

Economic Trends 2003/2004

The world economy is gradually pulling out of recession

Only with great hesitation is the world economy overcoming its long period of weakness. Moreover, the revival is not extending to all parts: while trends towards an upturn are already discernible in some regions, stagnation prevails in others.

The USA is the frontrunner of the revival. Here, economic production has already experienced substantial expansion, although the speed at which this is taking place is still considerably slower than during the previous upturn, and uncertainty remains high. The stimulus for the U.S.'s economic activity is primarily its highly expansionary economic policy. In Central and Eastern Europe, cyclical acceleration is also in the offing, although this is being restricted by the stagnation that has encompassed the entire euro zone. In Asia, generally robust expansion of economic production is continuing – albeit slightly more slowly. Together with Latin America, the European Union is bringing up the rear in terms of world economic development; in fact, certain isolated deflationary trends have become discernable (cf. tables 1 and 2).

With the hindsight of previous experience, this economic constellation suggests the spread of a worldwide economic upturn – initiated primarily by the USA. However, given the current situation, a strong upturn is not anticipated. In particular, the devaluation of the US dollar against the euro leads to fears that the positive effects achieved through foreign trade will – at least for the euro zone – be very limited.

Terrorist attacks, which are still flaring up, pose a great threat to world economic development, by underpinning global uncertainty and hampering international trade. This pressure, as well as restrained investment dynamism, will have to be reckoned with for the foreseeable future. Moreover, the imbalance in the U.S.' economic development is set to continue. For example, the current account deficit has grown further, and public budgets are recording rising deficits. This combination carries the risk of a further considerable devaluation of the US dollar. This, however, was not assumed in this forecast. A more favourable development than assumed here could result if an upturn in Asia and the USA were to strengthen the confidence of European investors to such an extent that it would lead to more dynamic investment.

USA: noticeable revival of economic activity

In the first quarter of 2003, the high degree of uncertainty meant that the U.S.'s cyclical dynamism remained restrained; GDP expanded by 1.4% on a current annual rate (cf. figure 1).

Continuously expanding private consumption (2%) has supported the economy. Private investment in construction grew particularly strongly, at an annual rate of 10%. The temporary fall in private investment in equipment and still falling exports had a delaying effect. Here, the uncertainty generated by the war and the weak world economy is likely to have played an important role.

In addition to the weak investment activity, the devaluation of the US dollar also meant that the fall in imports was considerably stronger than that of exports (-6.2%), so that the external surplus/deficit showed slight improvement. However, the labour market situation continued to deteriorate, with employment falling slightly and the unemployment rate most recently (May 2003) rising to 6.1%.

Growth in productivity, astonishingly high for a recessionary phase, implied that unit labour costs in manufacturing industry fell noticeably until mid-2002 and since then have risen only marginally. In addition, with low capacity utilisation inflationary pressure remains low; in May, the core inflation rate (excluding unprocessed foods and energy) stood at 1.5% compared with the previous year. Against this backdrop, there have therefore been increasing calls in the past few months warning of the dangers of deflation. However, this danger is low – in part due to the evidently great sensitivity of the U.S. Federal Reserve.¹

With the Federal Reserve's consistently low prime rate, monetary conditions have continued to improve during the past months. Compared with its highest level, the US dollar devalued effectively by almost 10% (trade weighted) compared with a broad range of countries. Long-term interest rates most recently stood at 3.3%, their lowest levels in 50 years. Given the low inflationary pressures, the Federal Reserve may lower the prime rate by a further 25 basis points to 0.75%, partly in order to combat the danger of deflation early on.

U.S. fiscal policy will further strengthen its already expansionary orientation during the period of this forecast. The overall volume of relief in the recently agreed

¹ In a study published last October, the U.S. Federal Reserve had already pointed out that deflationary dangers would have to be fought early on. Cf. Alan Ahearne et al.: 'Preventing Deflation: Lessons from Japan's Experience in the 1990s. Board of Governors of the Federal Reserve System.' *International Finance Discussion Paper*, no. 729. Washington, DC, 2002.

