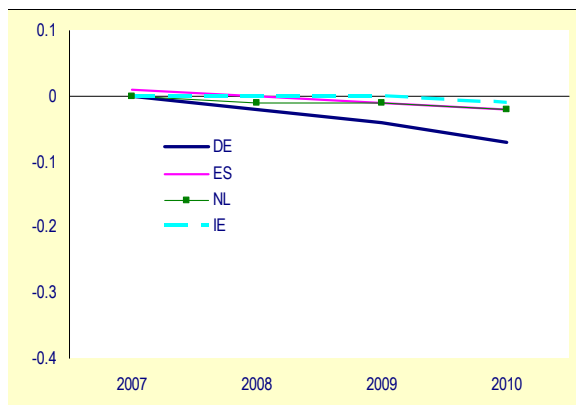


(1) Monetary authority reacts to inflation effect.
Source: Commission services.

The spillover effects from a VAT increase to the rest of the currency area appear to be negative: inflation in the rest of the euro area tends to fall (Graph 25), more so if the monetary authority reacts (Graph 26). However, the spillover effect appears to be smaller than with an expenditure shock, mainly due to the muted impact on aggregate demand.

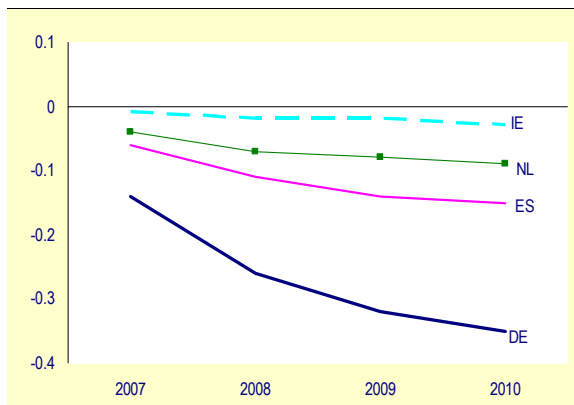
Graph 25: Impact on prices in the rest of the euro area of a rise in value added taxes of 1% of GDP in a given country (1)

(% change from baseline level of consumer price deflator)



(1) Monetary authority does not react to inflation effect.
Source: Commission services.

Graph 26: Impact on prices in the rest of the euro area of an increase in value added taxes of 1% of GDP in a given country (1)
(% change from baseline level of consumer price deflator)



(1) Monetary authority reacts to inflation effect.
Source: Commission services.

This simulation exercise helps to draw a number of conclusions. Inflation effects from fiscal policy on the domestic economy can be quite sizeable. Whether an expansionary fiscal policy operates via an increase in expenditures or tax cuts may, in the short run, have opposite results on inflation in the domestic economy.

Inflation spillovers to the rest of the area tend to go in the direction taken by the stance of fiscal policy. The magnitude of the spillovers depends on both the size and the trade openness of the country considered and can be sizeable when the fiscal impulse comes from a large open economy.

The effects of the simulations need to be considered in a situation where fiscal policy often involves a combination of measures with possibly opposed effects. Hence the overall effects on the country, as well on the spillovers, may be significantly more complex than presented here. The evidence of the inflationary impact of the recent VAT increase in Germany, much smaller than originally expected, is indicative.

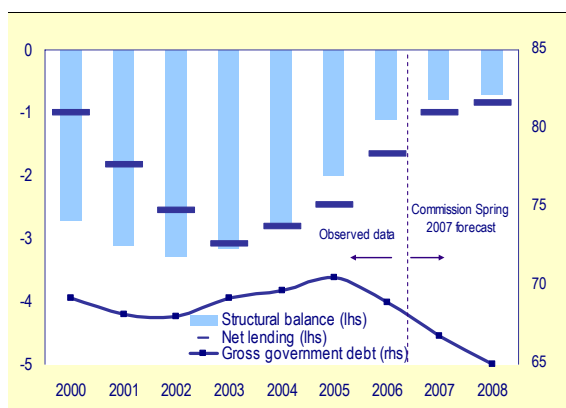
Nevertheless, the evidence of this exercise suggests that spillovers across countries could be relevant and potentially entail policy reactions by other actors, which could be usefully internalised by national policy makers in their decision process.

4. A Mid-Term Review of Budgetary policy in the euro area

Tax revenues explain better-than-expected budgetary outturn in 2006

The budgetary situation continued to improve in the euro area in 2006. The general government deficit was reduced for the third consecutive year, to 1.6% of GDP (see Graph 27). This is a markedly better outturn than the deficit of 2.3% of GDP projected for 2006 in the end-2005 Stability Programmes (SPs) and than the estimated outcome of 2.1% in the end-2006 SPs.²¹ Owing also to stronger GDP growth, the euro-area debt ratio recorded its first decline in 2006 since 2002. According to Commission calculations, in 2006 the improvement in the budgetary situation was marked by a large reduction in the deficit adjusted for cyclical effects and one-off measures – almost 1 percentage point of GDP, following ¾ of a percentage point of GDP in 2005. The improvement in the structural balance in 2006 was significantly larger than envisaged in the end-2006 SPs (½ of a percentage point).

Graph 27: Budgetary developments and prospects in the euro area according to the Commission spring 2007 forecast (% of GDP)



Note: Projections for 2008 are based on a no policy change assumption.
Source: Commission services.

²¹ Budgetary developments were significantly better than expected by most euro-area Member States (Germany, Spain, Ireland, Italy, Luxembourg, the Netherlands, Portugal and Finland) in their end-2006 SPs.



The composition of the fiscal adjustment raises doubts, however, on the permanent nature of ongoing fiscal consolidation. Contrary to plans, the reduction in the government deficit was primarily driven by large positive surprises in tax revenues – well beyond what could have been expected on the basis of the stronger-than-expected increase in real GDP. Given that part of the tax windfalls may be of a temporary nature,²² the structural balance estimates may to some extent overestimate the underlying improvement in the situation of government finances. Moreover, as in 2005, some Member States used part of the tax windfalls in 2006 to finance additional government expenditure (see Box 5). In the last two years, the size of the expenditure overruns compared to the budget plans has not been negligible: the cumulated improvement in the structural balance over the period 2005-2006 could have been about $\frac{3}{4}$ of a percentage point of GDP larger if government expenditure targets in the 2005 and 2006 budgets had been met.

	COM spring 2007 forecast			
	2005	2006	2007	2008
Real GDP growth	1.4	2.7	2.6	2.5
Government balance	-2.5	-1.6	-1.0	-0.8
Structural balance	-2.0	-1.1	-0.8	-0.7
Annual change	0.8	0.9	0.3	0.1
Government debt	70.5	69.0	66.9	65.0
2006 updates of the SCP				
	2005	2006	2007	2008
Real GDP growth	1.4	2.6	2.2	2.2
Government balance	-2.4	-2.1	-1.4	-1.1
Structural balance	-2.0	-1.6	-1.2	-1.0
Annual change	0.8	0.4	0.4	0.2
Government debt	70.6	69.4	67.8	66.4

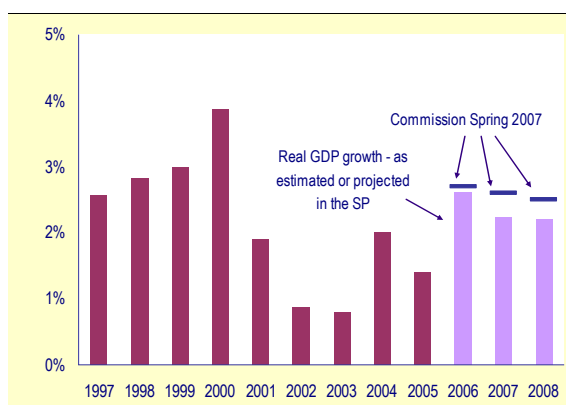
Note: Commission services' projections for 2008 are based on a no policy change assumption.

Source: End-2006 Stability Programmes and Commission spring 2007 forecast.

