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QUARTERLY REPORT ON THE EURO AREA

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Editorial

Over the summer, growth prospects for the euro-area economy have begun to look less rosy, as a result of both external and domestic factors. The recovery that started in the first quarter of 2002 has failed to gather momentum. On the positive side, household consumption took over from exports as the engine of growth in the second quarter.

Recent data suggest that recovery will continue - albeit more weakly and more gradually than forecast in the spring - and will accelerate to potential growth only in 2003. The average euro-area growth rate of 1.4% for this year, which the Commission put forward in its spring forecasts, is now out of reach. Based on our indicator model, which still predicts some acceleration in the second half of this year, the average growth rate for 2002 is unlikely to exceed 1%.

The labour market has shown remarkable resilience to the slow growth. Growth in employment continued in the first quarter of 2002 after almost 7 million new jobs were created in the euro area between 1998 and 2001. Nevertheless, the unemployment rate in the euro area has been creeping up and is not likely to fall again before 2003, when growth is expected to accelerate. Meanwhile, headline inflation dropped to around 2% in early summer after remaining stubbornly above the ECB's upper boundary during the economic slowdown. Barring spikes in oil prices, and in fresh fruit prices because of crops lost in floods, a further abatement of inflationary pressure can be expected over the next few months and into next year.

There is a high level of uncertainty in the current economic environment. This uncertainty is related to the impact on wealth, capital cost and confidence of the recent sharp correction in stock market prices, to weaker-than-expected external demand, to the increase in oil prices and to the economic crises in some Latin America countries. The outlook for investment growth is clouded by low productivity growth combined with higher wage increases, rising unit labour costs and a squeeze in company profits. Moreover, oil prices have risen in recent months as a 'war premium' reflects fears of possible supply disruptions in the event of military action in Iraq. If these fears materialise, the global recovery could be significantly dented. On the other hand, if no severe supply disruptions occur and uncertainty in the region eases, the risk premium could disappear and oil prices could drop to levels more in line with the weakness of the global recovery.

Although downside risks have increased significantly in recent months, it should be stressed that positive factors that should support a pick-up remain in place. Monetary conditions are accommodating domestic activity and interest rates are lower than predicted in the spring, aided by easing inflationary pressures following the overdue appreciation of the euro. The process of adjusting inventories has probably largely been completed, such that its negative contribution to growth will fade out and possibly reverse. There are no major economic imbalances in the euro area. Survey indicators remain around their long-term averages, and this is consistent with continued growth. Finally, inflationary pressures are abating, and the effect of price uncertainty and public perception of high inflation following the changeover to euro notes and coins is likely to evaporate.

The torrential rains and disastrous floods in August/September disrupted the lives of hundreds of thousands in eastern parts of the euro area, in France, Spain and in Eastern Europe. In contrast to the extensive human hardship, the natural disaster will have only a

limited impact on the euro-area economy. Output, public finances and prices have been affected, but most of the damage will be done to specific sectors (agriculture and tourism) and to the capital stock. The negative impact on euro-area GDP will be small as the sectors affected represent only a small share of total value added.

In this economic climate of high uncertainty, it is crucial to press ahead with sound policies that foster consumer and investor confidence, since this will in turn strengthen domestic demand. This includes making further progress with the implementation of structural reforms in order to increase both the growth potential of the euro-area and its resistance to external disturbances, as well as implementing sound budgetary policies.

As growth is lower than expected, budgetary positions are weakening. However, the shortfall is only to some extent the result of unforeseen cyclical developments that reflect the working of automatic stabilisers. In several countries, policies have also departed from planned adjustment paths. On top of this, expenditure overruns unrelated to the cycle, notably in health care, have been noted in a few countries.

Eight of the twelve euro-area countries have already achieved a medium-term budgetary position of 'close to balance or in surplus'. The Member States that have not yet achieved a budgetary position of 'close-to-balance or in surplus' have to complete the transition process rapidly. Fiscal efforts by those Member States are necessary to safeguard and reinforce the macroeconomic foundations on which the durable success of the euro rests. It is also in the interests of each individual Member State to complete the transition to close-to-balance as soon as possible, to regain full control of fiscal stabilisation through the working of automatic stabilisers, to bring debt levels down and to deal with the long-term costs of ageing and unfunded pension systems.

This does not mean that the close-to-balance objective should be pursued regardless of the underlying economic conditions. Fiscal consolidation has always been assessed in the context of the overall economic situation and outlook, and this will continue to be the case.

The SGP is the operational application of general principles of sound fiscal behaviour, combined within a transparent and predictable framework that allows a fair amount of flexibility. Adhering to its requirements will underpin consumer and producer confidence and support the recovery of the euro-area economy.

Pedro SOLBES

MEMBER OF THE EUROPEAN COMMISSION

I. Economic situation in the euro area

Whereas most projections, including those of the Commission, had anticipated a swift acceleration of euro-area growth up to and above potential as from the second quarter of 2002, the latest indicators suggest that growth is likely to remain below potential in the second half of the year. The main reasons for this downward revision of short-term growth prospects is that the recovery of domestic demand has not matched expectations. Although consumer spending picked up moderately in the second quarter, this upturn still appears fragile. Furthermore, there have been no signs of any turnaround in investment so far. Export growth accelerated sharply during the second quarter but a weaker-than-expected performance of the US economy is casting a shadow over the global recovery. On a more positive note, the disinflation trend, which has been rather slow in recent months, is expected to proceed smoothly during the rest of the year. Conversely, a source of concern is that wage growth is not in line with developments in productivity.

1. Euro-area recovery fails to gain momentum[1]

The recovery of the euro area, which had started in the first quarter of 2002 as anticipated in the Commission's Spring Forecasts, has failed to gather further momentum. Whereas it was generally expected that growth would pick up and reach its potential, Eurostat's preliminary estimates indicate that GDP growth decelerated slightly from 0.4% to 0.3% during the second quarter of 2002. The main reason for this sluggish performance was the persistent weakness of domestic demand which, with the noticeable exception of private consumption,

has so far failed to post signs of a real upturn.

Faint signs of recovery in consumption. Much of the growth momentum in the second quarter of 2002 stemmed from households. After three quarters of near stagnation, private consumption increased by 0.4% in the second quarter. However, although this development is encouraging, short-term prospects for consumer spending remain rather subdued, as the forces which have weighed on consumption since mid-2001 - including low confidence, higher than expected inflation and falling equity prices - will unwind only gradually.

Table 1: Euro-area growth components					
	2001 Q2	2001 Q3	2001 Q4	2002 Q1	2002 Q2
% change on previous quarter, volumes					
GDP	0.0	0.2	-0.3	0.4	0.3
Private consumption	0.5	0.1	0.0	-0.2	0.4
Government consumption	0.4	0.3	0.4	0.8	0.4
Gross fixed capital formation	-0.6	-0.6	-0.9	-0.6	-0.8
Changes in inventories (% of GDP)	-0.1	-0.3	-0.4	-0.3	-0.2
Exports* of goods and services	-1.2	-0.3	-1.7	0.1	1.9
Imports* of goods and services	-0.7	-1.5	-1.6	-0.7	1.7
% contribution to change in GDP					
Private consumption	0.3	0.1	0.0	-0.1	0.2
Government consumption	0.1	0.1	0.1	0.2	0.1
Gross fixed capital formation	-0.1	-0.1	-0.2	-0.1	-0.2
Changes in inventories	0.0	-0.3	-0.1	0.1	0.1
Net exports	-0.2	0.4	-0.1	0.3	0.1

* Including intra-euro area trade.

[1] The cut-off date for statistics included in this issue was 20 September, 2002.

Consumer confidence remains above its long-term average but has not improved noticeably since the beginning of the year. Expectations in terms of unemployment, which had improved noticeably during the first half of the year, deteriorated again in July.[2] More generally, households have expressed increasing worries about the general economic situation, probably as a reflection of the collapse in stock prices. A major improvement in consumer confidence appears unlikely in the months to come.

Consumer confidence

Source: Commission services.
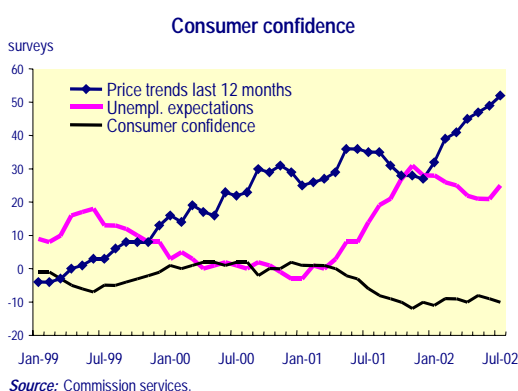
In the past two years, households' purchasing power has been dented by several price shocks. As explained in greater detail in the section on inflation below, the deceleration of inflation since spring has been slower than expected. Gains in purchasing power due to disinflation amounted to about 0.4 percentage points in the second quarter but should not exceed 0.2 percentage points in the third quarter. Since the beginning of the year, the impact of inflation on private consumption has probably been compounded by households' overly pessimistic perception of the price impact of the changeover. As highlighted in the previous quarterly report, there is a wide gap between consumers' inflation expectations, which have shown a downward trend since November 2001, and consumers' assessment of past inflation which have surged since the beginning of the year. Somewhat worryingly, public perception of past price trends continued to

deteriorate in June and July despite an easing of inflation as measured by the HICP.

Global stock indices

Source: Commission services.
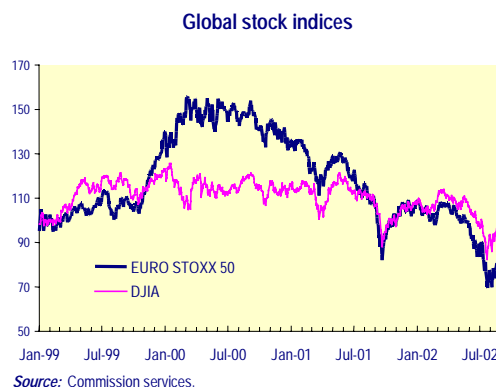
Although existing empirical evidence suggests that equity wealth has only a limited impact on private spending in the euro area, the magnitude of the collapse in stock markets since their peak in 2000 implies that private consumption must have been affected, even if only on a relatively small scale (see Box 1 on the impact of falling equity prices). Given the lags associated with wealth effects, past declines in stock prices should continue to weigh on private spending during the next months.

Capital formation remains a source of concern. Total investment in the euro area has been declining continuously since the beginning of 2001 and is now, in real terms, close to 4% below its peak level. Recent data do not display any sign of inflexion in this trend: gross fixed capital formation is estimated to have dropped by 0.8% between the first and the second quarters of the year, one of the most rapid quarter-on-quarter rates since the beginning of 2001. No breakdown of investment by sector is yet available for the second quarter but data for previous quarters suggest that the weakness in capital formation is relatively equally shared between the equipment and the construction sectors.

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[2] As no survey is released in August, the latest data only cover July.