Table 1

Real GDP, Consumer Prices and Unemployment Rate in Selected Countries

	Weight (%)		GDP			Consumer prices ¹			Unemployment rate ²		
			Change (%) on the previous year								
	GDP	German exports	2002	2003	2004	2002	2003	2004	2002	2003	2004
Germany	8.1	–	0.2	–0.1	1.3	1.3	0.7	0.7	8.6	9.1	9.2
France	5.8	13.3	1.2	0.7	1.5	1.9	1.6	1.4	8.7	9.4	9.2
Italy	4.8	9.1	0.4	0.4	1.0	2.6	2.3	1.6	9.0	9.3	9.3
Spain	2.6	5.7	2.0	1.9	2.5	3.6	3.1	2.8	11.3	11.5	11.4
Netherlands	1.7	7.6	0.2	–0.4	0.7	3.9	2.4	1.5	2.8	4.5	5.7
Belgium	1.0	6.0	0.7	0.9	1.6	1.6	1.4	1.4	7.3	8.0	8.0
Austria	0.8	6.4	1.1	0.4	1.5	1.7	1.3	1.0	4.3	4.5	4.6
Finland	0.5	1.3	1.6	0.9	2.3	2.0	1.5	1.2	9.1	9.5	9.6
Greece	0.5	1.0	4.0	2.9	3.6	3.9	3.5	3.5	9.6	9.8	9.5
Portugal	0.5	1.3	0.4	–0.8	1.6	3.7	3.2	2.4	5.1	7.5	7.7
Ireland	0.5	0.8	6.3	2.6	3.3	4.7	4.4	3.1	4.4	4.9	4.7
Luxembourg	0.1	0.6	1.1	0.3	1.5	2.1	2.5	1.6	2.8	3.5	3.3
EMU countries ³	27.1	–	0.8	0.5	1.5	2.3	1.8	1.4	8.3	9.0	9.0
EMU countries excl. Germany ³	18.9	–	1.2	0.7	1.6	2.6	2.2	1.8	8.3	8.9	8.9
EMU countries excl. Germany ⁴	–	52.7	1.1	0.6	1.5	2.6	2.1	1.6	–	–	–
Great Britain	6.4	10.4	1.8	1.9	2.2	1.3	1.5	1.6	5.1	5.1	5.1
Sweden	1.0	2.6	1.9	1.5	2.0	2.0	2.3	2.0	4.9	5.3	5.2
Denmark	0.7	2.1	1.6	1.3	2.1	2.4	1.5	1.3	4.5	5.0	4.8
EU ³	35.1	–	1.1	0.8	1.7	2.1	1.7	1.5	7.7	8.2	8.2
EU excl. Germany ³	27.0	–	1.4	1.1	1.8	2.3	2.0	1.7	7.4	7.9	7.9
EU excl. Germany ⁴	–	67.8	1.2	0.9	1.7	2.3	2.0	1.6	–	–	–
Poland	0.7	3.1	1.2	2.4	3.5	1.9	1.0	2.2	19.9	20.0	19.1
Czech Republic	0.3	3.1	2.0	2.4	3.5	1.8	1.1	3.5	7.3	7.0	6.7
Hungary	0.3	2.1	3.3	2.1	2.3	5.3	4.7	3.2	5.6	6.1	6.4
Slovakia	0.1	0.8	4.4	3.1	3.7	3.1	8.3	4.8	18.6	16.7	16.1
Slovenia	0.1	0.5	3.1	3.1	3.4	7.5	6.1	5.6	6.0	5.7	5.6
Lithuania	0.1	0.3	6.7	5.6	4.4	0.6	–0.3	2.3	13.1	11.5	10.9
Cyprus	0.0	0.1	2.2	1.9	2.3	2.8	4.7	2.0	3.8	4.2	4.1
Latvia	0.0	0.2	6.1	6.8	6.3	1.9	2.4	2.8	12.8	12.1	11.4
Estonia	0.0	0.1	5.8	3.5	4.2	3.6	2.2	2.8	9.1	8.4	8.5
Malta	0.0	0.0	3.0	3.1	3.3	2.3	2.5	2.1	7.4	7.3	7.0
Accession states	1.6	–	2.4	2.7	3.4	2.8	2.4	3.0	14.8	14.6	14.0
Switzerland	1.1	5.1	0.1	0.0	1.0	0.6	0.8	0.8	2.8	3.5	4.0
Norway	0.8	0.9	1.0	0.5	2.0	0.8	2.0	1.0	3.9	4.3	4.9
Europe ³	38.6	–	1.1	0.9	1.7	2.0	1.7	1.5	8.6	9.0	9.0
USA	42.3	12.7	2.4	2.3	3.4	1.6	2.2	1.8	5.8	5.8	5.4
Japan	16.1	2.3	0.1	1.2	1.2	–1.1	–0.5	–0.4	5.4	5.5	5.5
Canada	2.9	1.1	3.4	2.7	3.8	2.2	1.5	1.8	7.7	6.8	6.5
Non-European industrial countries ³	61.4	–	1.9	2.0	2.8	0.9	1.5	1.2	5.8	5.8	5.5
Non-European industrial countries ⁴	–	16.1	2.2	2.2	3.1	1.2	1.8	1.5	–	–	–
Total ³	100.0	–	1.6	1.6	2.4	1.3	1.6	1.3	7.2	7.3	7.2
Total excl. Germany ³	91.9	–	1.7	1.7	2.5	1.3	1.6	1.4	7.0	7.2	7.0
Memo item: Total weighted by exports ⁴	–	100.0	1.4	1.2	2.0	2.1	1.9	1.7	–	–	–

1 European Union and Norway: harmonised index of consumer prices. — 2 Standardised. — 3 Total of countries listed. GDP and consumer prices weighted by 2002 GDP in US dollars; unemployment rate weighted by 2002 labour force. — 4 Total of countries listed. Weighted by country's shares in German exports 2002.
Sources: OECD Economic Outlook; Eurostat; National Accounts; national statistics and DIW Berlin calculations; 2003 and 2004: DIW Berlin estimate and prognosis.