Limited fiscal consolidation efforts expected in 2007 and 2008

The end-2006 updates of the Stability Programmes, which were submitted before the better-than-expected 2006 outturns were known, projected a reduction in the government deficit to 1.4% of GDP in 2007 and 1.1% of GDP in 2008 (see Table 5). Projections were based on the assumption of real GDP growing at a close-to-potential rate over the period 2007-2008. The structural balance was planned to improve by $\frac{1}{2}$ of a percentage point of GDP in 2007 and by $\frac{1}{4}$ of a percentage point in 2008. When assessing these programmes, the Council recommended that some Member States not yet at their medium-term budgetary objective should take advantage of the good economic conditions to strengthen the structural adjustments compared to plans.

Graph 28: Real GDP growth in the euro area in 2007 and 2008 – a comparison with projections of the end-2006 Stability Programmes (y-o-y real GDP growth)



Source: Commission services.

According to the Commission spring 2007 forecast, real GDP growth would be more dynamic than expected in the end-2006 SPs and the output gap of the euro area would be almost closed in 2008 (see Graph 28). The Commission projects an improvement in the structural balance in 2007 of only $\frac{1}{4}$ of a percentage point of GDP, as opposed to $\frac{1}{2}$ of a percentage point in the SPs, and, under the assumption of no policy change, a neutral fiscal stance in 2008. Moreover, on the basis of the experience at the turn of the decade, when several Member States benefited from favourable cyclical conditions

²² A significant part of the tax windfalls stems from the dynamism of corporate income tax, which was notably driven by a sizeable and largely unexplained increase in the effective average tax rate. Experience has shown that fluctuations in the effective corporate tax rate can be large and act in both directions.

Box 5: Revenues explain better-than-expected deficit outturn in 2005 and 2006

The table below provides, for 2005 and 2006, detailed information on the reasons for the discrepancy between the government balance planned for year *t* in the Stability Programmes submitted in December *t*-1 and the observed government balance. The table shows that, cumulated over the two years, real GDP growth was in line with plans. The most relevant message concerns how the composition of fiscal consolidation differed from plans. In both years, the planned fiscal consolidation was based on expenditure restraint. Nominal government expenditure was planned to increase by 2.3% in 2005 and 3.1% in 2006. Government revenue was planned to increase by 3.4% in 2005 and 3.6% in 2006. Outcomes turned out to be significantly different.

Government revenue increased much faster than planned in both years, by about 4% in 2005 and 6% in 2006. Cumulated over the two years, the larger-than-planned increase in government revenue contributed to an improvement in the government balance compared to plans of about 1½ percentage points of GDP. The larger-than-planned increase in government revenue in these years mainly reflected favourable tax yields (cumulated GDP growth was roughly in line with plans). **Government expenditure** also increased significantly faster than planned, by 3.4% in 2005 and 4.0% in 2006. The cumulated expenditure overruns represent about 1.0 percentage point of GDP. The one-off increase in expenditure in Italy in 2006 accounts for ¼ of a percentage point of GDP.

Budgetary plans and outcomes in 2005 and 2006 in the euro area

	2005		2006	
	Plans for year <i>t</i> in Dec (t-1) SP	Outcome for year <i>t</i>	Plans for year <i>t</i> in Dec (t-1) SP	Outcome for year <i>t</i>
Real GDP growth in year <i>t</i>	2.3	1.5	2.0	2.7
Budget balance in year <i>t</i> -1 (2004 / 2005)	-2.8 (a)	-2.8 (f)	-2.6 (a)	-2.5 (f)
Budget balance in year <i>t</i> (2005 / 2006)	-2.3 (b)	-2.5 (g)	-2.4 (b)	-1.6 (g)
Change in the budget balance in year <i>t</i>	0.5 (c)	0.3 (h)	0.2 (c)	0.9 (h)
Change in the expenditure ratio in year <i>t</i>	-0.9	0.0	-0.4	-0.2
Change in the revenue ratio in year <i>t</i>	-0.4	0.3	-0.1	0.7
Increase in nominal expenditure in year <i>t</i>	2.3 (d)	3.4 (i)	3.1 (d)	4.1 (i)
Increase in nominal revenue in year <i>t</i>	3.4 (e)	4.0 (j)	3.6 (e)	6.1 (j)
Budget balance surprise compared to target (g)-(b)	-0.2		0.7	
Of which: base effect (f)-(a)	0.0		0.0	
Of which: variation effect (h)-(c)	-0.2		0.6	
Of which: expenditure overruns (-) ⁽¹⁾	-0.5		-0.5	
Of which: revenue windfalls (+) ⁽²⁾	0.3		1.1	

Notes: ⁽¹⁾ and ⁽²⁾ are calculated as $(-)(i)-(d)*(Exp/GDP_{t-1})$ and $((j)-(e))*(Rev/GDP_{t-1})$.

Source: 2004 and 2005 SPs and Commission spring 2007 forecast.

and better-than-expected budgetary outcomes loosened fiscal policy relative to plans, there is a risk that the better-than-expected budgetary outturns in 2006 will lead to less ambitious or less durable consolidation efforts in 2007 and 2008 than currently expected.

Good times for fiscal consolidation

The prospects for continued economic growth are better than they have been for many years. This favourable outlook provides Member States with an opportunity to consolidate government finances and to progress towards sustainable budgetary positions. This would be in line with the principles agreed in the context of the 2005

reform of the Stability and Growth Pact (SGP), which specify that structural efforts towards the medium-term budgetary objectives (MTOs) should be higher than the benchmark adjustment of 0.5% of GDP in *good times*. The revised Code of Conduct on the application of the SGP defines *good times* as "periods where output exceeds its potential level, taking into account tax elasticities".²³ It specifies that "given the uncertainty surrounding output gap levels' estimates, the change in the output gap could

²³ See document "Specifications on the implementation of the Stability and Growth Pact and Guidelines on the format and content of Stability and Convergence Programmes", endorsed by the Ecofin Council in September 2005.



also be considered, especially when the output gap is estimated to be close to zero" and that the identification of periods of *good times* should be made "after an overall economic assessment".

The *ex-ante* identification of *good times* is a difficult exercise, not only because of the usual uncertainties associated with economic forecasting but also because different economic indicators may point in different directions. Moreover, standard tools – for instance, to calculate output gaps – may partly fail to capture the complexity of economic developments. These uncertainties imply that a prudent stance should be taken in the identification of good times. This is essential if mistakes of the past are not to be repeated, when policy-makers realised only after the boom period that they had witnessed economic good times and therefore missed the opportunity to progress with consolidation. In line with the Code of Conduct, the identification of good times should be based on the examination of overall economic conditions. Converging factors suggest that the current period is a good time for fiscal consolidation:

(i) ***The output gap is slightly negative and moving towards positive territory.*** Real GDP growth reached 2.7% in 2006 and is projected to remain above potential in 2007 and 2008. According to the spring 2007 forecast of the Commission, the output gap of the euro area, which is currently slightly negative, will become positive in the course of 2008.

(ii) ***The labour market situation is improving rapidly.*** Two million new jobs were created in the euro area in 2006 and the euro-area unemployment rate reached its lowest level in more than a decade. The fall in the unemployment rate is largely attributable to the cyclical upswing - according to Commission calculations, the unemployment gap (i.e. the difference between structural unemployment and actual unemployment) is set to close in the course of 2007 - although available estimates also point to a fall in the structural rate of unemployment. The Commission expects the situation on the

labour market to continue to improve in 2007 and 2008.

(iii) ***Favourable tax elasticities.*** Government revenues have increased much faster than nominal GDP in the last two years. According to the latest information, in the last two years, the ratio of government revenue to GDP has increased by about one percentage point of GDP (0.6 percentage points in 2006 alone). This reflects the effect of favourable growth composition, as GDP has been supported by the dynamism of tax-rich components (domestic demand), positive labour market developments, and a number of other positive developments (e.g. developments in asset prices, dynamism of profits and corporate tax revenues, etc.).