Box 1: **The impact of falling equity prices on the real economy**

In the past months, financial market developments have been dominated by a sharp correction in international equity prices. Based on monthly averages, the EURO STOXX50 index dropped by 28% between March and August. The scale of this more recent equity price correction, in addition to the overall decline in prices since their peak of March 2000, has focused attention on the possible consequences for the euro-area's real economy. A decline in stock prices affects growth via two major channels. First, reduced financial wealth weighs on household spending. Second, the increase in capital cost (or the reduction in Tobin's Q) resulting from lower stock valuations has a negative impact on corporate investment. The importance of each of these two channels is discussed below.

Wealth effect on private consumption. Standard estimates of the economic impact of a drop in equity prices usually focus on the wealth effect on private consumption. Most existing empirical studies have found evidence of a substantial equity wealth effect on consumption. In the US, this effect is generally thought to lie between 3 to 7 cents per dollar wealth increase, materialising over 1 to 3 years. Estimates for European countries suggest a generally smaller wealth effect, reflecting differences in the structure of equity ownership. Given the uncertainty associated with these estimates, it is difficult to assess the impact on consumption of a drop in equity prices with reasonable precision. To give an idea of the orders of magnitude involved, the table below displays the direct impact of a 20% drop in equity prices on private consumption for various assumptions in terms of propensity to consume out of wealth. In the euro area, the estimated impact ranges from 0.2% to 1.2%. The impact is significantly higher in the USA because of larger stock market capitalisation.

Direct impact of a 20% drop in equity prices on private consumption				
Market capitalisation (% of GDP)		Impact on consumption (% pts) (1) Propensity to consume out of wealth		
Dec-2001	May-2002	0.01	0.03	0.05
Euro-area	71.8	66.6	-0.25	-0.75	-1.25
USA	138.6	115.2	-0.40	-1.20	-2.00

(1) Calculated on the market capitalisation in December 2001.
Source: Commission Services.

The estimates provided above only measure the direct wealth effect on private consumption. The final impact on GDP will be compounded by multiplier effects and the response of investment to weaker activity and changes in interest rates. It will also depend on the reaction of monetary policy to lower inflation pressures. To measure these indirect effects, macroeconomic simulations were conducted with DG ECFIN's Quest model. The simulations are presented in the table below.

Impact of a 20% drop in equity prices on GDP (1) (Shock to household financial wealth)		
	Year 1	Year 2
European Union	-0.40	-0.13
USA	-1.22	-0.34

(1) Simulations based on DG ECFIN's Quest model. The drop in equity prices is modelled as a shock to household financial wealth with no direct impact on investment spending. As a technical assumption, monetary policy remains unchanged in the first year and takes the deceleration of inflation into account thereafter.
Source: Commission Services.

The fall in stock prices is modelled as a shock to household wealth; the direct effect of stock prices on investment is ignored. It is assumed that monetary policy remains unchanged during the first year and takes the deceleration in inflation into account thereafter. In that case, the collapse of the stock market entails a 0.40% drop in EU GDP in the first year.

Direct impact of stock prices on investment. Only few empirical studies have explored the impact of stock price movements on corporate investment. This impact has been difficult to identify empirically in most euro-area countries and is therefore generally estimated to be small. Nevertheless, it may be argued that the equity price correction that has been taking place since spring 2002 is somehow atypical and could be associated with a stronger drop of investment than during previous stock market corrections. The recent drop in equity prices reflects investor concerns about corporate earnings, the latter resulting from several factors including a loss of confidence in the reliability of the audited accounts of many high profile companies. Such a confidence crisis is particularly worrying insofar as a the mechanisms at work risk having a particularly profound impact on investment through reduced availability (or higher cost) of finance for companies. Indeed, while a reassessment of earning growth prospects would normally be associated with reduced borrowing interest rates, reflecting the expected lower growth and lower inflationary pressures, a loss of confidence in company balance-sheets implies an immediate rise in the lending costs, as lenders' assessments of the default risks become less reliable. The rise in corporate bond spreads since April 2002 provides some backing for this hypothesis.

To try to assess the effect on the economy of such a confidence crisis, the impact of a positive shock to the equity risk premium was simulated using DG ECFIN's Quest model. The results, which are presented in the table below, suggest that under this scenario, the combined impact of the wealth effect on households and of a higher risk premium on investment results in a much bigger GDP loss during the first two years in both the EU and the USA than the simple wealth effect presented in the previous simulation.

Impact of a 20% drop in equity prices on GDP (1) Equity risk premium shock		
	Year 1	Year 2
European Union	-1.68	-0.54
USA	-4.00	-0.85

(1) Simulations based on DG ECFIN's Quest model. The drop in equity prices is modelled as a shock to the equity risk premium which affects both corporate investment and households financial wealth. As a technical assumption, monetary policy remains unchanged in the first year and takes the deceleration of inflation into account thereafter.
Source: Commission Services.

Some prudence is required, as usual, when interpreting model simulations. In particular in this case because the simulation results crucially depend on the assumptions concerning the monetary policy reaction. Nevertheless, two conclusions stand out from the analysis. First, empirical evidence suggests that the drop in equity prices has had an effect on private spending in the euro area since 2001 and will continue to hamper consumption in the near term. However, the corresponding wealth effect has probably remained small. Second, the impact of the recent confidence crisis on corporate investment may have been much more substantial.

Manufacturing confidence

surveys

Source: Commission services.
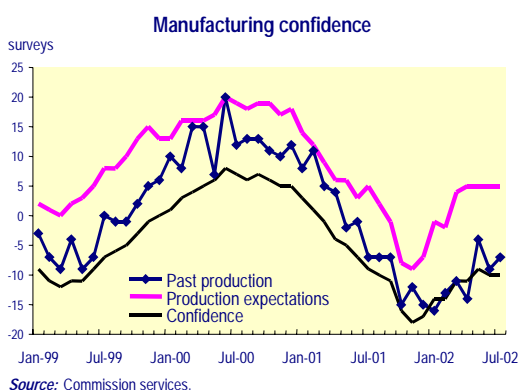
Confidence indicators in the business sector do not foreshadow a rapid turnaround of investment spending. According to the Commission's survey, sentiment in the manufacturing industry recovered during the first months of 2002 but has remained broadly unchanged since the beginning of the spring. The survey is not published in August but other business surveys such as Reuters PMI or IFO's index have shown significant declines over the summer. In August, Reuters PMI in the manufacturing sector fell to a level suggesting that manufacturing is barely expanding. Worryingly, the PMI index for

services dropped even more sharply, indicating that the loss in confidence is broad-based.

Two factors will weigh on corporate investment in the months to come. First, the collapse in equity prices that has taken place since April could affect corporate spending more significantly than previous falls in equity prices. To the extent that it reflects a confidence shock linked to the loss of credibility of audited accounts, the current stock market crisis is likely to be compounded by rising risk premiums and reduced access to corporate loans. It could therefore have serious consequences for investment, even if capital formation has traditionally been little affected by gyrations in equity prices in the euro area. Second, a combination of very low productivity gains and a slight pick-up in wage growth is likely to have taken a serious toll on corporate profits in the past four quarters.

These cost pressures may also be one of the factors explaining the strength of the current downward phase of the inventory cycle. According to national accounts, the euro area has now experienced six successive quarters of reductions in inventories. In terms of GDP, the inventory adjustment is already larger than that observed during the 1995-96 recession.

A fragile recovery of world demand. There is some evidence that the external sector has reverted to a source of growth. At 0.1%, the contribution of net trade to GDP growth was marginal in the second quarter of the year but this was the result of a sharp increase in imports. Exports rose by nearly 2% compared with the previous quarter, despite an appreciating exchange rate, suggesting a recovery of world demand.

Order-books in manufacturing

Source: Commission services.
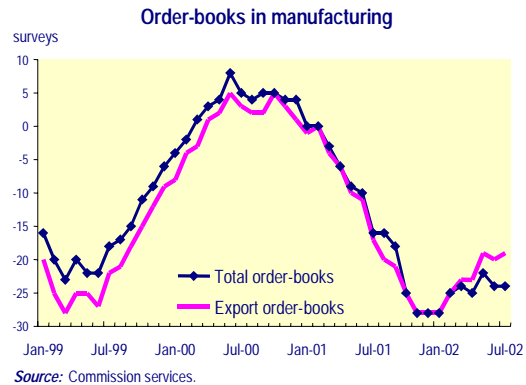
The strengthening of external demand is also visible in manufacturing surveys, which indicate that export order-books have recovered somewhat more strongly than total order-books since the beginning of the year. However, short-term prospects for the global economy have recently deteriorated on the back of a weaker than expected recovery in the USA (see Box 2) and the contribution of exports to growth in the euro-area could weaken somewhat in the months to come.

Table 2: Selected euro area and national leading indicators, 2001-2002

	SENT. IND[1]	BCI[2]	OECD[3]	PMI[4]	IFO[5]	NBB[6]
Long-term average[7]	99.2	-0.2	1.7	53.1	100.2	-9.7
October	99.1	-1.09	-5.5	42.9	89.6	-21.1
November	98.6	-1.18	-3.8	43.6	91.1	-17.0
December	98.8	-1.16	-1.7	44.1	94.5	-19.0
January 2002	99.1	-1.00	-0.1	46.3	96.2	-16.9
February	99.2	-0.85	1.2	48.6	101.1	-14.1
March	99.5	-0.59	2.4	50	106.0	-9.9
April	99.4	-0.64	3.6	50.7	104.7	-8.3
May	99.9	-0.20	4.1	51.5	106.2	-1.6
June	99.6	-0.45	3.1	51.8	104.9	-5.5
July	99.4	-0.35	2.1	51.6	102.4	-7.4
August				50.8	100.8	-7.6

1) Economic sentiment indicator, DG ECFIN. 2) Business climate indicator, DG ECFIN. 3) Composite leading indicator, six monthly change. 4) Reuters Purchasing managers index, manufacturing. 5) Business expectations, West Germany. 6) National Bank of Belgium indicator for manufacturing. 7) Jan-92 till last observation available, for PMI (manufacturing) since beginning of series in June-97.

Box 2: **The global economic context**

Recovery in the USA weaker than expected. Recent months have provided increasing evidence of a weakening of the recovery in the USA. The preliminary estimate for Q2 GDP growth came in well below expectations at 0.3% (quarter-on-quarter). The slowdown compared to the first quarter, which was itself revised downwards, was driven by a decrease in the contribution to growth of all major GDP components. The latest release of the quarterly accounts also featured a substantial revision of growth in 2001, translating into a longer and deeper recession than previously thought. The new figures show that US GDP shrank in every quarter but the last of 2001, and not just in the third quarter as previously reported.