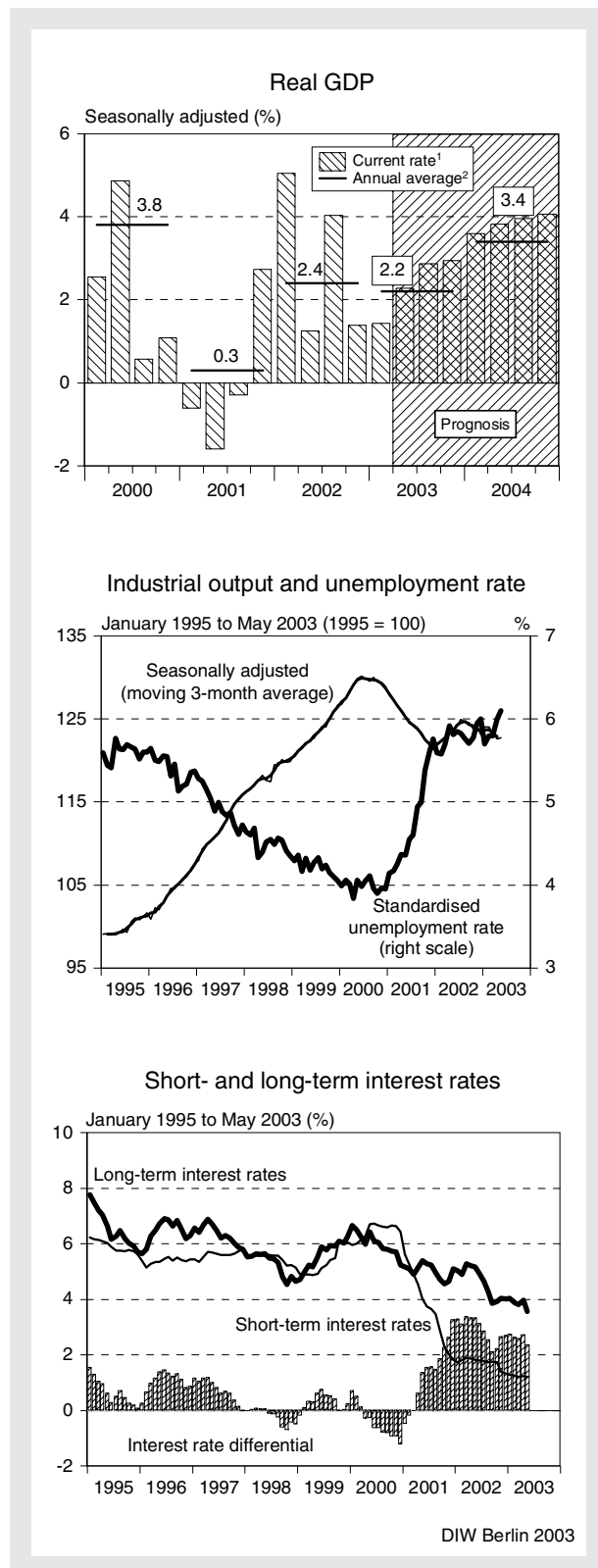
Table 2
Trends in GDP Components in Selected Countries
Real change (%) on the previous year

	Private consumption			Government consumption			Gross fixed investment			Goods and services					
										Exports			Imports		
	2002	2003	2004	2002	2003	2004	2002	2003	2004	2002	2003	2004	2002	2003	2004
Germany	-0.6	0.8	1.2	1.5	1.0	0.7	-6.7	-1.3	2.0	2.6	1.9	3.6	-2.1	4.7	4.1
France	1.4	1.6	1.6	4.1	1.9	1.4	-1.4	-1.6	1.8	1.2	0.1	2.7	0.7	1.6	3.2
Italy	0.4	0.8	1.1	1.7	1.5	1.6	0.5	-1.1	2.4	-1.0	-1.5	2.5	1.5	0.8	2.5
Spain	1.9	2.2	2.5	3.8	4.1	3.2	1.4	2.2	3.0	1.4	2.1	3.8	2.2	5.2	4.0
Netherlands	0.9	0.9	0.8	3.7	1.1	0.8	-3.7	-4.8	0.0	-1.4	0.4	0.7	-2.1	1.6	0.6
Belgium	0.6	1.3	2.0	1.6	1.3	1.5	-2.4	-0.6	2.4	-0.5	-0.1	3.5	-0.1	0.3	3.6
Austria	0.9	1.3	1.6	1.3	0.3	0.4	-4.9	-0.7	2.8	2.6	-0.8	3.3	0.0	0.4	3.7
Finland	2.1	1.4	1.1	4.0	0.8	0.8	-1.0	-3.8	1.2	5.6	1.0	1.7	1.7	2.0	2.4
Greece	2.5	2.5	2.8	6.2	-2.5	0.5	6.7	6.5	6.3	-4.5	0.5	2.0	-2.7	0.8	1.5
Portugal	0.6	-0.9	1.6	2.9	0.2	1.3	-5.1	-9.3	2.7	2.1	3.7	3.2	-0.5	-2.8	3.4
Ireland	2.6	2.0	2.4	8.3	3.1	1.9	0.4	1.1	2.5	3.8	-1.3	2.7	-1.0	-3.4	2.9
Luxembourg	2.9	1.3	1.7	5.3	4.0	1.4	-1.7	-1.0	1.2	-0.5	0.0	1.2	-1.3	0.5	1.4
EMU countries ^{1,2}	0.6	1.2	1.5	2.8	1.5	1.3	-2.7	-1.1	2.2	1.1	0.6	2.9	-0.4	2.2	3.2
EMU countries excl. Germany ^{1,2}	1.2	1.4	1.6	3.3	1.8	1.5	-0.8	-1.1	2.2	0.5	0.0	2.5	0.3	1.2	2.8
Great Britain	3.8	2.8	2.9	3.8	3.4	3.5	-3.2	2.7	3.8	-1.0	-1.1	3.9	1.5	2.4	3.1
Sweden	1.3	1.5	2.2	2.1	0.5	0.2	-2.5	-1.0	1.0	0.4	2.0	3.0	-2.7	1.5	2.5
Denmark	2.1	2.0	2.5	1.0	1.1	1.0	0.1	0.5	1.5	3.6	1.0	3.5	2.5	1.5	3.5
EU ¹	1.3	1.5	1.8	2.9	1.8	1.6	-2.4	-0.5	2.4	0.8	0.4	3.1	-0.1	2.3	3.1
EU excl. Germany ¹	1.9	1.8	2.0	3.3	2.1	1.9	-1.2	-0.3	2.5	0.2	0.0	2.9	0.5	1.6	2.9
Poland	3.3	2.6	3.4	1.6	1.9	1.2	-7.8	1.7	3.5	5.9	4.1	4.2	5.5	5.7	4.7
Czech Republic	4.0	4.3	4.1	5.7	2.4	0.4	0.6	-0.5	3.9	2.8	7.0	6.8	4.3	5.5	5.7
Hungary	8.7	7.3	3.1	1.5	1.1	0.1	5.8	-1.1	0.8	3.8	3.5	5.5	6.1	5.5	4.6
Slovakia	5.3	1.9	2.1	4.0	-1.4	1.0	-0.9	2.8	6.4	5.9	10.7	7.9	5.3	7.4	7.5
Slovenia	2.0	2.3	1.9	2.4	3.7	3.9	3.4	4.1	4.6	6.1	5.2	5.4	4.8	4.3	4.7
Lithuania	5.1	4.8	5.0	4.3	7.2	3.9	12.4	7.1	8.0	19.4	14.5	10.5	16.1	11.9	9.8
Cyprus	2.0	2.4	2.9	3.1	-2.5	-0.8	10.1	-6.0	4.0	-5.0	0.5	3.5	-0.4	-1.5	3.0
Latvia	7.2	6.4	4.8	4.8	2.4	2.0	9.6	10.2	8.0	6.3	8.0	8.6	4.5	8.8	8.9
Estonia	5.2	7.6	3.8	5.0	3.5	3.9	17.5	7.6	4.7	5.6	5.2	5.8	10.2	6.7	4.8
Malta	2.3	2.0	2.8	4.0	1.8	1.0	-3.6	3.2	3.8	0.5	3.0	3.5	-0.5	2.3	2.7
Accession states	4.4	3.7	3.4	2.7	1.9	1.1	-0.8	1.4	3.7	5.0	5.7	5.8	5.7	5.8	5.4
Switzerland	0.9	0.5	0.6	1.9	1.0	1.0	-6.5	-2.0	1.5	0.1	1.0	3.5	-5.2	2.0	4.5
Norway	3.3	2.3	2.6	4.5	2.5	2.5	-3.3	2.0	1.5	-0.5	2.5	4.5	1.7	3.0	4.5
Europe ¹	1.5	1.6	1.8	2.9	1.8	1.6	-2.4	-0.4	2.4	1.0	0.8	3.3	0.2	2.6	3.4
USA	3.1	2.2	2.9	4.5	2.9	3.0	-1.7	1.6	5.1	-1.5	1.1	5.5	3.7	1.5	4.3
Japan	1.4	0.7	0.4	2.3	1.3	1.3	-4.9	0.5	2.4	8.2	4.5	5.9	2.0	5.2	6.8
Canada	2.9	3.4	3.7	2.0	3.5	3.9	2.5	2.7	3.0	0.8	1.6	4.5	0.8	3.5	3.4
Non-European industrial countries ¹	2.7	1.9	2.4	3.7	2.5	2.6	-2.5	1.3	4.1	1.0	1.9	5.4	3.0	2.4	4.6
Total ¹	2.3	1.8	2.2	3.4	2.2	2.1	-2.5	0.7	3.5	1.0	1.2	4.0	1.3	2.5	3.9
Total excl. Germany ¹	2.5	1.9	2.3	3.5	2.3	2.3	-2.1	0.8	3.6	0.7	1.1	4.1	1.8	2.2	3.8