Table 6: Recent and projected budgetary developments in the euro area (in%)

	Real GDP Growth (1)			Government balance (1)			Structural balance (1)		
	2006	2007	2008	2006	2007	2008	2006	2007	2008
BE	3.1	2.3	2.2	0.2	-0.1	-0.2	-0.4	-0.1	0.1
DE	2.7	2.5	2.4	-1.7	-0.6	-0.3	-1.5	-0.8	-0.7
EL	4.3	3.7	3.7	-2.6	-2.4	-2.7	-3.9	-3.6	-3.4
ES	3.9	3.7	3.4	1.8	1.4	1.2	2.3	1.8	1.7
FR	2.0	2.4	2.3	-2.5	-2.4	-1.9	-2.3	-2.1	-1.5
IE	6.0	5.0	4.0	2.9	1.5	1.0	3.0	1.8	1.6
IT	1.9	1.9	1.7	-4.4	-2.1	-2.2	-2.6	-1.6	-1.8
LU	6.2	5.0	4.7	0.1	0.4	0.6	0.5	0.6	0.8
NL	2.9	2.8	2.6	0.6	-0.7	0.0	1.1	-0.4	0.1
AT	3.1	2.9	2.5	-1.1	-0.9	-0.8	-1.0	-1.1	-1.2
PT	1.3	1.8	2.0	-3.9	-3.5	-3.2	-2.9	-2.7	-2.6
SI	5.2	4.3	4.0	-1.4	-1.5	-1.5	-1.5	-1.7	-1.7
FI	5.5	3.1	2.7	3.9	3.7	3.6	3.7	3.5	3.6
EA	2.7	2.6	2.5	-1.6	-1.0	-0.8	-1.1	-0.8	-0.7

Note: Projections for 2008 are based on a no policy change assumption.

Source: Commission spring 2007 forecast.

Stronger efforts expected in some euro-area Member States

Overall, the current economic and budgetary developments clearly point to a situation of "good times" in the euro area and most of its Member States. This was explicitly recognised by the Eurogroup in the context of the annual Mid-Term Review of budgetary developments (see Box 6). An examination of budgetary plans suggests however that, only two years after the reform of the SGP, several Member States are not pursuing the sound fiscal policy principles laid down in the revised SGP for such periods. In

particular, some Member States which have achieved their MTO seem to be pursuing pro-cyclical fiscal policies while others not yet at their MTO are not pursuing an annual structural adjustment of at least ½% of GDP. This runs counter to the spirit and the letter of the preventive part of the Pact.

Table 6 summarises the main results of the Commission spring 2007 forecast. The following messages emerge from the table:

- (i) Several *Member States currently at their MTO* are expected to loosen their fiscal stance in 2007. According to the Commission spring 2007 forecast, fiscal loosening under current policies would exceed one percentage point of GDP in Ireland and the Netherlands. The fiscal stance in Spain would be mildly expansionary with the structural balance worsening by ½ of a percentage point. Such pro-cyclical policies are not optimal from a domestic point of view, nor from the perspective of the overall euro-area policy mix, as some of these countries can be considered to benefit from good economic times in 2007. In 2008, only the Netherlands would achieve a marked improvement in the structural balance, which would not, however, offset the large deterioration in 2007.²⁴
- (ii) A number of *countries adjusting towards their MTO* do not plan sufficient fiscal efforts in 2007 and 2008. According to the Commission spring 2007 forecast, Germany will be the only country to achieve an improvement in structural balance of more than ½ of a percentage point of GDP in 2007. The fiscal effort would fall short of the 0.5% benchmark in France and Greece, and also in Slovenia and Austria, where a slight deterioration of the structural balance is projected. None of the countries in this group can be considered to suffer from economic bad times and should therefore, according to the SGP principles, at least achieve the

benchmark fiscal effort of ½ of a percentage point of GDP. In 2008, France and Greece envisage in their end-2006 SPs a structural improvement in line with the ½ of a percentage point of GDP benchmark. Fiscal plans in the other countries deviate from the SGP principles. In spite of good times, Germany plans no more than a stabilisation of its structural balance in 2008. In France, in the absence of offsetting measures, the announced tax-reduction measures not contemplated in the 2007 Budget would entail a smaller structural improvement than projected in the Commission's spring forecast for 2007 and, specially, 2008.

- (iii) Finally, the *two countries currently subject to an excessive deficit procedure*, Portugal and Italy, are expected to make progress towards the correction of the excessive deficit position. Italy plans to achieve the required improvement of its structural balance in 2007, although a less favourable picture for the developments of public finances has emerged in the context of the new medium-term financial planning document of the government. For Portugal, the forecast points to a modest improvement in the structural balance in 2007. According to the Commission spring 2007 forecast, the structural balance in 2008 will remain broadly unchanged in view of the no policy change assumption, which indicates that the measures needed to achieve the planned consolidation still have to be taken and implemented.

Conclusions and fiscal policy orientations agreed by euro-area Finance Ministers

In a context where all large euro-area Member States have just corrected or are about to correct their excessive deficits, the challenge ahead is to ensure continuation of consolidation efforts and to a move towards the MTOs. This would create the necessary scope for the full working of the automatic stabilisers in less favourable cyclical phases and allow debt levels to be reduced before the budgetary effects of the retirement of the baby boom generation set in. Moreover, rigorous fiscal policies would contribute to keeping interest rates low and therefore to the crowding-in of investment and to lower debt servicing costs.

²⁴ In the Netherlands, the budgetary outcome in 2007 is likely to turn out significantly worse than anticipated in the budget, partly on account of lower gas receipts. Based on current information, the nominal balance in 2008 would improve reflecting notably tax elasticities returning to their long term average and a recovery of gas revenues.



On 20 April 2007, during the discussion on the Mid-Term Review of Budgetary policies (MTBR), euro-area Finance Ministers took these factors into account when assessing national fiscal policies for 2007 and intentions for 2008. Ministers provided clear orientations for the conduct of fiscal policies in the Member States (see Box 6) in the coming eighteen months. They agreed notably that Member states that have not yet reached their medium term objective (MTO) should make use of the benign economic outlook

to speed up the pace of deficit and debt reduction, and thus to achieve at least the benchmark of 0.5% of GDP annual fiscal adjustment in structural terms. They also committed themselves to implementing their 2007 budgets as planned, avoiding expenditure overruns, and to carefully designing fiscal policy plans for 2008 so as to accelerate adjustment towards the MTO for Member States which have not reached it and, for those which have reached it, to avoid feeding macroeconomic imbalances.

Box 6: The Mid-Term Review of Budgetary developments

In the context of the SGP reform, the Council agreed in 2005 that the Eurogroup should discuss, at least once a year before the summer, "a horizontal assessment of national budgetary developments and their implications for the euro area as a whole". At its meeting of 24 November 2006, the Eurogroup decided that this Mid-Term Budgetary Review (MTBR) should be upgraded to a genuine ex-ante policy debate, to be held just before crucial decisions on the budgetary plans for the following year are taken in the Member States.

The Eurogroup agreed in particular that the purposes of the MTBR are: (i) to ensure proper coordination of national fiscal policies in the euro area; and (ii) to provide sufficient peer support for sound fiscal policies at national level. To enrich the MTBR discussions, Member States were invited to forward information to their peers on their fiscal policy intentions for the year $t+1$. It was also decided to make a change to the calendar of discussions, to ensure that the MTBR discussion takes place, for all Member States, at a time when fiscal policy decisions can still be influenced. Finally, Ministers concurred that the Eurogroup would agree on conclusions on horizontal and country-specific issues. Following the MTBR discussion of 20 April 2007, the Eurogroup adopted conclusions stating notably that:

"(...) Eurogroup Ministers reaffirm their adherence to the sound fiscal policy principles of the revised SGP and to national fiscal rules (...) and agree that the euro area is experiencing economic good times. In this context, they are committed to make full use of the current economic growth and the better than expected tax revenues to pursue sound fiscal policies and to avoid pro-cyclical policies in line with the SGP provisions. (...) Member states that have not yet reached their MTO are expected to make use of the benign economic outlook to speed up the pace of deficit and debt reduction, in order to achieve at least the benchmark of 0.5 % of GDP annual fiscal adjustment in structural terms, and to make use of the benign economic outlook to speed up the pace of deficit and debt reduction. Taking advantage of the favourable cyclical conditions, most euro area members would achieve their MTOs in 2008 or 2009 and all of them should aim for 2010 at the latest."

Ministers commit: (i) to build on the better-than-expected budgetary outcomes in 2006 to pursue more ambitious budgetary targets than those set in the 2006 Stability Programmes; (ii) to implement their 2007 budget as planned, avoiding expenditure overruns, and using unexpected extra revenues to reduce government deficit and debt; (iii) to carefully design fiscal policy plans for 2008 so as to accelerate adjustment towards the MTO for Member states which have not reached it and for those which have reached it to avoid feeding macroeconomic imbalances overall."