Looking ahead, recent indicators paint a mixed picture. Consumer confidence, which had staged a recovery towards the end of 2001, fell back sharply over the summer on the back of slumping equity markets. The ISM manufacturing index fell sharply in July/August and has now reached a level suggesting that manufacturing is barely expanding. The Conference Board's leading indicators index also fell back in June and July. On a more positive note, orders of non-defence capital goods registered in July their largest monthly increase since 1992 and sales of cars and home have remained buoyant over the summer.

Whilst there is now a somewhat increased risk of a 'double-dip' recession, on balance the data continue to indicate that a recovery is underway, albeit one which is substantially weaker than initially assumed. Factors that will support growth include the resilience of private spending, first signs of an upturn in equipment investment and relatively strong gains in labour productivity.

➢ Private consumption has been fuelled by gains in disposable income essentially attributable to relatively strong wage growth and tax cuts. Growth in disposable incomes has even allowed a modest recovery in the personal saving ratio since mid-2001. Very low interest rates have also supported the housing sector.

➢ After six quarters of contraction, investment in equipment and software staged a modest recovery in the second quarter, suggesting that the overhang in ICT capital may have been reduced substantially. This interpretation is backed up by a recent surge in orders for computers and communication equipment.

➢ Even if the economy's productivity in 2000-01 was less impressive than previously thought, gains in output per hour have generally exceeded expectations since mid-2001.

However, there are important downside risks to the short-term outlook of the US economy. First, the extent and the potential damage of the confidence crisis triggered by the Enron scandal are not fully understood yet. Second, there is substantial uncertainty as to the impact of the collapse in equity prices on consumption and investment. Empirical studies suggest that the US economy is more sensitive to fluctuations in equity prices than most other Western countries. Finally, although the recent recession slightly improved the situation for a while, much remains to be done to solve the economy's structural imbalances.


USA: Contribution to GDP growth — Japan: Contribution to GDP growth
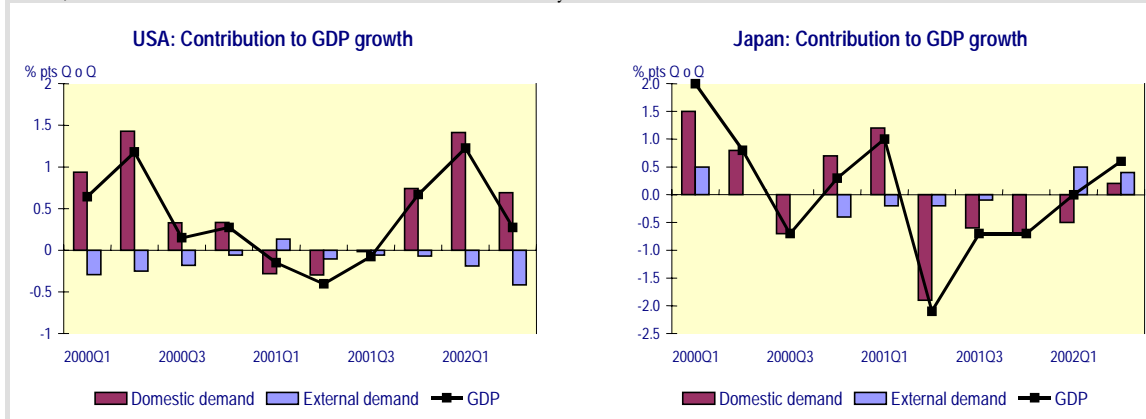
Fragile hopes of recovery in Japan. In the second quarter of 2002, real GDP in Japan grew by 0.6% quarter-on-quarter. Methodological changes, giving greater emphasis to the supply side, have resulted in a major downward revision of growth in the first quarter. Whereas statistics were previously pointing to a solid rebound of the economy with GDP increasing by 1.4%, new data now indicate flat activity in that quarter. The revision underlines the fragility of the Japanese recovery. Although private consumption posted some signs of an upturn during the first half of the year, investment continued to fall and the contribution of domestic demand to growth was negative for the period as a whole. Prospects for domestic demand during the second half of the year remain lacklustre due to continued slack in labour markets and the difficult situation of the corporate sector.

The external sector remains the main engine of the Japanese economy, but this source of growth is particularly vulnerable to the slowing pace of expansion in the US. Around 30% of Japan's exports are for the US, while a further 40% go to the rest of Asia which is also exposed to the US slowdown (particularly in technology sectors). In this respect, one of the main problems confronting the authorities in recent months has been the impact of the weaker dollar. An appreciating yen not only adds to ongoing deflationary pressures, but threatens to curtail export-led growth.

Overall, the ongoing recovery of the world economy appears fragile and the external environment less supportive than previously anticipated. The oil prices situation is an additional source of downside risks. While economic fundamentals would suggest oil prices to be lower, prices have been rising, up from $19 per barrel in January to over $28 per barrel in early September, on the back of an increasing risk premium because of the possibility of military conflict in the Middle East.

Overall, recent data suggest a continuation of the recovery, albeit at a weaker pace than previously envisaged. Hence, DG ECFIN's short-term forecasting model predicts quarter-on-quarter GDP growth in the range of 0.3 to 0.6% in the third as well as the fourth quarter of 2002. It seems increasingly likely that growth in the euro area will not recover to and above its potential before 2003.

Euro area: GDP growth rate
% change on previous quarter
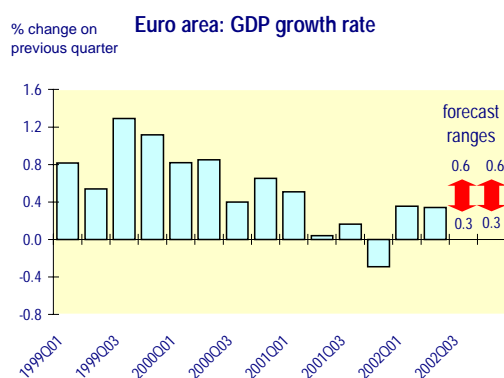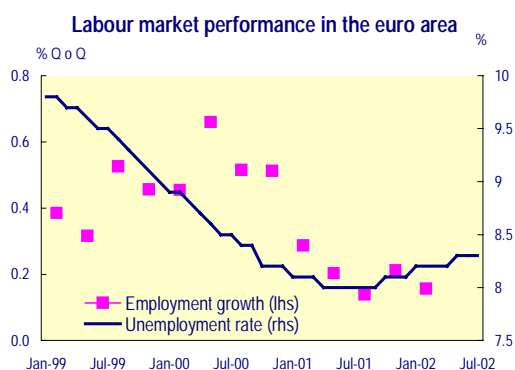
Source: Commission services.

Furthermore, risks to the outlook seem to be essentially on the downside. First, oil prices could surge if supply is disrupted by military action in Iraq. Second, equity prices remained volatile, and there is a lot of uncertainty surrounding estimates of the steep decline in equity prices on economic activity. Finally, recovery of the global economy now seems less well-established than a few months ago.

An additional uncertainty concerning the short-term outlook is the economic impact of the floods caused by the torrential rains in some euro-area countries. This is an adverse supply shock on the economy affecting output, public finances, and prices. At the macroeconomic level, the impact is difficult to quantify, but it is likely to remain small. Most of the damage will be done to specific sectors (agriculture, tourism), and to the capital stock. The impact on GDP should remain limited as the affected sectors represent a small share of total value added. Moreover, the floods coincided with holiday season, when many industrial plants are shut down anyway. While the short-term effect on output is negative, the medium-term effect may well be positive thanks to the reconstruction effort. Put another way, while natural disasters imply a loss in wealth their impact on demand and production may turn out to be positive.

2. Labour market resilience might be jeopardised by accelerating unit labour costs

After steady falls in several years, unemployment began to creep up again in the euro area in the last months of 2001. However, the weakening of economic activity has, so far, taken only a modest toll on the labour market. The harmonised unemployment rate increased from 8% in September 2001 to 8.3% in May 2002 and remained at that level in June and July. Although growth in the labour supply has slowed since the beginning of the downturn, the economy's relatively good unemployment performance owes much to persistent job creation. Although employment growth has decelerated significantly since the beginning of 2001, it has so far remained positive. In year-on-year terms, employment was still expanding by 0.7% in the first quarter of 2002.

Labour market performance in the euro area

An important consequence of the remarkable resilience of the euro-area labour market since the beginning of the downturn is that household expectations in terms of unemployment have not deteriorated markedly. According to the Commission's consumer survey, household expectations in terms of unemployment deteriorated steadily in the euro area through 2001 but have improved significantly since the beginning of 2002. Given that unemployment expectations play a crucial role in overall consumer confidence, the resilience of the labour market has probably helped to prevent a major deterioration of consumer sentiment in the current downturn.

This is probably one of the main factors explaining why consumer confidence has remained more resilient in 2001-02 than during the 1992-93 or 1995-96 downturns.

Nevertheless, the ongoing resilience of the labour market is not without its shortcomings on the cost front. As a result of persistent employment growth, labour productivity has experienced a sharper cyclical deterioration in the past few quarters than during previous cyclical downturns. Gains in labour productivity have decelerated rapidly since mid-2000 and year-on-year growth in output per worker has turned negative since the last quarter of 2001. While a decline in apparent labour productivity is to some extent normal during downturns, the amount of the drop in productivity in absolute terms has not been registered since 1981. In the meantime, wage increases have remained on a slightly accelerating trend causing significant increases in unit labour costs. Hence, if recent trends were to persist, there would be a risk that wage developments might jeopardise the resilience of the labour market.

Labour costs and productivity in the euro area
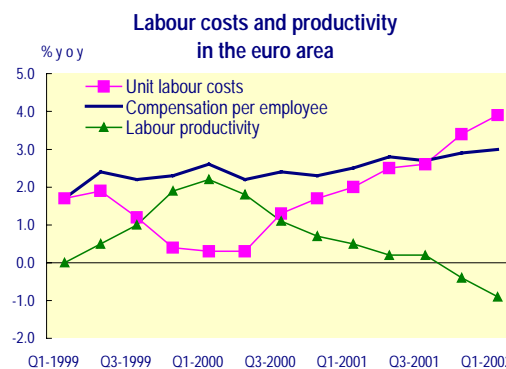
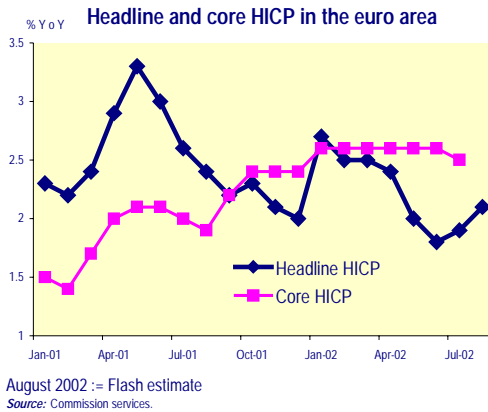## 3. Inflation decelerates only slowly

The beginning of 2002 witnessed a marked increase in headline HICP inflation which reached 2.7% in January and remained sticky during the first quarter. Headline inflation started to come down more noticeably in April but the downward trend observed since then has been somewhat irregular with a modest uptick in inflation taking place over the

summer. HICP inflation rose from 1.8% in June to 2.1% in August. In addition, core inflation has been very sticky since the beginning of the year: it peaked at 2.6% in January and declined only marginally to 2.5% in July and August.[3]

Headline and core HICP in the euro area

August 2002 := Flash estimate
Source: Commission services.