1 2002 weights on dollar basis at 2002 exchange rates (annual average); exports and imports: weighted average of the countries concerned. — 2 Exports and imports incl. intra-EMU trade.

Sources: OECD Economic Outlook; Eurostat; National Accounts; national statistics and DIW Berlin calculations; 2003 and 2004: DIW Berlin estimate and prognosis.

Figure 1
USA



1 Annualised rate. — 2 Change (%) on the previous year.
Sources: OECD; DIW Berlin calculations.

tax package will be substantially lower over 10 years than the government had originally intended.² However, cuts in tax relief have been minimal in those areas demonstrating effective purchasing power over the next two years. Thus, the shortfall in receipts could make a difference of US \$ 60 billion in fiscal year 2003 and of US \$ 150 billion in fiscal year 2004.³ Notionally, this corresponds to 0.6% and 1.5% of GDP, respectively. The main areas of tax relief result from bringing forward the stages of income tax reduction that were planned for 2004 to 2006 in any case. The tax relief for private consumers will be limited, as the cuts are more favourable to those on higher incomes, whose consumption tendencies are comparatively low.

There are currently signs that, with the war-induced uncertainty subsiding, the expansionary forces generated by both economic policy and the dollar devaluation will gradually gain the upper hand. The mood among investors is once again becoming brighter. For the first time in a while, industrial production has demonstrated an upward trend, making a pronounced recovery likely in the second half of the year.

Nevertheless, the forecast of an economic recovery in the USA does carry some risks. The level of indebtedness of private households remains critical; despite a tax cut, a noticeable increase in disposable income and an improvement in the labour market situation are not anticipated until towards the end of the year. In addition, in striving to climb out of recession, the USA is burdened with an extremely high current account deficit.

The U.S. growth rates forecast here are lower than the rates of between 4% and 5% that were achieved during the second half of the 1990s; nevertheless, they are still significantly higher than those anticipated for many other countries: in the USA, GDP will rise by 2.2% in 2003, and by 3.4% next year. The price climate is expected to remain calm despite higher prices for imports; consumer prices will rise by 2.2% this year and by 1.8% next year.

Modest recovery in the EU

The European economies remain in a weak cyclical phase. The euro zone has even slipped into stagnation in the maelstrom of both Germany's economic development and the strong euro revaluation. The after-effects

² Cf. 'The World Economy in the Spring of 2003'. In: *DIW Economic Bulletin*, vol. 40, no. 5, May 2003, p. 141.

³ Cf. Congressional Budget Office: 'Cost Estimate for H.R. 2, Jobs and Growth Tax Relief Reconciliation Act of 2003.' (www.cbo.gov)

of the oil price shocks are slowly waning; not only might this considerably dampen the buoyancy in prices in the euro zone, but it may also lessen the corresponding pressures on budgets and companies. Moreover, monetary policy has gradually veered onto a noticeably expansionary course; low interest rates are improving companies' financing conditions. Similar stabilising trends on stock markets are having the same effect.

All of this, however, is currently still overshadowed by uncertainty over international economic development and the lack of confidence in the economic revival. This is also hindering the effects of low interest rates. In particular, the euro's strong upward valuation is reducing the competitiveness of euro zone companies.