Focus

II. EU financial integration and euro-area adjustment

The process of EU financial integration is predicated on the link between financial development and improved economic performance, and reflects a two-step rationale. Integration of Member State financial sectors is expected to promote financial development in the EU as a whole and this, in turn, should lead to a higher potential output in the EU economy. In addition, just as the financial integration process has benefited from the elimination of currency risk in the euro area, the smooth functioning of the euro-area economy depends on the extent to which the euro is underpinned by an integrated financial market. A number of financial market indicators confirm increasing integration in the European Union, with the introduction of the euro acting as a further catalyst. As a result, portfolios have been rebalanced to improve risk/reward structures reducing home bias and leading to increased risk sharing, especially prevalent for the euro area. An important message is that the euro-area Member States have even more to gain from financial integration than EU Member States outside the euro area. However, it also has potentially unfavourable implications for the euro area essentially due to the fact that the process of financial integration has itself constituted an asymmetric shock which has proved to be difficult to cope with.

1. Introduction

The financial sector plays a crucial role in a modern economy. First, it provides the necessary infrastructure to facilitate financial transactions. Second, it channels financial resources from those in surplus to those in deficit, ensuring an efficient allocation of resources, capital formation and growth. Third, it facilitates risk management by pooling, diversifying and reallocating risks among economic agents with different risk-taking characteristics and possibilities. Within the EU, cross-border integration is seen as a means to promote the efficiency of the financial sector in performing these functions. Cross-border integration has additional relevance in the euro area, where the financial sector also functions as a mechanism for economic adjustment among the participating Member States.

This focus section analyses EU financial integration and its role for euro-area adjustment from four angles: first, it looks at the respective EU policies and their economic rationale; second, it reviews the state of play of EU financial integration by looking at the actual degree of integration achieved to date; third, it discusses the benefits and risks of financial integration for economic adjustment in the euro area; and fourth, it lays out the policies needed to optimise the role of financial integration in euro-area economic adjustment.

2. EU policies and the rationale for financial integration

The blueprint for an integrated EU financial sector is the Financial Services Action Plan (FSAP) proposed in the late 1990s and currently in the process of national implementation. The FSAP comprises 42 separate measures targeted at a wide range of financial activities. These measures relate to both the wholesale and retail sectors and to the three financial-sector functions described above. They establish common rules for integrated securities and derivatives markets (the Market in Financial Instruments Directive), facilitate the raising of capital on an EU-wide basis (the Directive on Prospectuses), ensure legal certainty in the cross-border use of collateral (the Directives on Settlement Finality and Financial Collateral Arrangements), set common standards for financial reporting (the Regulation on International Accounting Standards), promote investor confidence and market integrity (Directive on Market Manipulation) and facilitate cross-border retail payments. The implementation of those measures within Member States will be aided by the four-level 'Lamfalussy framework'²⁵ which is

²⁵ Following a suggestion by a committee of 'wise men' headed by Alexandre Lamfalussy, a four-level approach for EU financial market legislation and implementation was endorsed by the European Council at Stockholm in March 2001. It is composed of four "levels", each focusing on a specific stage of the implementation of legislation. The four-level approach is as follows: Level 1 consists of legislative acts, namely Directives or Regulations, proposed by the Commission following



intended to ensure that legislation is implemented consistently in all Member States and that national supervisory practices converge.

The immediate economic rationale for financial-sector integration policies stems from the well-documented finance-growth nexus, with both theoretical and empirical evidence suggesting that an efficient financial sector improves investment performance and so promotes higher long-term output growth (see Box 7). An efficient financial sector can improve growth via (a) portfolio diversification, where the opportunity to share risks may induce savers to allocate a higher fraction of their savings to riskier but more profitable projects; (b) enhanced quality of investment, as greater access to and by intermediaries reduces the problem of asymmetric information and so raises overall investment profitability; and (c) longer-term investment, as the availability of liquid financial markets allows a larger proportion of savings to be invested in longer-term and typically more productive projects.

In the EU, national segmentation has acted as a major constraint on the efficiency of the financial sector of the Union as a whole. While Member State financial sectors have generally been efficient from a national perspective, they have been much less so when viewed from the perspective of a progressively integrating EU economy. A significant divergence has emerged between the real sector, which increasingly operates on a cross-border basis, and the financial sector, which remains segmented. The degree of segmentation has been such that the EU financial sector has not been able to function efficiently and so has acted as a drag on the overall performance of the EU economy.²⁶

consultation with all interested parties and adopted under the 'co-decision' procedure by the Council and the European Parliament. At Level 2, the relevant implementing measures are adopted. Such measures are used to ensure that technical provisions can be kept up to date with market developments. Level 3 measures have the objective of improving the common and uniform implementation of Level 1 and 2 acts in the Member States. Level 4 involves compliance and enforcement of the new rules and laws through common EU-wide practices by supervisors and regulators.

²⁶ See 'Quantification of the macroeconomic impact of integration of EU financial markets', London Economics, 2002; and 'Financial market integration, corporate financing and economic growth', European Commission,

But integration can stimulate financial-sector development, via two main channels. First, benefits will emerge from exploiting the scale effects of a greater number of actual and potential counterparts for financial transactions. The resulting decline in transaction costs translates into a lower cost of capital for borrowers and higher returns for investors. Second, competition among financial intermediaries make the intermediation of savings to investment even more efficient. Finally, integration can also increase financial-sector development and thereby enhance stability, e.g. due to the enhanced risk management techniques from foreign entrants and additional intermediation channels arising, i.e. going beyond traditional banking. As sector development and efficiency rises, investment and growth performance in the economy is further enhanced.

However, many of the benefits of financial integration might be indirect, especially for less developed countries. Indeed, summarising the literature related to financial *globalisation*, Kose et al. (2006) conclude that the 'main benefits of successful financial globalisation are probably catalytic and indirect rather than simply enhanced access to financing for domestic investment'.²⁷ They argue that more important than direct growth effects of access to more capital is how capital flows generate so-called 'potential collateral benefits' of financial integration. They cite broad support in the literature for the thesis that 'financial openness can promote development of the domestic financial sector, impose discipline on macroeconomic policies, generate efficiency gains among domestic firms by exposing them to competition from foreign entrants, and unleash forces that result in better government and corporate governance.

Directorate General of Economic and Financial Affairs,
Economic Papers, No. 179, 2002, by M. Giannetti, L. Guiso, T. Jappelli, M. Padula and M. Pagano.

²⁷ Kose, M.A. et al. (2006), 'Financial globalization: a reappraisal', NBER Working Paper Series, No. 12484, August.

Box 7: Finance and growth

Finance, entrepreneurship and economic growth are interconnected as the financial system enables savers to pool funds, and then allocates investment to the highest return activity by addressing problems of adverse selection in credit markets. This theoretical link suggests that the development of finance is closely linked to economic growth. While empirical work in the field of financial development and economic performance is relatively new, evidence would seem to confirm the importance of a well-developed – and hence efficient – financial system in boosting economic performance.

A positive link between a developed financial sector and economic performance has been established by a number of studies. Building on the work of King and Levine (1993), Levine et al. (2000) establish a strong positive link between financial intermediary development and economic growth. Similarly, Beck et al. (2000) find a robust and positive link between financial intermediary development and both real per capita GDP growth and total factor productivity growth. In a broad overview article, Levine (1997) documents a strong positive link between the functioning and development of the financial system as a whole and long-run economic growth.

Both banks and financial markets provide complementary ways of fostering economic growth, with each of them having their distinctive advantages (Dolar and Meh, 2002). Similarly, Levine (2002) shows in a broad-based cross-country examination that although overall financial development is robustly linked with economic growth, financial structure in itself is not a stringent determinant of economic growth. In fact, intermediary-based finance and market-based finance may play different roles and the availability of both financing avenues seems to be beneficial.

Financial development seems to benefit new entrants and small firms disproportionately. Rajan and Zingales (1998) find that financial development influences economic growth rates via the reduction of the cost of external finance to financially dependent firms. In that context, the paper suggests that a well-developed financial system may play a crucial role in the rise of new firms, while a lack of financial development may favour incumbent firms – able to fund themselves through retained profits – over new entrants. Similar results are reached by Beck et al. (2004). Giuso et al. (2004) find that local financial development enhances the probability of an individual starting his own business, favours entry, increases competition and promotes the growth of firms. The study also shows these effects to be weaker for larger firms, which can more easily raise funds outside their local region.