Different elements may explain the stickiness of headline and core inflation.

➢ The indirect effects of the high oil prices registered during most of 2001 are still being felt. International tensions linked to the situation in Iraq have also led to a rise in oil prices over the past few months, the impact of which was compounded by base effects.

➢ The upward pressure on fresh food prices that occurred in the first part of 2002 has been passed through, and is now affecting processed food prices.

➢ The decline in labour productivity following the economic slowdown raised unit labour costs (although in the current economic context higher costs are likely to squeeze profits rather than affect prices).

➢ As a result of the introduction of euro notes and coins, firms may have rounded up prices. However, Eurostat's recent estimate shows this effect to be small: 0.0-0.2%. This estimate has been confirmed by research in individual Member States.

While these elements may explain why inflation is slow to fall, their effects should be of a temporary nature. Barring additional tensions on oil markets and a further spike in fresh food prices as a consequence of recent crop losses due to the flooding, it thus appears realistic to expect a decline in both HICP and core inflation over the following months and the beginning of next year. Recent developments in producer prices, which have remained constant since May, back such a scenario. Furthermore, inflation expectations remain subdued. The Commission's survey indicates that price expectations have remained virtually stable over the past four months in the manufacturing industry. Survey evidence for households points to a clear downward trend of inflation expectations since the beginning of the year. Finally, longer-term inflation expectations, as reflected in French indexed linked bonds, remain well contained.
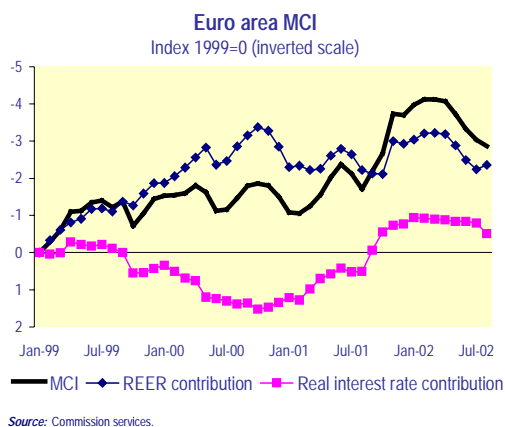
Looking at the major determinants of inflation, recent developments are working in the right direction. The appreciation of the euro will limit increases in imported prices and weak economic activity should both restrain workers' wage claims and induce companies to compress margins rather than raise prices. However, as discussed in the previous section, the cyclical decline of labour productivity has been particularly sharp in the current downturn, leading to a relatively rapid increase in unit labour costs. Hence, wage growth, although not particularly high by historical standards, appears somewhat too rapid in the current context.

4.   Macroeconomic policy mix

Monetary conditions. The euro exchange rate has, over the past months, strengthened against the dollar. The peak was reached on 19 July at 1.0146, which was over 14% higher than the average level for January 2002. Since then, the euro has lost some ground, and the exchange rate has stabilised at around 0.97-0.98. In nominal effective terms, the euro has appreciated by some 6% since the start of the year.

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[3] Core inflation excludes unprocessed food and energy.

Nominal short-term interest rates have been fairly stable since the end of last year. In August, the 3-month rate (nominal) was around 10 basis points higher than ECB's minimum bid rate, which has been unchanged at 3.25% since 9 November 2001.
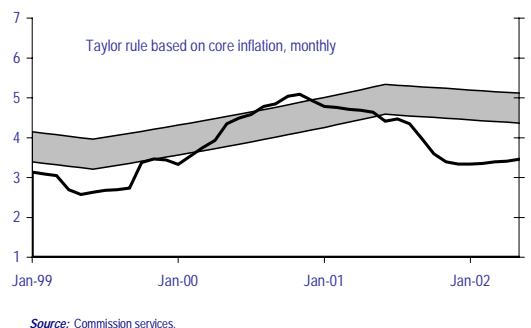
Euro area MCI
Index 1999=0 (inverted scale)

MCI — REER contribution — Real interest rate contribution

Source: Commission services.

In the year up to March 2002, the Monetary Condition Index (MCI)[4] began to reflect some loosening, mainly due to falling real short-term interest rates. Since then, short-term real interest rates have remained fairly stable, but the real effective appreciation of the euro since April caused the MCI to move towards tightening. However, short-term interest rates remain well below the corridor of the Taylor rule, suggesting that monetary conditions are accommodating activity.[5]

Short term interest rate: Actual and implied by the Taylor rule

Taylor rule based on core inflation, monthly

Source: Commission services.

Doubts about the strength and timing of both the US and the euro-area recovery and the appreciation of the euro since the beginning of the year have caused expectations of interest rate changes to shift down across the maturity structure. The shift has been significantly faster at the long end than at the short end. The yield curve shows that at the time of the last Quarterly Report (July 2002), the markets expected interest rates to increase steadily from the end of 2002. Now, in September 2002, the yield curve has become flat for maturities up to two years, implying a shift in the expected starting point for the interest rate rise to the autumn of 2004. Given that inflation expectations do not seem to have changed significantly in the past months, the decline in expected nominal interest rates also means a decline in expected real interest rates, a factor that should provide some support to investment.

EURO term structure

Avg Mar-02 — Avg Jul-02 — Avg Sep-02

Source: Commission services.

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[4] The MCI tries to capture the combined impact on economic activity of changes in the real effective exchange rate and the real short-term interest rate.
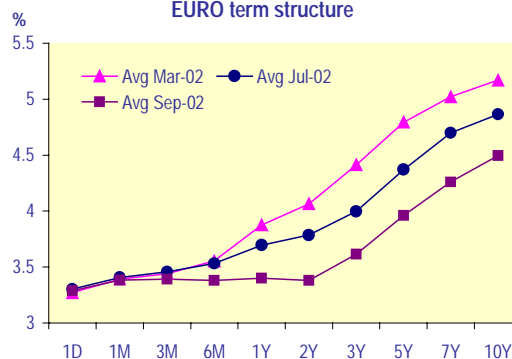
[5] According to the Taylor rule, the appropriate short-term interest rate is conditional on two variables, the actual rate of inflation and the size of the output gap. Any deviation of both variables from their target value should lead to adjustments of the short-term interest rate according to the weights of both variables in the Taylor rule.

Developments in lending conditions in the corporate sector need to be monitored carefully as the recent drop in long-term yields on government bonds has not been fully reflected in corporate bonds. Although spreads on high-grade bonds have not changed significantly in the past months, spreads on lower-grade corporate bonds have increased noticeably since May, probably reflecting a higher risk-premium in the wake of the Enron scandal.

Spreads on corporate bonds

Source: Datastream.
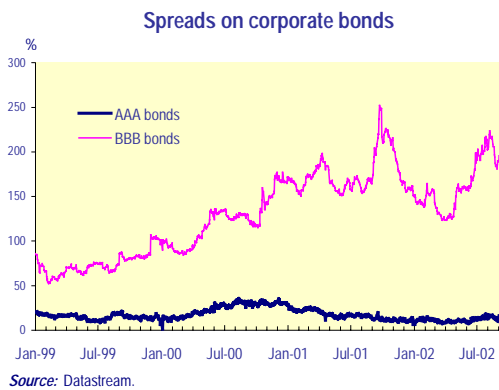
The annual growth rate in M3 has been on a declining path since December 2001, and in July 2002 was at 7.1%. The rather high growth rate is to some extent due to portfolio shifts, and does not, in the ECB's assessment, represent an immediate threat to the ECB's price stability objective.

Budgetary prospects. The latest available information on the implementation of budgets confirms that budgetary positions with respect to the targets of the stability and convergence programmes are weakening. The Commission's Spring Forecasts already anticipated a shortfall of half a percentage point of GDP for the euro area this year compared with the 2001 updates of the stability programmes. However, it now appears that the final outcome might turn out to be significantly worse than that, at least by an additional quarter of a percentage point of GDP.

These shortfalls appear only partially attributable to cyclical developments in the last part of 2001 and in the course of 2002 which were less positive than foreseen. In several countries policies have also departed from the planned adjustment path. Moreover, there was a tendency to overestimate the results of the previous year.

The context in which budgetary choices for 2003 will be made has not become easier as the recovery has failed to gain momentum so far. Furthermore, the reconstruction costs for the damage caused by the floods in some Member States will weigh on the budgets. The budgetary impact of the floods should be negligible at the euro-area level but not in Austria and Germany where announced aid packages should amount to about 0.5% of GDP. Finally, the budgetary slippages accumulated over the 2001-2002 period, only partially attributable to the cyclical slowdown, will require further adjustment efforts in several Member States in order to fully meet the commitments under the Stability and Growth Pact. Of particular concern is the situation of the four countries with significant deficits, namely, Portugal, Germany, France and Italy.

II. Focus on the euro-area's international price and cost competitiveness

The euro has appreciated against most major currencies since the beginning of the year. This has led to a loss of competitiveness compared to last year. However, this recent development has to be assessed in a wider perspective. Indeed, cost competitiveness indicators are certainly important indicators but they should be interpreted with caution as they tell us only one part of the story. Moreover, from a historical perspective, the recent appreciation has not reversed all cost competitiveness gains accumulated in the last years. In addition, the recent appreciation of the euro will help containing inflation pressures and therefore increase purchasing power of households. This will in turn increase domestic demand and therefore reinforce the economic recovery. Within the euro area, the picture of price and cost competitiveness among individual Member States is quite differentiated.

1. What is price and cost competitiveness?

International price and cost competitiveness can be defined as the price of foreign tradable goods relative to the price of domestic tradable goods. In this context, a country's competitiveness "improves" if the relative price of its tradable goods declines.

A widely used indicator of price and cost competitiveness is the real effective exchange rate (REER). Calculating REER involves two major steps. Firstly, nominal exchange rates are weighted to find a basket of effective nominal exchange rates (NEER). NEER are relatively easy to calculate and are uncontroversial. However, they only reflect movements in nominal exchange rates without considering developments in other price and cost components. Therefore, in a second step, NEER are adjusted by domestic and foreign deflators.

Price and cost competitiveness is an important determinant of trade flows among industrial countries. Changes in direct taxes, wage settlements and country-specific factors affect costs. If, for example, costs and prices in a particular country rise steeply, this could be either due to a general trend also experienced by its trading partners - in which case there is no effective loss of competitiveness - or the competitive position of that country may have deteriorated in comparison with its partners. To analyse this issue, indicators of competitiveness that compare a given country's prices and costs with a weighted average of prices and costs in a number of partner countries have to be defined.