Against this backdrop, a continuation of the weak cycle is anticipated for this year. In the euro zone, economic production will be stagnant in the first six months and will then increase only gradually. Domestic demand will be stimulated slightly, but, depending on exchange rates, exports will remain weak while imports will rise significantly. Next year, the expansion in exports will be more pronounced, but only if – as is assumed here – the euro revaluation does not continue. A relaxation on labour markets is not anticipated.

The development could be noticeably better than forecast here, if, through the consolidation of a world economic upturn, investors could gain confidence regarding further development – resulting in a push for investment. Conversely, a further significant euro revaluation could shatter the trend towards economic revival.

EU accession states: growth greater than in euro zone

The 10 countries that are set to join the European Union next year have distinguished themselves for a number of years now by recording higher levels of economic growth than the euro zone. The only exception in this regard has been Poland – although economic recovery did set in here last year.

The comparatively robust growth can be considered a sign of continuing real convergence with the EU member states. Differences in per capita GDP, however, remain considerable.

Initial data on the development of GDP in the first quarter of 2003 in many cases show a strong increase compared with the same quarter in the previous year⁴ –

⁴ Owing to the short time series, seasonal adjustment is linked with very many uncertainties. For this reason, growth rates for the same quarter in the preceding year have been provided.

of 9.1% in Lithuania (8.1% in the previous quarter), of 8.9% (8.3%) in Latvia, of 5.0% (5.9%) in Estonia, of 4.1% (5.7%) in Slovakia, of 2.7% (3.7%) in Hungary and of 2.2% (1.5%) in the Czech Republic. In Poland, the growth rate of 2.2% recorded during the first quarter was slightly higher than in the previous quarter.

The cyclical weakness in the euro zone (and in the world) has, however, also left its mark in these countries. The strong slowdown in exports has resulted in reduced growth rates, especially in those countries with close trading links to the euro zone; growth is primarily supported by domestic demand. Nevertheless, these countries were able to gain market share in the euro zone. The export-oriented industries in the accession states remain the most significant forces in catch-up growth.

The expansion of private consumption was due in particular to a strong rise in real wages. In this context, Poland and Slovenia were exceptions. The most dynamic element of domestic demand continues to be investment. Here, the prospect of fairly imminent EU accession is thought to play a vital part and to have favourably influenced conditions for investment.

Public consumption, too, has increased strongly in most countries, supported by wage rises in the public sector and by rising expenditure in the health care sector. Furthermore, preparations for accession to the European Union (and, in some countries, to NATO) have led to greater levels of government spending. Budget deficit levels, which in 2002 deviated very strongly away from the reference values stipulated in the Maastricht Treaty in the case of Hungary (9.2% of GDP), Slovakia (7.7%) and the Czech Republic (6.5%), require consolidation.

Disinflation continued in all countries. This is partly due to the favourable trend in energy prices. The fall in prices in Lithuania and the Czech Republic is temporary. On the one hand, domestic demand in both countries is robust; on the other, in addition to the oil price, the nominal currency revaluation is also becoming evident. In Slovakia, the increase in the inflation rate at the beginning of this year is the result of a strong increase in regulated prices. The core inflation rate is just under 2%.

Unemployment in most countries remains extremely high. While the unemployment rate in Poland has persisted at 20% for several months, it has fallen in other countries. For example, in Slovakia unemployment fell by 2% between April 2002 and April 2003, to 16.9%. Cyprus, Slovenia and Hungary are recording substantially lower unemployment rates; Hungary, however, is recording a rising trend.

In most of these countries, continued robust growth is anticipated. Impulses will continue to be generated primarily by private consumption and investment activity. Public consumption will dampen economic demand.

The contribution to growth generated by foreign trade will continue to be negative.

Poland may demonstrate higher growth (of 2.4%) than in the previous year. A stronger rise in real wages will facilitate the further growth of private consumption. Moreover, investment will record positive growth rates as a result of vast improvements in financing conditions: nominal interest rates fell from 11.5% at the beginning of 2002 to 5.25% in May 2003. In addition, the real effective devaluation of the zloty by 14% during the same time has had a stimulating effect.

In Slovakia, Hungary and Estonia, a clear decline in growth rates is expected. In Slovakia, this is due in particular to the broad fiscal consolidation programme, while in Hungary and Estonia, steep increases in real wages led to a loss of international competitiveness, which will put a damper on growth. Thus for 2003 a fall in growth to 2.1% is anticipated for Hungary and a fall to 3.5% for Estonia.

Linked to EU accession on 1 May 2004, these countries must decide when and at what exchange rate they will join Exchange Rate Mechanism II (ERM II). While countries with Currency Boards can, theoretically, continue on their current monetary policy course, four countries will have to fix their currencies (again). In Slovenia, the implicit Crawling Peg will have to be abolished first and a more determined disinflation policy adopted. The risks inherent in fixing exchange rates were evident most recently in the case of the Hungarian forint – a currency closely linked to the euro in a 15% band. After a speculative attack against the upper limit had been successfully fought off by the Central Bank, bad news on growth in the first quarter of 2003 led to a 10% devaluation of the forint within the space of a week, which could only be met with strong interest rate increases.

At this point, most countries are pursuing their aim of joining ERM II when they accede to the European Union. In this regard, the Czech Republic is the exception. In the interest of a slow decline of the budget deficit, it has delayed accession to ERM II, and thereby ultimately also to the euro zone. For these countries, it is therefore highly significant that the economic policy instruments be targeted at the conditions of monetary union. This is particularly true for fiscal policy, which must be able to act in the case of cyclical fluctuations, but also for wage policy. In monetary union, indexation, which currently still exists in Slovenia, can lead to high inflationary differentials and therefore to instability.