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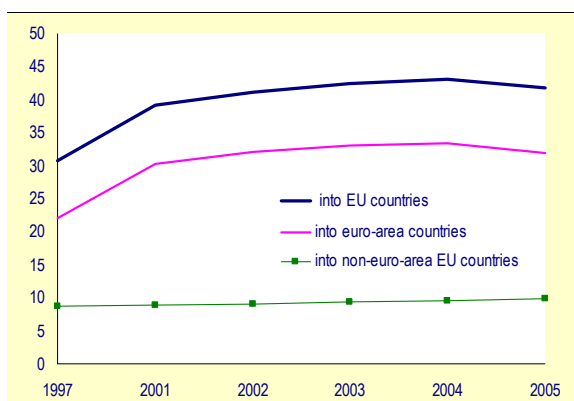
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3. The state of play of financial integration in Europe

A number of financial market indicators confirm increasing integration in the European Union, with euro introduction acting as a further catalyst. Although product distribution is still being hampered by different legal and institutional barriers rooted in often centuries-old traditions, national contract and property laws, financial integration has resulted in a common regulatory framework in a number of areas, progressively allowing capital to flow more easily across borders.

Graph 29: Relative share of EU countries cross-border portfolio investment going to other (i) EU countries, (ii) euro area countries and (iii) non euro-area countries (in % of total cross-border portfolio investment) (1)



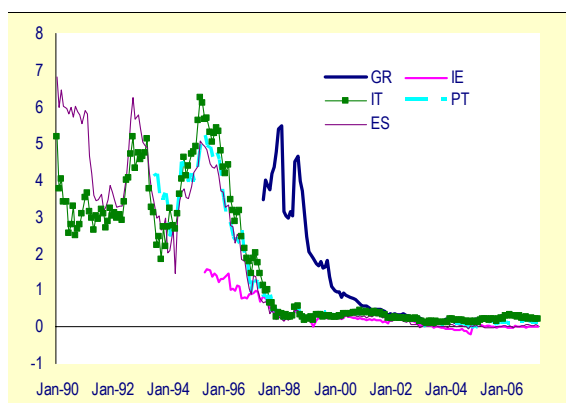
(1) When compared to total cross-border portfolio holdings. As no data are available for 1997, the portfolio investments from Germany, Luxembourg and Greece are excluded for that year.
Source: IMF, Commission services.

As a result, portfolios have been rebalanced to improve risk/reward structures reducing home bias and leading to increased risk-sharing. Calculations based on IMF data demonstrate that the relative share of EU countries' cross-border portfolio investment going to other EU countries increased from roughly 30% in 1997 to around 42% in 2005 (see Graph 29).²⁸ In other words, EU and euro-area countries have increasingly invested in each other. Figures show that development overwhelmingly benefited the euro area as the share of EU countries' portfolio debt

²⁸ As no data are available for 1997, the portfolio investments from Germany, Luxembourg and Greece are excluded for that year.

and equity holdings in the single currency area increased from 22% to 32% during that period. In contrast, the share of portfolio investments from EU countries vis-à-vis non-euro-area EU countries barely increased at all. The time profile of the shift in cross-border portfolios documents a sharp acceleration in the EU cross-border portfolio investment component between 1997 and 2001, the run-up to and the early years of the euro. This might be explained by pre-euro convergence developments as rational forward-looking economic agents adjusted to changed circumstances, also evidenced in the sharply lowered borrowing costs in a number of prospective euro-area countries, as evidenced by the declining yield spread when compared to Germany (Graph 30).

Graph 30: Sovereign yield spread against Germany (in %, Jan 1990 to May 2007)



(1) 10 year segment.
Source: EcoWin.

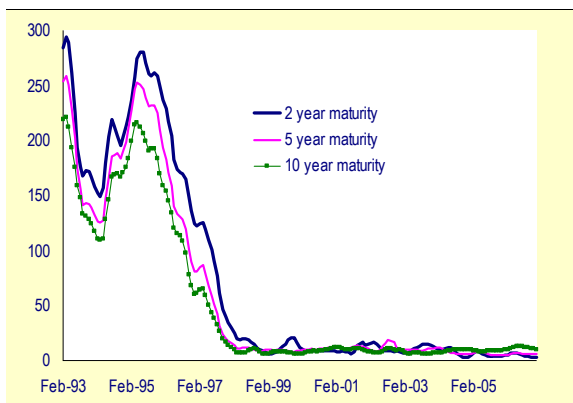
The process of EU financial integration is well under way, in particular in wholesale markets but increasingly also in retail markets. The pace of integration has been fastest in the case of financial instruments with agreed definitions, common conventions and a common infrastructure such as the euro-area inter-bank and derivatives markets. Progress has been slower for instruments which are more affected by national regulations, market conventions, taxation, and legal frameworks, such as equities.

The euro-area derivatives market is highly integrated with a sharp expansion of euro interest swap activity and the rise of pan-European equity-based index trading. As regards the integration of money markets, the market for

interbank deposits is fully integrated, as witnessed by the acceptance by market participants of EONIA (Euro Overnight Index Average) and EURIBOR (Euro Inter-Bank Offered Rate) as uniform price references.

On the other hand, various technical, regulatory, fiscal and legal obstacles relating to clearing and settlement are still holding back the integration of the secured market segments (e.g. commercial paper and treasury bills), which involve the exchange of liquidity against collateral.

Graph 31: Standard deviation of government bond yield spreads for two, five and ten year maturities, euro area (in basis points – Feb 1993 to Dec 2006)

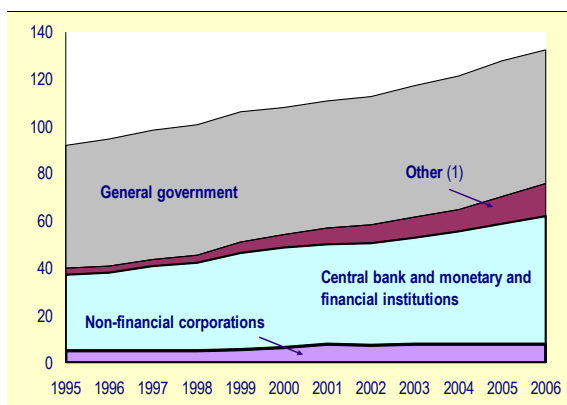


Source: ECB.

The launch of the euro created a much more homogenous EU bond market, with largely convergent prices among euro-area Member States evidenced in the sharply declining standard deviation of government bond yields (Graph 31). A deeper and more liquid euro-denominated bond market has resulted in higher net and gross issuance volumes for the market as a whole, when compared to the combined issuance in the legacy currencies, resulting in a wider and deeper market for bonds issued by the private sector. Outstanding bond securities amounted to more than 130% of euro-area GDP, up from roughly 90% of GDP in 1995 (Graph 32). The financial sector contributed most to the euro-area bond market development, with central banks and other monetary and financial institutions (i.e. banks) increasing their outstanding bond obligations from 32% of euro area GDP in 1995 to 54% during 2006. In addition, the financial sector category including other financial intermediaries, pension funds and insurance

companies enhanced its share of outstanding debt obligations when measured against euro area GDP from 2.5% to 11.5% during that same period. Outstanding debt securities from the general government sector rose from roughly 52% of GDP in 1995 to roughly 56% of GDP in 2006 and outstanding non-financial corporate sector debt securities increased from 5% to roughly 8%.

Graph 32: Debt securities of euro-area residents, outstanding amounts, all currencies (in % of GDP)



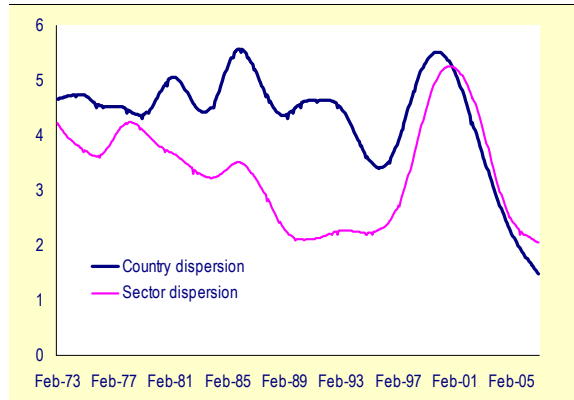
(1) Includes other financial intermediaries as well as pension funds and insurance companies.