Price and cost indicators of international competitiveness are useful indicators of economic performance, but they have shortcomings for assessing the appropriate level of the exchange rate. For example, a cyclically-advanced economy might warrant a loss in competitiveness in order to reduce excess demand. Another ambiguity stems from the fact that the internationally relative price and cost position of one country can be both the cause and the result of a country's economic performance. If, e.g. an industry is very successful in the non-price component of its products then it is likely – provided that this industry has an important weight in the economy - that the real exchange rate will appreciate, causing indicators of cost competitiveness to worsen. Without further information about the structure of and shocks to the economy, no firm conclusions are possible.

Moreover, the narrow definition of price and cost competitiveness obviously should not be confused with the popular usage of the term "competitiveness", which refers to a broad assessment of economic performance. [6] Generically, "competitiveness" embraces not only the notion of price and cost competitiveness, but includes other elements

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[6] Other ways of measuring competitiveness include composite indicators like global competitiveness. One reference for these global indicators is the *Global Competitiveness Report* by the World Economic Forum, which ranks countries by their "current competitiveness" and "growth competitiveness". The European Commission also publishes a yearly report on enterprises' competitiveness. Online access at http://europa.eu.int/comm/enterprise/enterprise_policy /competitiveness/doc/competitiveness_report_2001/ind ex.htm

such as product quality, services, ability to innovate, flexibility, in sum the strength of a country's export sector. Moreover, a country is not a corporation and therefore the concept of competitiveness of a nation is not straightforward. It should be remembered that countries do not compete with each other as corporations do: if anything, a successful partner is likely to help the domestic economy by providing it with large markets and selling it goods of superior quality at lower prices. Indeed, international trade is not a zero-sum game.

2. Measurement of price and cost competitiveness

When calculating a real effective exchange rate three principal choices have to be made. These include: (1) how many countries are to be compared; (2) what weightings are to be used; and (3) which domestic price measures are the most appropriate?

### (1) Which currencies are to be included?

In principle, every country that counts in international trade should be included. However, in practice the currency basket is usually restricted to the most important trading partners, which are the industrial countries.

Changes in nominal effective exchange rates may send misleading signals if countries with relatively high inflation are included because those currencies tend to depreciate, which induces an upward trend in the nominal effective exchange rates of other countries. This concerns in particular the inclusion of Mexico (especially important for US trade), Turkey and some of the accession countries (as trade with these countries is becoming more and more important especially for the euro area).

The graph below shows that the difference between the nominal effective exchange rate of the euro against the group including Turkey and the same group excluding Turkey has reached 7% since the launch of the euro. Of course, the difference is much smaller for the real effective exchange rate as this index takes into account the difference in prices, so the depreciation of the Turkish lira is compensated for by the high
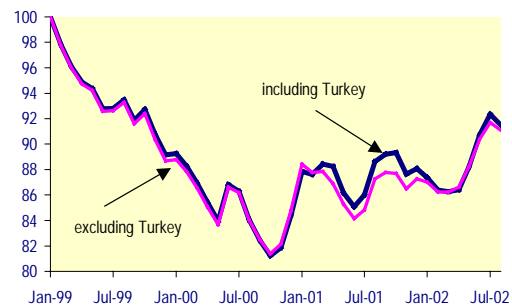
inflation rate. This means that the nominal effective exchange rates have to be interpreted carefully.

Nominal effective exchange rate of the euro vs. (the rest of 23) industrialised countries
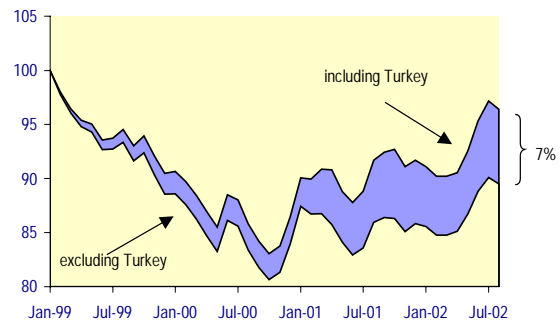
Real effective exchange rate of the euro vs. (the rest of 23) industrialised countries

The Commission services calculate two currency baskets: a narrow one that includes industrialised countries and Turkey (23 countries) and a broader one that includes 43 countries, representing nearly 85% of total extra-euro area exports of merchandise.[7]

(2) What weightings are to be used?

The weights reflect the country's trade composition in one way or another.[8] Using *fixed*

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[7] The Commission services trade matrices are based on merchandise trade. The source of data on bilateral imports and exports is the IMF's Direction of Trade Statistics (DOTS).

[8] Most published effective exchange rates are based on geometric averaging as this method presents the advantage of ensuring that the change in the exchange

weights is a simple method. However, the base period needs to be representative of a trade structure that is both reasonably balanced and current. As this is not likely to be the case at the same time for all countries included in the effective index, Commission services use moving weight matrices

Moving weights have the advantage that they reflect the influence of changing trade patterns over time. However, the fact that changes in effective rates are due both to changes in the trade structure and to changes in exchange rates complicates the interpretation of an index based on moving weights. Furthermore, it considerably complicates the computation of the effective exchange rates.

Choice of weights

Several definitions of a weighting system are possible. The three most popular trade-weighting structures are those based on bilateral trade flows, those based on double weights and those based on global trade flows.

Bilateral export (or import) weights are defined as the share of a country's exports (or imports) going to (or arriving from) its competitor countries. This system has the advantage of simplicity, but does not take into account competition in which two countries may be engaged on a third market (the "third market effect").

For example, as 32% of euro-area exports (to industrial countries) go to the UK, changes in the pound sterling against the euro will count for 32% of the changes in the euro's nominal effective exchange rate based on bilateral export weights.

Double export weights take into account the fact that exporters to a given market compete not only with domestic producers there, but also with other exporters to that market ("third market effect"). For example, euro-area car exporters to the USA compete not just with

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rate between two points in time is identical irrespective of which date is chosen as the base ("time reversal test"). The Commission services also use this method.

American car producers but also, and perhaps even more, with Japanese exporters to the US.

For each market, the total supply is calculated as the sum of home supply (the part of the domestic production that is not exported) and foreign supply (all competitor countries' exports to the market). The share of each country in the total market is then calculated. These weights per market are then weighted together, for each exporting country in the total market.

Put in formal terms, if there are k foreign markets in which country j competes against h foreign producers, then the weight given to i's currency in country j's double-weighted effective index can be expressed as follows:

Double export weight:

$$w_i^x = \left(\frac{x_j^i}{x_j}\right)\left(\frac{y_i}{y_i + \sum_h x_h^i}\right) + \sum_{k \neq i}\left(\frac{x_j^k}{x_j}\right)\left(\frac{x_i^k}{y_k + \sum_h x_h^k}\right)$$

where:

$x_j^i =$ exports of country j to country I

$x_j =$ total exports of country j

$y_i =$ domestic production in country j for its home market and

w_i^x is the bilateral export weight of country i.

The third market effect is particularly important for countries like Japan and the UK. For instance, the bilateral weight of Japan in the euro effective rate is 6% while the double exports weight is 13% (see Table 1). This means that while the Japanese market is not very important for euro-area exports, euro-area exporters do face competition with Japanese products on third markets, in the USA for example. On the contrary, while the UK market is the most important export market in terms of bilateral trade (32%), when third markets are taken into account the USA becomes more important (with 31%) and the UK moves into second place with a weight of 24%.

Global trade flows. A double weighting system can be used to derive overall competitiveness instead of just the external price competitiveness of exports. These patterns consist in calculating import competitiveness and export competitiveness separately, and then combining these measures. Under this system, import competitiveness is estimated by using bilateral import weights while export competitiveness is calculated using double export weights. The respective weights in the overall index reflect the relative importance of domestic and foreign markets for domestically produced manufactured goods. The calculations require specification of what proportions of domestic goods should be considered in competition with imported goods.[9]

Table 1: 2000 weight matrix with alternative weighting patterns

	Bilateral exports	Double exports	Overall weight
USA	29	31	29
UK	32	24	26
Denmark	4	4	4
Norway	2	2	3
Sweden	7	6	7
Switzerland	11	8	8
Canada	2	2	2
Japan	6	13	13
Turkey	4	5	4
Australia	2	3	2
New Zealand	0	0	0

Presenting alternative weighting patterns for the euro effective exchange rate against the rest of the group of 23. Table 1 shows that the overall weights are relatively similar to the double export weights. This contrasts with the large difference between the bilateral weights and the double export weights.
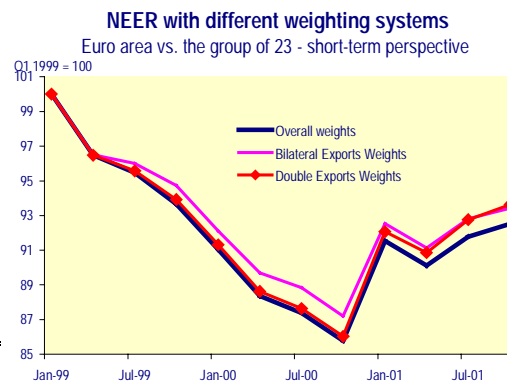
The overall weights are somewhat more difficult to compute as they require an identification of the part of domestic production that faces competition from exported products. Consequently, the Commission services generally uses the double exports weighting system for indices presented in the "Quarterly report on price and cost competitiveness" but overall indices are also available.

Illustration of the three main weighting methods. The graph below plots the quarterly effective exchange rate of the euro from 1999 onwards, calculated using three different weighting schemes. Despite some relatively small differences, the message conveyed by the trends in the NEER is the same whatever the method.

NEER with different weighting systems
Euro area vs. the group of 23 - short-term perspective

Source: Commission services.

NEER with different weighting systems
Euro area vs the group of 23 - long-term perspective

Source: Commission services.

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[9] More formally, the overall weight is given by:

$$W_i = \left(\frac{m_j}{x_j + m_j}\right) w_i^m + \left(\frac{x_j}{x_j + m_j}\right) w_i^x$$

where:

$$w_j^m = \left(\frac{m_j^i}{m_j}\right),$$ the bilateral import weight

m_j^i = imports of country j from country I

m_j = total imports of country j

However, over a longer period of time the index based on bilateral exports diverges importantly from the other two indices after more than 20 years, while the other two (overall weights and double exports weights) remain very similar. Indeed, the NEER of the euro based on bilateral export weights at the end of 2001 is 22% above its level at the beginning of 1980, while the one based on overall weights is nearly at the same level and the one based on double export weights is 5% above.

(3) Which price measures are the most appropriate?

In principle, the price indices used should be based on a representative basket of traded goods and services. These indices should be exogenous with respect to the exchange rate and represent quite stable values, rather than temporary movements associated with price-setting behaviour ("pricing-to-market" behaviour[10]) or other short-run influences.

In practice, three types of measures are commonly used: those based on broad price indicators such as consumer price indexes (CPIs) and GDP deflators; those based on export and import values; and those based on unit labour costs (ULC). Each of these measures has its pros and cons. No single measure is absolutely superior to the others, and indicators should be chosen depending on their specific advantage for the designated aim.