Euro zone

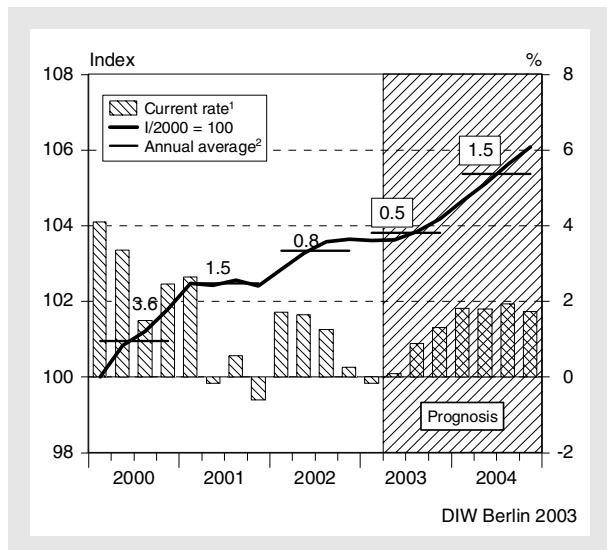
Since mid-2001, the euro zone economy has persisted in a state of cyclical weakness. This stagnation is the result of a number of pressures, including the strong increase in oil prices; monetary policy restrictions in 2000; rising food prices; the unexpectedly strong downturn in the USA and, consequently, a stagnation in world trade; the correction in the assessment of company profitability – initially in the IT sector and subsequently in the entire economy, which led to a strong fall in stock market prices; and the uncertainty surrounding the run-up to the war in Iraq.

GDP Stagnates

In the first quarter of 2003, GDP in the euro zone stagnated, having risen by only 0.8% on an annual average in 2002 (cf. figure 2). This value was the lowest since the recession year of 1993. Germany's weak economic development is prominently reflected here: the scenario excluding Germany is not quite as bleak – showing a GDP increase of 1.2%.

Weak domestic demand is characterised in particular by the fall in investment in construction and equipment (cf. table 3). In the first quarter of 2003, these indicators once again shrank by 5.6% – as such, the trend

Figure 2
Real GDP in the Euro Zone
Seasonally adjusted



1 Change (%) on the previous quarter, annualised rate (right-hand scale). — 2 Change (%) on the previous year.
Sources: Eurostat; DIW Berlin calculations.

has been that of a consistent decline for the last 10 quarters. This long-lasting weakness in investment is the consequence, on the one hand, of the numerous, previously mentioned pressures to which the euro zone economy has been exposed since mid-2000 and, on the other, the hesitant economic policy responses to these pressures.

In the first quarter of 2003, private consumption rose at an annual rate of 1%, following 0.6% in 2002. This fairly stable development of private consumption is due not least to the fact that employment in the euro zone did not fall. A more favourable development, however, was prevented by the rise in the unemployment rate accompanying the weak economy.

By now, the external surplus/deficit acts as a brake on growth. The surplus had still risen quite noticeably in 2002. In the first quarter of 2003, imports rose by 2.4%, while exports fell by the same amount. The external surplus/deficit was thus negative and, with a growth contribution of -0.5%, compensated for the positive effect of growth in domestic demand.

Weakness evident in almost all member states

Almost all euro zone member states are suffering from weak growth, ongoing now for a number of years. The only exception is Greece, where, with entry to the euro zone, the considerable reduction in real interest rates led to a boost in investment. Moreover, preparations for the 2004 Olympic Games are also having a stimulating effect. In all other countries, economic growth is markedly below 1998 to 2000 levels. This is also the case for Ireland, which last year enjoyed the highest rate of growth (6.3%). This was due in particular to the very strong revival of exports early on in the year; domestic demand, meanwhile, rose by a mere 1.5% in 2002. As a result of the particularly strong real upward valuation, the great speed of Ireland's economic growth will not be sustainable.

In France, only a temporary revival was recorded in 2002, despite an active fiscal policy and a 4.1% increase in public consumption over the previous year; since mid-2002, economic growth has been very weak. In the first quarter of 2003, the increase on an annual basis was 1%, following a fall in the fourth quarter of 2002. Growth in employment also came to a standstill in the first quarter of this year; in the private sector, in fact, employment fell.

In Italy, the economy was supported by temporary programmes to stimulate investment ('Tremonti Law'). Investment in equipment rose in the second half of the

Table 3

EMU Countries: Key Forecast Figures

	2001	2002	2003	2004
	Change (%) on the previous year			
Real GDP	1.5	0.8	0.5	1.5
Private consumption	1.8	0.6	1.2	1.5
Government consumption	2.2	2.8	1.5	1.3
Gross fixed capital formation	-0.5	-2.7	-1.1	2.2
Construction	-0.6	-1.9	-1.4	1.0
Machinery and other equipment	-0.5	-3.4	-0.9	3.3
External surplus/deficit ¹	0.5	0.6	-0.6	0.0
Consumer prices ²	2.5	2.3	1.8	1.4
Unit labour costs	2.9	2.3	2.0	1.3
	As % of nominal GDP			
Budget surplus/deficit ³	-1.6	-2.2	-2.7	-2.4
Current account balance	-0.3	0.9	0.2	0.5
	As % of labour force			
Unemployment rate ⁴	8.0	8.3	9.0	9.0

1 Contribution to GDP growth. — 2 Harmonised index of consumer prices. — 3 Total government surplus/deficit. — 4 Standardised.
Sources: National and international statistics; DIW Berlin calculations; 2003 and 2004: DIW Berlin estimate and prognosis.

year at an annual rate of 14%. Despite very restrained economic growth, Italy stands out as a result of the impressive expansion in employment (2002: +1.4%). In 2002, Italy contributed 0.3 percentage points to a euro zone increase of 0.5%. This development was due in particular to tax breaks. Until the end of 2002, companies were able to claim wage subsidies for each newly created permanent job. Moreover, thanks to the growth in employment, the rise in private consumption in the second half of the year was much more pronounced than the euro zone average. In the first quarter of 2003, however, Italy also recorded a fall in GDP, which was due especially to the slump in investment.