Source: Commission services.

In equity markets, the impact of the euro has so far been strongest at investor level, with an overall reduction in 'home bias' and a re-orientation of asset managers' investment strategies towards a European-based approach. One measure of euro-area equity market integration is to compare the dispersions of euro-area equity returns by country and by sector. In an integrated market, equity prices should be driven primarily by sector-specific rather than country-specific variables. Graph 33 shows that the cross-country dispersion has been slightly below the respective cross-sector dispersion since the end-1990s, co-inciding with the euro introduction, while it was clearly above it during the previous 25 years. In the euro area, therefore, sector-based equity strategies would provide a greater degree of diversification than country-based equity portfolios.



Graph 33: Filtered cross-country and cross-sector dispersions of equity returns, euro area (in % – Feb 1973 to Jan 2007)

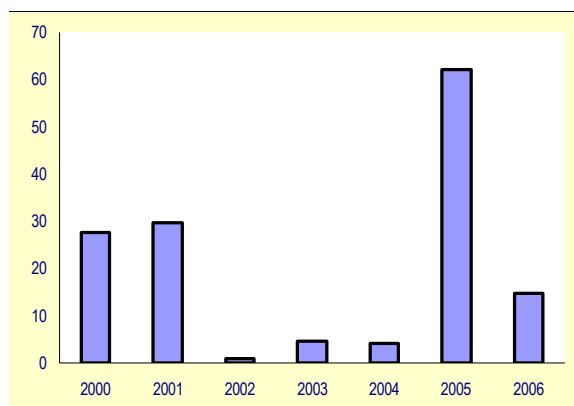


(1) Based on monthly cross-sectional Hodrick-Prescott filtered total equity returns in country and sector.

Source: ECB.

- There have been a significant number of M&As in the banking sector – still the dominant sector in providing euro-area financing – although consolidation has mainly occurred along national lines due to a number of remaining legal and political barriers. However, cross-border banking M&A picked up during 2005, when several large-value transactions were conducted (Graph 34).

Graph 34: Share of cross-border M&A on total banking system M&A, euro area (in % – in 2000 to 2006)



Source: ECB.

- Consolidation in euro-area market infrastructure can be witnessed in Europe's stock exchanges, where notable examples would include the merger of exchanges in

Amsterdam, Brussels, Paris, and Lisbon in Euronext, and the integrated Nordic-Baltic market, which includes the stock exchanges of Copenhagen, Stockholm, Helsinki, Tallinn, Riga and Vilnius. Some progress has been made in the integration of payment systems, such as TARGET, and in clearing and settlement systems.

4. Benefits and challenges of financial integration for economic adjustment in the euro area

Considerable attention has been devoted to the question of how to enhance the functioning of market-based channels of adjustment in the euro area. One strand of literature considers the possibility of fostering greater geographical labour mobility, while a second considers whether monetary union could provide a catalyst for structural reform in product, labour and capital markets. Less attention has been paid to the role of the financial sector in the process of adjusting to country-specific shocks. Financial markets seem to have had a relatively minor impact in inter-country adjustment in the EU during the 1970s and 1980s. During the 1990s, however, the adjustment role of EU financial markets seems to have picked up and is likely to have become even more significant after the adoption of the euro.

Integration has the potential to support the adjustment role of the euro-area financial sector in several ways.

First, smooth adjustment to country-specific shocks means having a financial sector that helps to reallocate resources efficiently across sectors and firms within an economy. With low labour mobility, adjustment to such shocks in the euro-area context relies heavily on wage and price adjustments and it is critical that capital moves fluidly to take advantages of such shifts, creating new businesses and new jobs. The more integrated and efficient the euro-area financial sector is, the more it can play a role in the rapid regeneration of productive capacity and growth across the area as a whole.

Second, integration can promote greater diversification in the financial sector, which in turn plays an important role in ensuring

resilience. A diverse institutional structure means that a broader financial sector is potentially more robust than one resting on a few pillars, while the availability of alternative intermediation channels can avoid the risk of stress in one part of the financial sector starving firms or other sectors of funds at a time of adjustment stress. Integration has already contributed to diversification in the euro-area financial sector via the creation of new or more liquid markets (e.g. for derivative products and corporate bonds) and the emergence of non-bank financial intermediaries.

Third, financial integration can dampen the negative effects of country-specific financial shocks by promoting innovation by suppliers of capital. Recent research at the IMF suggests that securitisation of the US national mortgage market may have halved the amplitude of local real estate cycles by diluting 'credit crunch' effects in local downswings.²⁹ Securitisation has expanded in the euro-area financial sector since 1999 (e.g. increased issuance of covered bonds and other asset-backed securities), but remains underdeveloped and segmented along national lines.

Fourth, financial integration promotes income- and consumption-smoothing through enhanced opportunities for risk-sharing. The theoretical basis of income- and consumption-smoothing through risk-sharing is well-established: the holding of financial assets allows an individual to separate his production and consumption decisions over time. Subject to a negative shock (e.g. a loss of employment and labour income), the individual may draw on financial assets to maintain consumption while income recovers from the shock. Similar reasoning can be extended to the regional or country level, where the aggregate levels of production and consumption can be smoothed over time as financial integration provides a form of 'macroeconomic insurance'. In the US, the role of private risk-sharing has been compared to that of fiscal transfers, and according to some estimates has an even greater impact.³⁰ As there

is no federal budget in the euro area, it is logical to assume that risk-sharing through financial asset diversification could play a predominant role in continuing financial-market integration.

An important message from this is that the euro-area Member States have even more to gain from financial integration than EU Member States outside the euro area (and than those countries/states participating in monetary unions with centralised budgetary policy and labour mobility). Such considerations cannot be regarded as an argument for the euro area to 'go it alone' in financial integration, which would make little sense when so much euro-denominated financial business is conducted outside the euro area. Instead, it should be seen as a reason for the euro-area Member States to move into the vanguard of efforts to create an integrated financial market for the EU as a whole.

While financial integration can bring strong 'risk-reducing' features into the process of economic adjustment in the euro area, it may also bring additional risks:

First, there is a change in the nature of financial-market discipline over economic policies under monetary union. The key aspects of this are the elimination of currency risk and the ease of financing imbalances in highly integrated markets, thus inevitably reducing market discipline on national economic policies. Such changes can mute the signals from the financial sector to Member State policy-makers, for example, when fiscal policy moves off track or when financial inflows are misallocated to less productive sectors of the economy. The reduction in market discipline since 1999 has been aggravated by a more generalised decline in risk premia due to ample liquidity and a search for yield across the global financial system.

²⁹ See Schnure, C. (2005), 'Boom-bust cycles in housing: The changing role of financial structure', *IMF Working Paper*, No. 05/200, October.

³⁰ For example, a study by Asdrubali, Sørensen and Yoshia (1996) found that capital and credit markets had

smoothed over 39% of shocks to gross state product over the period 1963-90 compared with less than 13% smoothed by the federal budget. Credit markets also contributed to a significant amount of smoothing by credit markets (23% of all shocks). 'Channels of interstate risk sharing: United States 1963-1990', *Quarterly Journal of Economics*, Vol. 111, pp.1081-1110.



Second, deep and integrated financial markets will tend to amplify both favourable events and distortions in Member State economies. For example, asymmetric shocks affecting national credit and asset markets in the euro area are no longer met with a domestic interest rate response. Swings in these financial markets may in consequence be wider and more prolonged, possibly contributing to amplified cycles in economic activity and the real exchange rate. While these amplified cycles may not be problematic per se, there is a potential for boom-bust scenarios if too much credit goes into housing/consumption and not enough into the productive sector, which has a potentially negative impact on future reimbursement capacity. In such an environment, economic growth may be unbalanced and external competitiveness impaired.