CPIs and GDP deflators. The main problem of both these measures is that they include non-traded goods as well as traded goods. If traded and non-traded goods prices diverge over time, as they often do for various reasons such as differential sectoral productivity (the Balassa-Samuelson effect), aggregate price indexes can be

misleading indicators of the prices of traded goods.

Consumer price indices have some advantages over GDP deflators as their measurement is more similar across countries than that of GDP deflators, and being the most common basis for measuring inflation, they are available for more countries on a timely basis.

Relative export and/or import prices. Export prices/deflators have the advantage of excluding non-traded goods. However, they have other drawbacks, and in particular, they may be heavily influenced by short-run pricing to market. They do not reflect losses in competitiveness due to potentially exportable goods that are not exported because prices are too high. Also, they may be heavily influenced by prices of primary commodities.

Unit labour costs (ULC). Real effective exchange rate indices based on unit labour costs[11] in the manufacturing sector (labour cost per unit of output) are commonly seen to be useful indicators of international competitiveness.

They reflect cost developments in an important sector exposed to international competition. By focusing on costs rather than prices, ULC avoid some of the endogeneity problems of the CPI and export price measures. Overall, They are considered to be a reliable gauge of the relative profitability of traded goods.

This does not mean that ULC-based REER indices are uniformly superior indicators of competitiveness. In fact, ULC also have several limitations:

- Measurements are not widely available for services, which account for a growing component of international trade.

- A major drawback to using costs as a measure of competitiveness stems from the fact that they refer only to labour costs. ULC ignore other costs of production such as R&D costs, distribution costs, intermediary costs, non-labour taxes, and capital costs.

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[10] "Pricing to market" describes firms' policies in terms of price-setting behaviour. Indeed, if firms set their export prices at the foreign-currency equivalents of their domestic sales prices they do not have any particular price-setting behaviour. However, if, for example, firms try to absorb the appreciation of the exchange rate in order to maintain their low export price or keep their price despite a depreciation of the exchange rate in order to increase their profit margin, they are manipulating their prices and are said to be displaying "a pricing-to-market" behaviour.

[11] Unit labour costs are defined as compensation per head divided by labour productivity.

Similarly, movements in unit labour costs may sometimes reflect factor substitution rather than changes in efficiency. For example, an increase in the capital stock may raise the productivity of labour and reduce unit labour costs without necessarily improving competitiveness, since capital now represents a higher share of unit costs.

In practice, the choice of the preferred real effective exchange rate index is also determined by data constraints. For many countries, a lack of data makes it impossible to compute ULC-based REER indicators and may limit the choice of indicators to CPI-based ones. [12]

3. Recent changes in the euro's effective exchange rate

Since the beginning of the year, the euro appreciated by 6% in nominal effective terms.[13] Indeed, after a quite stable beginning of the year, the euro appreciated against most other major currencies between April and July. The nominal effective rate of the euro has been mainly driven by the euro's appreciation against the dollar since the beginning of the second quarter of 2002.

NEER of the euro area vs the 23 countries and the USD/EUR rate
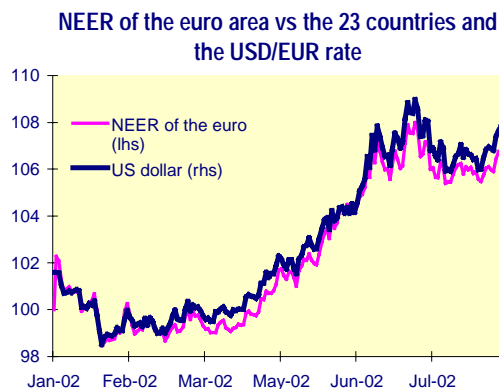
Source: Commission services.

This may seem surprising because, as shown in Table 1 above, changes in the USD/EUR rates account for only 31% of the effective exchange rate of the euro. Indeed, the close relationship between the dollar and the euro reveal that some important currencies have moved together with the dollar. This is true, of course, for the "dollar zone", i.e. the Australian, the Canadian and the New Zealand dollars plus the Mexican peso. The Swedish krona has also accompanied the USD/EUR movements, but to a lesser extent.

Table 2 sheds some further light on the composition of the euro's recent effective appreciation. It reveals that half of the euro's effective appreciation is due to appreciation against the US dollar (3.3% out of a total of 6.1%). An important part of the variations in the effective euro rate is due to depreciation of the Turkish lira against the euro. The rest of the appreciation is due to appreciation against the pound sterling.

Table 2: Individual contributions to variations in the euro's effective exchange rate since January 2002

Weight matrix	In % of total euro area exports	Exch. Rate variation since 01/2002	Contribution to variations in the effective euro rate
USA	30.7%	10.7%	3.3%
UK	24.4%	3.2%	0.8%
Denmark	3.8%	-0.1%	0.0%
Norway	2.1%	-6.2%	-0.1%
Sweden	6.2%	0.2%	0.0%
Switzerland	7.6%	-0.7%	-0.1%
Canada	2.3%	8.5%	0.2%
Japan	12.9%	-0.7%	-0.1%
Turkey	4.9%	32.6%	1.6%
Australia	3.0%	5.6%	0.2%
New Zealand	0.4%	1.2%	0.0%
Mexico	1.7%	18.8%	0.3%
	100.0%		6.1%

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[12] For more details, please see the technical annex to the "Quarterly report on price and cost competitiveness".

[13] In this publication, price and cost competitiveness indicators are assessed against their level at the launch of the euro (January 1999=100) and against a long-term average (1980-2000=100). It should be stressed, however, that the choice of the base period is somewhat arbitrary.

From a historical perspective[14], however, this appreciation is not very large. At the end of

[14] In order to be able to assess the current level of the euro in a historical perspective, it is necessary to calculate a

August, the euro was 8% above its 20 years average in nominal effective terms.

Despite the recent nominal appreciation, the underlying competitiveness position of euro-area exports is still favourable when placed in a historical perspective. In real terms, the euro is below its long-term average, irrespective of whether the nominal effective rate is deflated by the consumer price index, the GDP deflator or total economy's unit labour costs.

REER of the euro area with different deflators: long-term perspective

1980-2000 = 100

— Consumer prices   — Unit labour costs, total economy
—●— NEER of the euro, including Turkey
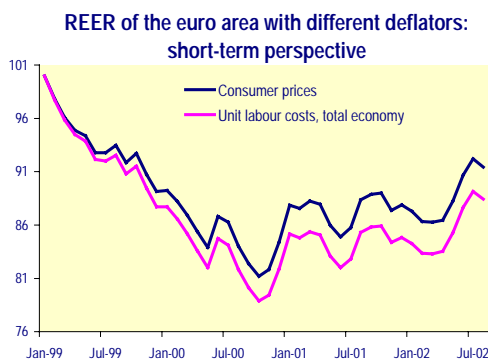
Source: Commission services.
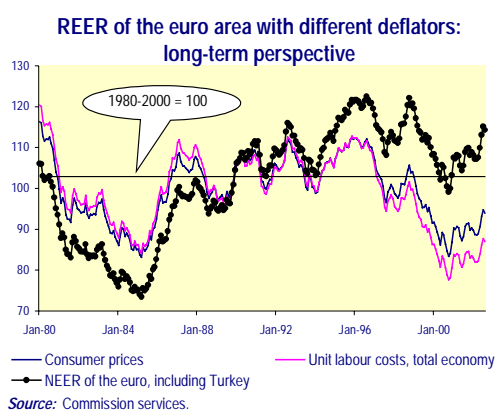
The discrepancy between the current real effective exchange rate and its long-term average, however, depends on the deflator chosen. The gap between the 20-year average and the level of the real effective exchange rate of the euro in August 2002 ranges from 2% (exports deflators) to 13% (ULC in the whole economy). This difference stems mainly from pricing to market behaviour. The changes in relative prices measured by GDP deflators has been inferior (– 7%) to the relative change in unit labour costs in the economy as a whole (– 13%), this can be seen as increase in the overall profitability of the euro area.
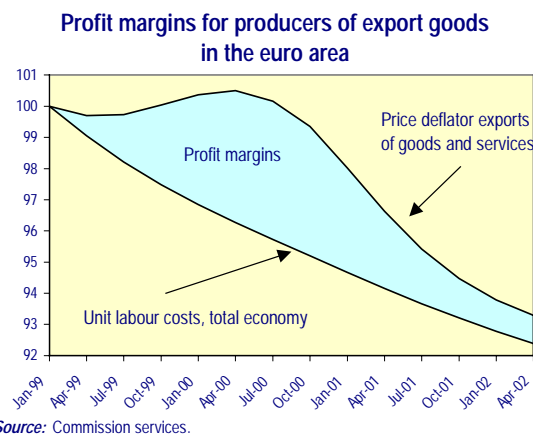
Undeniably, the recent appreciation of the euro had a negative impact on the price and cost competitiveness of euro-area exporters compared to 2000/2001. Actually, in August 2002 the competitiveness of euro-area exports was back to its end-1999 level. The appreciation

historical series of the nominal and real effective exchange rates of the euro area prior to its introduction. This is done by calculating a synthetic euro as a geometric average of participating currencies weighted by each member's share of total extra-EMU trade.

erased about half of the gains accumulated since the beginning of 1999.

REER of the euro area with different deflators: short-term perspective

— Consumer prices
— Unit labour costs, total economy

Source: Commission services.

The difference in trends between the deflator of export price of goods and services and the unit labour cost of the whole economy is of particular interest as it is a proxy for the profit margins of export goods producers. As shown in the graph below, in 1999, export producers first increased their margin before translating the depreciation into lower export prices, despite the strong decrease in unit labour cost (due to wage moderation).

Profit margins for producers of export goods in the euro area

Profit margins

Price deflator exports of goods and services

Unit labour costs, total economy

Source: Commission services.

From a longer-term perspective, the widening profit margins phenomenon started at the beginning of 1997, a few months after the nominal effective exchange rate of the euro started to lose ground. Evidence in favour of pricing-to-market behaviour can also be drawn from the fact that export prices are less volatile than the (effective) exchange rate. Over the last 10 years, the standard deviation in export prices

has been 16% lower than that in the effective rate.

In conclusion, the appreciation of the euro in recent months had a negative impact on cost competitiveness, but the euro area's cost competitiveness is still favourable in a long-term perspective. Additionally both exporters' profit margins and the overall profitability of the euro area are also in a favourable position.