Portugal is in a state of severe recession. The country also recorded the highest increase in unemployment: the rate rose from 4.5% in April 2002 to 7.3% in April 2003. As a result of insufficient consolidation efforts during the previous boom, Portugal is now forced to embark on a rigorous savings course.

Since the second half of 2002, the increase in unemployment in the euro zone has accelerated: in April 2003, the unemployment rate stood at 8.8%. As ever, differences between member states are considerable. A high increase in unemployment was recorded in Belgium, Germany, the Netherlands and Portugal; in Spain and France, meanwhile, the increase was much lower.

The current weak phase is accompanied by a comparatively strong buoyancy in prices. Thus, the May 2003 inflation rate of 1.9% was still at a level just below the upper limit of the ECB's inflationary goals. Previously, levels of over 2% had been recorded almost every month for the previous three years. And while the underlying inflationary trend (HCPI excluding food, tobacco and energy) had been very low in the summer of 2000, this measure of inflation has, since mid-2001, also reached values of around 2%.

In 2003, at around 0.5%, economic growth in the euro zone will be very low. A revival is anticipated only for the second half of the year, although this will be very restrained. Although consumer confidence will be on the increase again following the calming of international political tensions and the fall in oil prices, at the same time, the currently low interest rate levels will increase investment tendencies among companies. Other factors, however, argue against a strong upturn. For one, there is the strong euro revaluation, which will serve to dampen external impulses. On the other hand, government demand, following strong expansion last year, is expected to grow only minimally. Unemployment will fall only slightly during the course of next year.

Prices will rise substantially more slowly anyway this year than in 2002. This is due to the revaluation of the euro, the renewed fall in the price of oil and the still dampened domestic demand. Following a 1.8% increase this year, prices in the euro zone will rise by 1.4% next year. GDP will then rise by 1.5%.

Divergence of euro zone inflation rates on the increase

While the nominal convergence process in the run-up to currency union had led to a strong approximation of the inflation rates in the euro zone, an increasing divergence in price trends has been observed since the introduction of the common currency (cf. table 4). This is discernible in the variance that has been calculated from the deviations of the rates in the individual member states away from the unweighted average value of the rates.⁵ The growing divergence becomes even more evident if only those countries that formed monetary union at the beginning of 1999 are observed. At that time, Greece, which achieved nominal convergence two years later, did not belong to this group. Here there has been a continuous increase since 1997. And by now, the variance is even greater than in 1996.

⁵ This value is higher than the weighted average value, which the individual countries enter according to their economic importance.

Differences in the inflation rates between the member states do not per se threaten the stable functioning of monetary union; it can be an expression of allocatively sensible relative price adjustments. However, if divergence is great and sustained over a long period of time, this points to systematic problems in the functioning of monetary union. Since the central bank has to implement its instruments with a view to aggregate development, the Union's monetary conditions can differ substantially, owing to sustained strong divergence of inflation rates and therefore also of real interest rates. Thus, in the case of Germany, where inflation rates are lower than the euro zone average, real interest rates have for some time been much higher than those in other member states, although the weak economic phase in Germany is particularly pronounced.

The differences between inflation rates in the euro zone can be due to a number of factors:

- *Higher structural inflation rates in countries catching up on growth (the Balassa-Samuelson Effect):* Until now, it could not be demonstrated for the euro zone that this can explain differences in inflation.⁶ In contrast to the theory, most countries with strong productivity differentials between industry and service sectors do not demonstrate above-average inflation rates. Countries in the process of catching up do have higher inflation rates, but not above-average sectoral productivity differences. Of course, prices for services in all member states rise more quickly than prices for industrial goods. Also, the divergence in the rates of increase for prices for services is higher: the rise in the variance of prices for industrial goods only increased moderately, and, moreover, fell again slightly in 2002. Such differences in the development of prices for services can be due to the competitive position, the adjustment of regulated prices (these concern services in particular), or different effects of price increases in input factors.
- *(Differing) adjustment of indirect taxes:* In the Netherlands, for example, at the beginning of 2001, as part of a tax reform, indirect taxes were raised in favour of a fall in direct taxes. The increase in value-added tax explains a good share of the Netherlands' high rate of inflation – of over 5% – in 2001. Other examples are the introduction of the ecology tax in Germany, and the increase of value-added tax in Portugal in mid-2002. Such price adjustments in themselves cannot, however, lead to an expansion of inflationary divergence in monetary union, but only to a temporary deviation of the rate of one country in

⁶ Cf. Kirsten Lommatzsch and Silke Tober: 'Reform der geldpolitischen Strategie der Europäischen Zentralbank.' In: *Wochenbericht des DIW Berlin*, no. 7/2003.