Third, financial integration may bring subtle changes in the nature of systemic risk in the euro area. While financial integration can influence adjustment, causality does not run in one direction only and the real-sector adjustment under the euro area can also have significant feedback into financial markets. While the risk of acute financial crisis triggered by abrupt movements in exchange rates no longer exists for euro-area Member States, there is an increased risk of financial instability linked to a protracted slowdown in economic activity. With nominal exchange rates irrevocably fixed, adjustment to asymmetric shocks among euro-area Member States is a gradual process with the realignment of intra-euro real effective exchange rates occurring through relative price changes. If the adjustment required is large, Member States can be trapped in a low-growth cycle for many years, with potentially serious implications for the health of their financial sectors.

A dominant theme running through the risk factors identified above is that financial integration might be a shock in itself. As a result, financial sector behaviour might become more pro-cyclical following country-specific shocks, at least during a learning period. Strong and protracted asymmetric booms could lead financial-sector agents to underestimate the build-up of lending risks, which might then crystallise in an extended downturn. Asset market movements could be pronounced at times of

negative local real interest rates and could be followed by a protracted downturn in valuations. Easy deficit financing and weaker market discipline could allow sizeable imbalances to accumulate. These elements could increase the amplitude and length of adjustment cycles, as well as heightening systemic risk.

5. Summary and conclusion

There is ample theoretical and empirical evidence suggesting a causal link between financial development and improved economic performance. By allocating financial resources and risk efficiently over time and space, the financial sector allows real-sector activity to expand and develop optimally. To the extent that the financial sector may be constrained in performing this task, there is a consequent cost in terms of sub-optimal economic performance and welfare loss.

The process of financial integration in the EU is predicated on the link between financial development and improved economic performance, and reflects a two-step rationale. Integration of Member State financial sectors is expected to promote financial development in the EU as a whole and this, in turn, should lead to a higher potential output in the EU economy. As a subset of EU Member States, the performance of the euro-area economy can be expected to benefit from financial integration perhaps to an even higher degree as the absence of currency risk on intra-area financial flows provides scope for relatively deeper integration.

Just as the financial integration process has benefited from the elimination of currency risk in the euro area, the smooth functioning of the euro-area economy depends on the extent to which the euro is underpinned by an integrated financial market. The more specific relevance of financial integration for the euro area is based on optimal currency area theory. In the absence of national exchange rates and monetary policies, cross-border financial flows can play a crucial role in stabilising income and output at the Member State level, by expanding opportunities for economic agents to smooth consumption and investment over time. This stabilisation role – linked to more efficient resource allocation and enhanced risk-sharing opportunities – is even

more important in a context where cross-border labour mobility tends to be limited and there are downward rigidities in both real and nominal wages. An important message is that the euro-area Member States have even more to gain from financial integration than those Member States outside. This is a powerful rationale for euro-area Member States to move into the vanguard of efforts to create an integrated financial market for the EU as a whole.

However, financial integration also has potentially less positive implications for the euro area. For instance, a general reduction in risk premia and loosened credit constraints have led to very large current-account differences between Member States, while the elimination of currency risk has reduced the effect of market discipline on national developments within the euro area. There are concerns about the fact that these developments have been associated, to some degree, with what looks like an excessive loss in competitiveness and that the corresponding funds have, to a large degree, been channelled into private consumption and housing rather than corporate investment (but this depends on the countries considered). In sum, the process of financial integration has constituted an asymmetric shock which has proved to be difficult to cope with.

In a single-currency environment, there are fewer macroeconomic policy instruments with which to manage the effects of increased financial flows between Member States within an integrated financial sector. This situation is exacerbated if the reduction in available policy instruments is not sufficiently internalised by policy makers. Moreover, the reduced sensitivity of the integrated financial sector to national economic developments means that policy makers cannot rely on an autonomous private-sector response to the emergence of economic disequilibria. Accordingly, the benefits of financial integration in the economic adjustment process can be optimised only if accompanied by policies that remove structural rigidities and thus enhance economic flexibility, strengthen prudential oversight, and ensure a sound fiscal setting, all of which helps underpin macroeconomic and financial stability.



III. Recent DG ECFIN publications

1. Policy documents

EUROPEAN ECONOMY. No. 2. 2007

Spring economic forecasts 2007 - 2008

http://ec.europa.eu/comm/economy_finance/publications/european_economy/forecasts_en.htm

EUROPEAN ECONOMY. No. 3. 2007

Public finances in EMU - 2007

http://ec.europa.eu/comm/economy_finance/publications/european_economy/public_finances2007_en.htm

EUROPEAN ECONOMY. No. 4. 2007

Annual statement and report on the euro area

http://ec.europa.eu/comm/economy_finance/publications/european_economy/2007/euro_area2007_en.htm

EUROPEAN ECONOMY. OCCASIONAL PAPERS. No. 27. November 2006

Country Study: Growth and competitiveness in the Polish economy: the road to real convergence

http://ec.europa.eu/economy_finance/publications/occasional_papers/2006/occasionalpapers27_en.htm

EUROPEAN ECONOMY. OCCASIONAL PAPERS. No. 29. April 2007

Growth, risks and governance: The role of the financial sector in southeastern Europe

http://ec.europa.eu/economy_finance/publications/occasional_papers/2007/occasionalpapers29_en.htm

EUROPEAN ECONOMY. OCCASIONAL PAPERS. No. 30. June 2007

European Neighbourhood Policy: Economic Review of EU Neighbour Countries

http://ec.europa.eu/economy_finance/publications/occasional_papers/2007/occasionalpapers30_en.htm

EUROPEAN ECONOMY. OCCASIONAL PAPERS. No.31. June 2007

2006 Pre-accession Economic Programmes of candidate countries

http://ec.europa.eu/economy_finance/publications/occasional_papers/2007/occasionalpapers31_en.htm

EUROPEAN ECONOMY. ENLARGMENT PAPERS. No. 29. 2006

Progress towards meeting the economic criteria for accession: the assessments of the 2006 Progress Reports

http://ec.europa.eu/economy_finance/publications/enlargement_papers/elp29_en.htm

EUROPEAN ECONOMY. ENLARGMENT PAPERS. No. 30. 2006

Western Balkans in Transition

http://ec.europa.eu/economy_finance/publications/enlargement_papers/elp30_en.htm

2. Analytical documents

EUROPEAN ECONOMY. ECONOMIC PAPERS. No. 273.

Luís Gordo Mora (Banco de España) and João Nogueira Martins (Directorate-General for Economic and Financial Affairs)

How reliable are the statistics for the Stability and Growth Pact?

http://ec.europa.eu/economy_finance/publications/economic_papers/2007/economicpapers273_en.htm

EUROPEAN ECONOMY. ECONOMIC PAPERS. No. 274.

Sven Langedijk and Werner Roeger (Directorate-General for Economic and Financial Affairs)

Adjustment in EMU: A model-based analysis of country experiences

http://ec.europa.eu/economy_finance/publications/economic_papers/2007/economicpapers274_en.htm

EUROPEAN ECONOMY. ECONOMIC PAPERS. No. 276.

Roel M.W.J. Beetsma (University of Amsterdam, Tinbergen Institute, CEPR and CESifo) Frederick van der Ploeg (EUI, Florence, University of Amsterdam, CEPR and CESifo)

The political economy of public investment

http://ec.europa.eu/economy_finance/publications/economic_papers/2007/economicpapers276_en.htm

EUROPEAN ECONOMY. ECONOMIC PAPERS. No. 277.

Fabio Balboni (University of Bologna), Marco Buti, Martin Larch (Directorate-General for Economic and Financial Affairs)

ECB vs Council vs Commission: Monetary and fiscal policy interactions in the EMU when cyclical conditions are uncertain

http://ec.europa.eu/economy_finance/publications/economic_papers/2007/economicpapers277_en.htm

EUROPEAN ECONOMY. ECONOMIC PAPERS. No. 278.

Peter Tillmann (University of Bonn)

Robust Monetary Policy with the Cost Channel

http://ec.europa.eu/economy_finance/publications/economic_papers/2007/economicpapers278_en.htm

EUROPEAN ECONOMY. ECONOMIC PAPERS. No. 279.