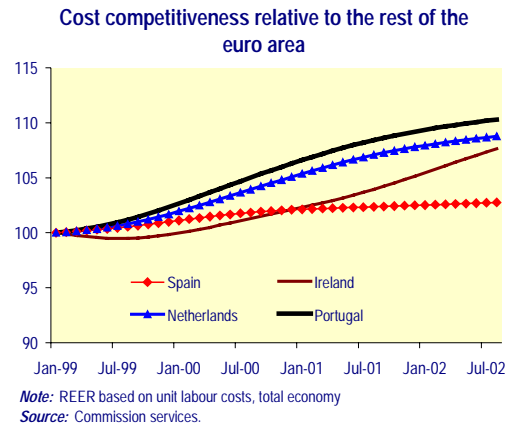## 4. Recent developments within the euro area

The analysis of changes in individual Member States' relative cost indicators (or other indices when there are strong divergences between the deflators) has increasingly attracted attention since the launch of the euro. This is justified by the fact that deviating price and cost trends among Member States could lead to a build-up of competitive imbalances, which might hamper economic growth.

Rather independent on the indicator chosen, Member States can be divided into three groups within the euro area. The first group includes countries where competitiveness has deteriorated over the last three years. Ireland, the Netherlands, Spain and Portugal make up this first group. Their REER has appreciated continuously since the launch of the euro relative to the other euro-area Member States.

This is particular obvious for REER based on unit labour costs (ULC), which provide a focus on differences in wage and productivity developments across Member States. According to this concept, cost competitiveness deteriorates if real wage grow exceeds the growth in labour productivity more than in trade partners' economies.

In Spain and Portugal, above-average wage and cost increases resulted from advanced cyclical positions. In Spain, ex-post adjustment to high CPI in 2000 led to a continued increase in wages in 2001, up by a total of 3.7%. In the period from January to May 2002, wages settled through collective bargaining increased by 3% year-on-year. However, this is below the national

inflation rate, implying that a wage moderation process may still be taking place.

Cost competitiveness relative to the rest of the euro area

Note: REER based on unit labour costs, total economy
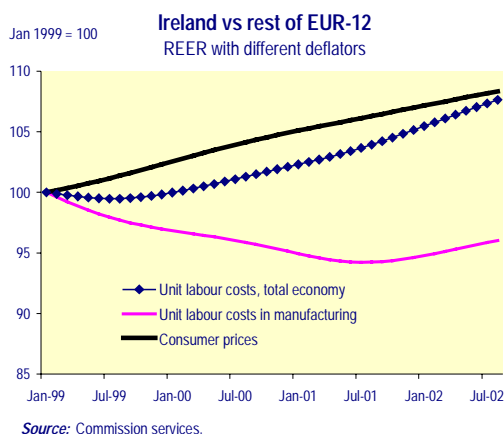*Source:* Commission services.

Portugal is the country which has suffered the greatest loss in cost competitiveness since 1999. Cost inflation has been relatively high due to a tight labour market and inflation expectations. The deceleration in economic growth and the easing up of the labour market (although the unemployment rate - 4.4% - is still below most estimates for the NAIRU) may trigger lower wage settlements in the near future. Inappropriately high wage settlements would lead to further erosion of external competitiveness. An immediate risk in this respect is that the rate of inflation can be expected to rise due to the increase of VAT. Unions might want to pass through higher price inflation into wage settlements.

In these two countries, some real appreciation may be warranted as they are catching-up with the other euro-area countries. In the case of Portugal, nevertheless, the large current account deficit (about 10% of GDP) may indicate an unwarranted loss in competitiveness. In fact, competitiveness, as measured by ULC but also by GDP deflator, has been deteriorating in Portugal since 1996.

In the Netherlands, due to vigorous job creation, falling unemployment, and increasing tension on the labour market as a result, wage increases have accelerated significantly in recent years, from 1.4% in 1996 to some 5% on average in 2001. Contractual wages should decelerate only slightly

and progressively in 2002 and 2003 as the labour market would remain relatively tight despite an increase in unemployment, resulting, with some lags, from the economic slowdown in 2001-02.
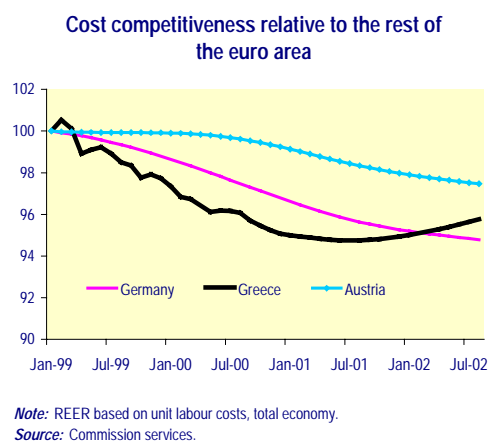
In Ireland, strong wage growth due to rapid economic expansion has led to decreased cost competitiveness, even though this picture is not clear-cut (see graph below) as the different indices diverge. For example, the situation is much better if only the manufacturing sector is considered. In 2001, the evidence suggests that wage growth was higher than in 2000 (8.4%), as a result of continuing labour market tightness and a delayed response to higher than expected inflation in 2000.

Ireland vs rest of EUR-12
REER with different deflators

Jan 1999 = 100

- Unit labour costs, total economy
- Unit labour costs in manufacturing
- Consumer prices

Source: Commission services.

A second group consists of Germany, Greece and Austria. These countries have improved their cost competitiveness over the last three years.

In Austria, gains are mainly due to continued wage moderation. For 2002, the metal industry, which serves as a yard stick for other industries, concluded the collective wage bargaining negotiations with an average increase of 2.9% plus a minimum increase in absolute terms. Other main manufacturing sectors more or less followed this settlement. In the trade sector and the financial sector, agreements were somewhat lower.

In Greece, wage developments allowed unit labour costs to decline, which has led to an improvement in cost competitiveness. The situation might start to differ now as there is likely to be some acceleration in wages following application of the clause to compensate for the higher than expected inflation rate in 2001.

Cost competitiveness relative to the rest of the euro area

- Germany
- Greece
- Austria

Note: REER based on unit labour costs, total economy.
Source: Commission services.

After some years of improvement due to wage moderation, the situation in Germany might change in 2002 as the first agreements of the 2002 wage round come into force. On average, these agreements provide for a 3.5% wage increase, whereby all sectors lie within a relatively narrow band between 3.2% for the construction industry and 4.0% for the metals industry.

In the last group, countries have broadly kept their cost competitiveness level over the period under review. In France, the effect on the labour costs of the shorter working week has so far been offset to a large extent by cuts in social security contributions and by gains in hourly productivity. Despite systematic wage indexation mechanisms in Belgium and Luxembourg, cost competitiveness has been maintained over the last three years.

Cost competitiveness relative to the rest of the euro area
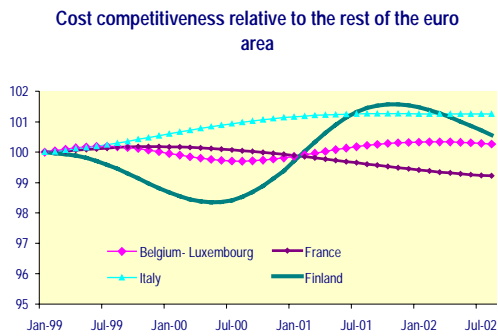
Note: REER based on unit labour costs, total economy.
Source: Commission services.

It has to be understood that the trend observed since the beginning of EMU does not necessarily indicate a movement away from the appropriate level of competitiveness, as the starting positions may not have been in equilibrium. Therefore, an in-depth assessment of movements in real exchange rates requires comprehensive analysis of the economic situation in each country, which is beyond the scope of this note.

IV.   References to further work

1. Policy documents

EURO PAPER No. **46**

Communication from the European Commission. **The euro area in the world economy. Developments in the first three years**

This issue, as the final number of this series, presents the Commission Communication adopted on 19 June 2002, which notes that the introduction of euro notes and coins at the beginning of this year was a landmark achievement in the history of European integration. The benefits of Economic and Monetary Union (EMU) have been felt already for some time. EMU is based on a commitment to sound macroeconomic policies, which have helped to create a new culture of economic stability in Europe. In turn, this has enabled Europe to weather the recent slowdown in the world economy. Furthermore, thanks to the euro, the kind of damaging intra-European exchange rate tension that often characterised previous episodes of adjustment to external shocks has been avoided. With the euro in place, the citizens of euro area countries can now look forward to the benefits of increased price transparency, more intense competition in the market place and greater financial integration in Europe.

http://europa.eu.int/comm/economy_finance/publications/euro_papers/europapers46_en.htm

EURO PAPER No. **45**.

Co-ordination of economic policies in the EU: a presentation of key features of the main procedures

The economic policy framework in the EU and euro area encompasses as a principle the co-ordination of national economic policies. This acknowledges the growing economic interdependence of Member States. Against this background, a comprehensive system of co-ordination procedures has been defined. This paper presents the key features of the main procedures.

http://europa.eu.int/comm/economy_finance/publications/euro_papers/europapers45_en.htm

Economic Policy Committee: **Reform challenges facing public pension systems: the impact of certain parametric reforms on pension expenditure**

This report, which complements the report on budgetary challenges of ageing population, illustrates the potential fiscal impact of certain fundamental pension reforms, and attempts to identify options for reforming the pension systems in the EU

http://europa.eu.int/comm/economy_finance/epc/epc_reports_en.htm

Brussels, 25 July 2002 **Statement by Commissioner Solbes on the Portuguese deficit data**

http://europa.eu.int/rapid/start/cgi/guesten.ksh?p_action.gettxt=gt&doc=IP/02/1168|0|RAPID&lg=EN&display=

Communication from the Commission on streamlining the annual economic and employment policy co-ordination

Following up on the March 2002 Barcelona European Council's call for streamlining policy co-ordination processes and enhancing the focus on action for implementation, the Communication sets out the Commission's views on how a better streamlined policy co-ordination can be achieved whilst preserving the autonomy of the Treaty-based co-ordination processes. In this context the Commission proposes: (1) a better and more clearly articulated EU policy co-ordination cycle whereby the key decisions in various procedures are organised around two pivotal points in the year involving the adoption of an "Implementation Package" in January and a "Guidelines Package" in April; (2) an enhanced focus on the medium-term in framing policy orientations (in principle, guidelines to be fully reviewed only once every three years, with changes in the intermediary years to be kept to a minimum); (3) to improve coherence of EU policy orientations by specifying more clearly the contents to be covered by the respective instruments.

http://europa.eu.int/comm/economy_finance/publications/structural_policies/structuralpolicies_communication03092002_en.htm

2. Analytical documents

ECONOMIC PAPER No. **175**.
Gaëtan Nicodème: **Sector and size effects on effective corporate taxation**
The current debate in corporate taxation is focussing on leveling the tax playing field within the European Union in order to allow companies incorporated in different countries to face the same competitive conditions. However, various elements of corporate tax rules may discriminate against companies registered in the same country but having different sizes or operating in different sectors. Using the micro backward-looking approach to compute effective tax rates for eleven European countries, the US, and Japan, this paper shows that there could be some concerns regarding domestic tax discrimination since some sectors and sizes enjoy significantly more favorable tax burdens.
http://europa.eu.int/comm/economy_finance/publications/economic_papers/economicpapers175_en.htm