Michael Neugart (Wissenschaftszentrum Berlin für Sozialforschung - WZB)

Provisions of the welfare state: employment protection versus unemployment insurance

http://ec.europa.eu/economy_finance/publications/economic_papers/2007/economicpapers279_en.htm

3. Regular publications

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

http://ec.europa.eu/comm/economy_finance/indicators/euroareagdpend.htm

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

http://ec.europa.eu/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)

ec.europa.eu/comm/economy_finance/indicators/businessandconsumersurveys_en.htm

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

http://ec.europa.eu/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://ec.europa.eu/comm/economy_finance/publications/bondmarkets_en.htm

Price and Cost Competitiveness

http://ec.europa.eu/comm/economy_finance/publications/priceandcostcompetitiveness_en.htm



IV. Key indicators for the euro area

		2003	2004	2005	Dec-06	Jan-07	Feb-07	Mar-07	Apr-07	May-07
1 Output										
Industrial confidence ^{1.1}	Balance	-11	-5	-8	6	5	5	6	7	6
Industrial production ^{1.2}	mom % ch	0.5	2.0	1.3	1.3	-0.6	0.5	0.4		
		2003	2004	2005	05Q4	06Q1	06Q2	06Q3	06Q4	07Q1
Gross domestic product ^{1.3}	Qtr. % ch				0.4	0.8	1.0	0.6	0.9	0.6
2 Private consumption										
Consumer confidence ^{2.1}	Balance	-18	-14	-14	-6	-7	-5	-4	-4	-1
Retail sales ^{2.2}	mom % ch	0.1	0.2	1.0	0.5	-0.9	0.4	0.5		
		2003	2004	2005	05Q4	06Q1	06Q2	06Q3	06Q4	07Q1
Private consumption ^{2.3}	Qtr. % ch	1.3	1.4	e1.4	0.1	0.5	0.4	0.7	0.4	
3 Investment										
Capacity utilization ^{3.1}	%	80.7	81.6	81.3	81.1	82.0	82.5	83.6	83.9	84.4
Gross fixed capital formation ^{3.2}	Qtr. % ch	1.0	2.1	2.7	0.5	1.1	2.2	0.9	1.5	
Change in stocks ^{3.3}	% of GDP	0.0	-0.1		0.4	0.0	0.3	0.2		
4 Labour market										
Unemployment ^{4.1}	%	8.4	8.9	8.5	7.5	7.4	7.3	7.2		
		2003	2004	2005	05Q4	06Q1	06Q2	06Q3	06Q4	07Q1
Employment ^{4.2}	Ann. % ch	0.4	0.6	0.7	0.8	1.0	1.4	1.5	1.5	
Shortage of labour ^{4.3}	%	2.5	2.4		2.8	2.8	3.1	4.4	5.0	5.0
Wages ^{4.4}	Ann. % ch	2.5	2.2		2.6	2.9	2.9	2.7	2.5	
5 International transactions										
Export order books ^{5.1}	Balance	-24	-13	-16	4	2	5	5	5	6
World trade ^{5.2}	Bn. EUR	132	146	157	178	181	179	182		
Exports of goods ^{5.3}	Bn. EUR	1056.0	1142.1	1232.5	121.7	122.0	120.9			
Imports of goods ^{5.4}	Bn. EUR	970.4	1069.1	1207.3	121.3	119.0	120.6			
Trade balance ^{5.5}	Bn. EUR	85.6	73.0	25.2	0.4	3.0	0.3			
		2003	2004	2005	05Q4	06Q1	06Q2	06Q3	06Q4	07Q1
Exports of goods and services ^{5.6}	Qtr. % ch	1.1	6.8	4.2	0.8	3.2	1.0	1.9	3.6	
Imports of goods and services ^{5.7}	Qtr. % ch	3.1	6.7	5.2	1.7	2.4	0.9	2.2	1.7	
		2003	2004	2005	Dec-06	Jan-07	Feb-07	Mar-07	Apr-07	May-07
Current account balance ^{5.8}	Bn. EUR	18.1	42.4	38.8	6.8	3.5	-3.7	5.4		
Direct investment (net) ^{5.9}	Bn. EUR	-18.4	-39.7	-41.8	-28.3	-5.0	-12.4	-8.1		
Portfolio investment (net) ^{5.10}	Bn. EUR	-9.4	39.0	32.3	35.8	39.0	26.2	71.7		
6 Prices										
HICP ^{6.1}	Ann. % ch	2.1	2.2	2.2	1.9	1.8	1.8	1.9	1.9	1.9
Core HICP ^{6.2}	Ann. % ch	2.0	2.1	1.5	1.6	1.8	1.9	1.9	1.9	
Producer prices ^{6.3}	Ann. % ch	1.6	2.3	4.1	3.5	2.9	2.8	2.7		
Import prices ^{6.4}	Ann. % ch	102.5	97.2	104.8						
7 Monetary and financial indicators										
Interest rate (3 months) ^{7.1}	% p.a.	2.3	2.1	2.2	3.4	3.6	3.7	3.8	3.8	4.1
Bond yield (10 years) ^{7.2}	% p.a.	4.1	4.1	3.4	3.8	4.0	4.1	4.0	4.2	4.3
ECB repo rate ^{7.3}	% p.a.	3.25	2.75		3.50	3.50	3.75	3.75	3.75	4.00
Stock markets ^{7.4}	Index	2420	2805	3207	4070	4160	4230	4070	4337	4441
M3 ^{7.5}	Ann. % ch	7.8	5.9	7.4	9.7	9.9	10.0	10.9	10.4	
Credit to private sector (loans) ^{7.6}	Ann. % ch	5.0	6.0	8.1	10.7	10.6	10.3	10.5	10.3	
Exchange rate USD/EUR ^{7.7}	Value	1.13	1.24	1.24	1.32	1.30	1.31	1.32	1.35	1.35
Nominal effective exchange rate ^{7.8}	Index	106.4	109.8	109.7	114.1	113.4	113.8	115.0	116.0	

Number	Indicator	Note	Source
1	Output		
1.1	Industrial confidence indicator	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
2	Private consumption		
2.1	Consumer confidence indicator	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
3	Investment		
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 capital formation	Volume (1995 prices), seasonally adjusted	Eurostat
3.3	Change in stocks	In percent of GDP, volume (1995 prices), seasonally adjusted	Eurostat
4	Labour market		
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
5	International transactions		
5.1	Export order books	Industry survey; balance of positive and negative replies, seasonally adjusted	ECFIN
5.2	World trade	Volume, 1998=100, seasonally adjusted	CPB
5.3	Exports of goods	Bn. EUR, excluding intra euro-area trade, fob	Eurostat
5.4	Imports of goods	Bn. EUR, excluding intra euro-area trade, cif	Eurostat
5.5	Trade balance	Bn. EUR, excluding intra euro-area trade, fob-cif	Eurostat
5.6	Exports of goods and services	Volume (1995 prices), including intra euro-area trade, seasonally adjusted	Eurostat
5.7	Imports of goods and services	Volume (1995 prices), including intra euro-area trade, seasonally adjusted	Eurostat
5.8	Current account balance	Bn. EUR, excluding intra euro-area transactions; before 1997 partly estimated	ECB
5.9	Direct investment (net)	Bn. EUR, excluding intra euro-area transactions	ECB
5.10	Portfolio investment (net)	Bn. EUR, excluding intra euro-area transactions	ECB
6	Prices		
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
7	Monetary and financial indicators		
7.1	Interest rate	Percent p.a., 3-month interbank money market rate, period averages	Ecwin
7.2	Bond yield	Percent p.a., 10-year government bond yields, lowest level prevailing in the euro area, period averages	Ecwin
7.3	ECB repo rate	Percent p.a., minimum bid rate of the ECB, end of period	Ecwin
7.4	Stock markets	DJ Euro STOXX50 index, period averages	Ecwin
7.5	M3	Seasonally adjusted moving average (3 last months)	ECB



7.6	Credit to private sector (loans)	MFI loans to euro-area residents excluding MFIs and general government, ECB monthly values: month end values, annual values: annual averages	
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

Contributors to this issue are:

Recent economic developments and short-term prospects

C. Brzeski, L. González and W. Schoellmann

The impact of the euro appreciation on domestic prices and the export performance

H. Cigan and M. Zogala

Spillovers revisited: fiscal policy and inflation in the euro area

M. Larch and A. Turrini

A mid-term review of budgetary policy in the euro area

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