ECONOMIC PAPER No. **174**.
Heikki Oksanen: **Pension reform: key issues illustrated with an actuarial model**
The paper examines pension reforms under ageing. With stylised facts, ageing is traced to low fertility and increasing longevity. Given these persistent factors, pension systems must be reformed to avoid an unfair burden being left for future generations. The main results for reform blueprints are: (1) In a Defined Benefit (DB) system, partial pre-funding is needed to achieve intergenerational fairness unless benefits are sufficiently reduced; partial privatisation is an option for the management of the accumulating funds. (2) Transition from a DB to a Notional Defined Contribution (NDC) system is another reform option; it reduces the replacement rates to levels which match prescribed contribution rates; an NDC public pillar can be accompanied by a second pillar, managed by the private sector. (3) An effective retirement age increase is necessary to moderate the increase in pension expenditure and to preserve adequate pension levels. (4) Pension reforms have important effects on public finance target setting.
http://europa.eu.int/comm/economy_finance/publications/economic_papers/economicpapers174_en.htm

Presentation papers: EU accession: developing fiscal policy frameworks for sustainable growth
From 13 May to 14 May 2002, the European Commission, the World Bank and the IMF co-organised in Brussels a conference on fiscal policy issues in candidate countries. It covered various economic, institutional and procedural aspects of fiscal policy in candidate countries at the current juncture as they prepare for accession and ultimately adoption of the Euro.
http://europa.eu.int/comm/economy_finance/events/2002/events_brussels_130502_en.htm

3. Regular publications

Euro area GDP indicator (Indicator-based forecast of quarterly GDP growth in the euro area)
http://europa.eu.int/comm/economy_finance/indicators/euroareagdp_en.htm

Business and Consumer Surveys (harmonised surveys for different sectors of the economies in the European Union (EU) and the applicant countries)
http://europa.eu.int/comm/economy_finance/indicators/businessandconsumersurveys_en.htm

Business Climate Indicator for the euro area (monthly indicator designed to deliver a clear and early assessment of the cyclical situation)
http://europa.eu.int/comm/economy_finance/indicators/businessclimate_en.htm

Key indicators for the euro area (presents the most relevant economic statistics concerning the euro area)
http://europa.eu.int/comm/economy_finance/indicators/key_euro_area/keyeuroarea_en.htm

Monthly and quarterly notes on the euro-denominated bond markets (looks at the volumes of debt issued, the maturity structures, and the conditions in the market)
http://europa.eu.int/comm/economy_finance/publications/bondmarkets_en.htm

Price and Cost Competitiveness
http://europa.eu.int/comm/economy_finance/publications/priceandcostcompetiteveness_en.htm

V. Key indicators for the euro area

1 Output		2001*	2002*		Mar-02	Apr-02	May-02	Jun-02	Jul-02	Aug-02
Industrial confidence [1.1]	Balance	5			-11	-11	-9	-10	-10	
Industrial production [1.2]	Ann. % ch	5.7			-2.0	-0.9	-1.2	-0.5	-0.5	
		2001*	2002*	2003*	01 Q2	01 Q3	01 Q4	02 Q1	02Q2	02Q3
Gross domestic product [1.3]	Ann. % ch	1.6	1.4	2.9	1.6	1.4	0.4	0.3	0.6	
	Qtr. % ch				0.0	0.2	-0.3	0.4	0.3	

2 Private consumption		2001*	2002*		Mar-02	Apr-02	May-02	Jun-02	Jul-02	Aug-02
Consumer confidence [2.1]	Balance	1			-9	-10	-8	-9	-10	
Retail sales [2.2]	Ann. % ch	2.7			1.5	0.8	0.7	-0.9		
		2001*	2002*	2003*	01 Q2	01 Q3	01 Q4	02 Q1	02Q2	02Q3
Private consumption [2.3]	Ann. % ch	1.8	1.2	2.5	1.8	1.8	1.6	0.4	0.3	

3 Investment		2001	2002*	2003*	01 Q2	01 Q3	01 Q4	02 Q1	02Q2	02Q3
Capacity utilisation [3.1]	%	83.2			83.6	83.0	81.8	80.8	80.8	80.7
Gross fixed capital formation [3.2]	Ann. % ch	-0.2	0.2	3.8	-0.1	-1.5	-2.5	-2.7	-2.9	
Change in stocks [3.3]	% of GDP	-0.3	-0.2	0.1	0.0	-0.3	-0.4	-0.3	-0.2	

4 Labour market		2001	2002*	2003*	Mar-02	Apr-02	May-02	Jun-02	Jul-02	Aug-02
Unemployment [4.1]	%	8.3	8.5	8.1	8.2	8.3	8.3	8.3	8.3	
		2001	2002*	2003*	01 Q2	01 Q3	01 Q4	02 Q1	02Q2	02Q3
Employment [4.2]	Ann. % ch	1.3	0.3	1.1	1.4	1.1	0.8	0.7		
Wages [4.3]	Ann. % ch	2.7	2.9	3.0	3.1	3.1	3.2	3.1		

5 International transactions		2001	2002*	2003*	Mar-02	Apr-02	May-02	Jun-02	Jul-02	Aug-02
Export order books [5.1]	Balance	-14			-24	-23	-19	-20	-19	
Exports of goods [5.2]	Bn. EUR	962.7	997.3	1083.8	92.4	89.7	90.0	90.1	92.0	
Imports of goods [5.3]	Bn. EUR	1011.5	1027.4	1128.4	81.2	84.5	81.4	79.1	79.9	
Trade balance [5.4]	Bn. EUR	-48.8	-30.1	-44.6	11.2	5.2	8.6	11.0	12.0	
		2001	2002*	2003*	01 Q2	01 Q3	01 Q4	02 Q1	02Q2	02Q3
Exports of goods and services [5.5]	Ann. % ch	2.7	2.6	6.7	4.4	-1.3	-3.3	-3.0	0.0	
Imports of goods and services [5.6]	Ann. % ch	0.8	2.0	6.9	3.4	-0.5	-4.9	-4.5	-2.2	
		2001	2002*	2003*	Mar-02	Apr-02	May-02	Jun-02	Jul-02	Aug-02
Current account balance [5.7]	Bn. EUR	-12.3	9.6	11.0	3.7	-5.8	0.1	3.9		
Direct investment (net) [5.8]	Bn. EUR	-104.6			-5.9	7.7	5.1	-15.5		
Portfolio investment (net) [5.9]	Bn. EUR	36.5			8.1	11.5	32.0	14.3		

6 Prices		2001	2002*	2003*	Mar-02	Apr-02	May-02	Jun-02	Jul-02	Aug-02
HICP [6.1]	Ann. % ch	2.5	2.2	2.0	2.5	2.4	2.0	1.8	1.9	2.1
Core HICP [6.2]	Ann. % ch	2.0			2.6	2.6	2.6	2.6	2.5	2.5
Producer prices [6.3]	Ann. % ch	2.2			-0.8	-0.8	-1.0	-1.1	-0.6	
Import prices [6.4]	Ann. % ch	0.9	0.4	2.2						

7 Monetary and financial indicators		2001	2002*	2003*	Mar-02	Apr-02	May-02	Jun-02	Jul-02	Aug-02
Interest rate (3 months) [7.1]	% p.a.	4.3			3.4	3.4	3.4	3.5	3.4	3.4
Bond yield (10 years) [7.2]	% p.a.	4.9			5.2	5.2	5.2	5.0	4.9	4.6
Stock markets [7.3]	Index	4050			3749	3647	3503	3143	2811	2697
M3 [7.4]	Ann. % ch	5.3			7.6	7.4	7.4	7.4	7.3	
Credit to private sector (loans) [7.5]	Ann. % ch	7.9			5.4	5.1	5.3	5.4	4.9	
Exchange rate USD/EUR [7.6]	Value	0.90	0.87	0.87	0.88	0.89	0.92	0.96	0.99	0.98
Nominal effective exchange rate [7.7]	Index	90.8	91.4	92.2	91.4	91.7	93.8	96.6	98.5	97.7

*   ECFIN Spring 2002 forecasts (*European Economy*, No 2/2002 -April 2002)

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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	Annual percentage change, volume, excluding construction, wda	Eurostat
1.3	Gross domestic product	Annual percentage change, volume (1995), seasonally adjusted	Eurostat
1.3.3	Gross domestic	Quarterly percentage change, volume (1995)	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	Annual percentage change, volume, excluding motor vehicles, wda	Eurostat
2.3	Private consumption	Annual percentage change, volume (1995 prices), seasonally adjusted	Eurostat
3	**Investment**		
3.1	Capacity utilization	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	Annual percentage change, 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	Annual percentage change, ECFIN calculations on basis of Eurostat figures, partly estimated	Eurostat
4.3	Wages	Annual percentage change; not fully harmonised concept (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	Exports of goods	Bn. EUR, excluding intra euro area trade, fob	Eurostat
5.3	Imports of goods	Bn. EUR, excluding intra euro area trade, cif	Eurostat
5.4	Trade balance	Bn. EUR, excluding intra euro area trade, fob-cif	Eurostat
5.5	Exports of goods and services	Annual percentage change, volume (1995 prices), including intra euro area trade, seasonally adjusted	Eurostat
5.6	Imports of goods and services	Annual percentage change, volume (1995 prices), including intra euro area trade, seasonally adjusted	Eurostat
5.7	Current account balance	Bn. EUR, excluding intra euro area transactions; before 1997 partly estimated	ECB
5.8	Direct investment	(net) Bn. EUR, excluding intra euro area transactions	ECB
5.9	Portfolio investment	(net) Bn. EUR, excluding intra euro area transactions	ECB
6	**Prices**		
6.1	HICP	Annual percentage change, harmonised index of consumer prices	Eurostat
6.2	Core HICP	Annual percentage change, harmonised index of consumer prices, excluding energy and unprocessed food	Eurostat
6.3	Producer prices	Annual percentage change, without construction	Eurostat
6.4	Import prices	Annual percentage change	Eurostat
7	**Monetary and financial indicators**		
7.1	Interest rate	Percent p.a., 3-month interbank money market rate, period averages	Datastream
7.2	Bond yield	Percent p.a., 10-year government bond yields, lowest level prevailing in the euro area, period averages	Datastream

7.3	Stock markets	DJ Euro STOXX50 index, period averages	Datastream
7.4	M3	Annual percentage growth rate of seasonally adjusted flows, moving average (3 last months): from 1997 onwards corrected for holdings by non-residents	ECB
7.5	Credit to private sector (loans)	Annual percentage change, MFI loans to euro area residents excluding MFIs and general government, monthly values: month end values, annual values: annual averages	ECB
7.6	Exchange rate USD/EUR	Period averages, until December 1998: USD/ECU rates	ECB
7.7	Nominal effective exchange rate	Against 13 other industrialised countries, double export weighted, 1995 = 100, increase (decrease): appreciation (depreciation)	ECFIN

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Comments on the report would be gratefully received and should be sent to:

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