Table 4
Inflation Rate and Wage Trends in the Euro Zone¹

	EU12/ EU8 ²	Bel- gium	Ger- many	Greece	Spain	France	Ireland	Italy	Luxem- bourg	Nether- lands	Austria	Portu- gal	Finland	Variance	
														All	Excl. Greece
Harmonised index of consumer prices															
1996	2.3	1.8	1.2	7.9	3.6	2.1	2.2	4.0	1.2	1.4	1.8	2.9	1.1	3.3	0.9
1997	1.6	1.5	1.5	5.4	1.9	1.3	1.2	1.9	1.4	1.9	1.2	1.9	1.2	1.2	0.1
1998	1.2	0.9	0.6	4.5	1.8	0.7	2.1	2.0	1.0	1.8	0.8	2.2	1.4	1.1	0.3
1999	1.1	1.1	0.6	2.1	2.2	0.6	2.5	1.7	1.0	2.0	0.5	2.2	1.3	0.5	0.5
2000	2.1	2.7	1.4	2.9	3.5	1.8	5.3	2.6	3.8	2.3	2.0	2.8	3.0	1.0	1.0
2001	2.4	2.4	1.9	3.7	2.8	1.8	4.0	2.3	2.4	5.1	2.3	4.4	2.7	1.0	1.1
2002	2.3	1.6	1.3	3.9	3.6	1.9	4.7	2.6	2.1	3.9	1.7	3.7	2.0	1.2	1.2
Unit labour costs															
1996	1.5	0.6	0.2	.	3.4	1.2	.	5.2	.	0.7	-1.3	.	0.2	.	.
1997	0.4	0.2	-0.7	.	1.4	0.5	.	2.4	.	1.5	0.1	.	-1.6	.	.
1998	0.0	0.8	0.1	.	2.5	-0.4	.	-2.4	.	2.1	-0.8	.	1.1	.	.
1999	0.9	1.5	0.3	.	2.0	0.8	.	1.3	.	1.8	0.4	.	1.2	.	.
2000	1.2	0.2	1.0	.	3.0	0.6	.	1.7	.	3.1	-0.5	.	0.7	.	.
2001	2.6	3.8	1.6	.	3.8	2.4	.	3.0	.	5.5	1.4	.	5.0	.	.
2002	2.1	3.1	0.8	.	3.2	2.1	.	3.0	.	4.9	0.7	.	0.9	.	.
Compensation per employee															
1996	2.4	1.5	1.3	.	4.5	1.9	.	5.6	.	1.4	1.3	.	2.7	.	.
1997	1.8	2.9	0.8	.	2.5	2.0	.	4.1	.	2.1	1.1	.	1.4	.	.
1998	1.1	1.0	1.0	.	3.0	1.6	.	-1.7	.	3.8	2.1	.	4.0	.	.
1999	1.8	3.4	1.2	.	2.8	2.1	.	1.9	.	3.1	1.7	.	2.1	.	.
2000	2.5	2.1	2.1	.	3.8	2.1	.	2.9	.	4.3	2.3	.	3.9	.	.
2001	2.6	3.2	1.7	.	4.1	2.9	.	2.8	.	4.9	1.4	.	4.3	.	.
2002	2.4	4.0	1.6	.	4.0	2.5	.	2.1	.	4.3	2.2	.	2.3	.	.
Components of the harmonised index of consumer prices															
Industrial goods, excl. energy															
1996	1.6	0.6	0.7	6.4	3.1	1.3	0.8	3.9	0.3	-0.7	-0.5	2.3	-0.2	4.0	2.0
1997	0.7	0.1	0.3	4.7	1.6	0.1	-1.4	1.7	0.3	0.1	-0.6	1.1	0.1	2.2	0.8
1998	1.0	0.7	0.7	4.9	1.4	0.1	-0.2	2.1	0.6	1.2	0.2	0.1	0.3	1.7	0.4
1999	0.7	0.8	0.4	1.2	1.5	-0.2	-0.6	1.4	0.2	1.5	0.2	1.8	0.4	0.5	0.6
2000	0.5	0.0	-0.5	0.6	2.0	0.1	0.5	1.7	1.5	0.9	0.0	1.5	0.4	0.6	0.6
2001	1.0	2.0	0.2	2.9	1.0	0.9	1.6	1.1	1.7	3.7	0.9	2.5	1.8	0.9	0.8
2002	1.4	1.7	0.5	2.5	2.6	0.9	1.0	2.4	1.2	2.7	0.7	3.1	0.9	0.8	0.8
Energy															
1996	3.1	5.7	1.0	8.0	3.7	4.8	3.5	1.7	5.7	6.7	6.3	0.9	8.8	6.3	5.9
1997	2.7	3.1	2.8	-2.7	2.4	2.0	3.0	1.9	3.7	8.2	3.0	3.8	1.8	5.3	2.8
1998	-2.6	-3.6	-3.3	-2.8	-3.8	-2.7	-0.5	-1.4	-5.2	-0.1	-3.6	0.6	-0.6	2.9	3.1
1999	2.3	2.0	4.2	-2.5	3.2	0.4	1.9	1.1	2.9	2.8	0.7	-1.8	3.5	3.9	2.7
2000	13.1	16.3	13.9	17.3	13.4	12.1	13.8	11.6	20.3	14.9	11.6	6.1	11.2	11.7	11.4
2001	2.2	1.4	5.7	-1.7	-0.7	-1.5	-2.8	1.6	-2.6	8.4	0.4	5.2	-1.0	12.0	12.3
2002	-0.6	-3.6	0.3	-0.3	-0.2	-1.5	3.4	-2.6	-3.7	3.3	-2.4	1.2	0.2	5.2	5.7
Food, tobacco															
1996	2.0	0.8	0.6	7.2	3.7	1.8	2.2	4.3	1.1	0.2	0.2	2.3	-0.6	4.4	2.1
1997	1.5	2.4	1.5	5.0	0.5	2.4	1.8	0.3	0.9	1.9	1.4	0.4	1.7	1.5	0.5
1998	1.7	1.7	1.2	4.8	1.7	1.7	4.0	1.5	2.9	2.5	1.7	3.8	1.6	1.3	0.8
1999	0.6	0.4	-0.6	2.8	1.8	0.8	3.3	1.0	1.5	1.7	-0.5	2.8	0.2	1.5	1.4
2000	1.4	0.8	0.1	2.3	2.4	2.4	5.6	1.5	2.5	1.3	1.4	2.0	1.5	1.7	1.8
2001	4.5	4.1	3.8	5.7	5.1	5.1	5.3	3.7	4.4	7.0	3.4	6.1	3.6	1.2	1.2
2002	3.1	2.2	1.7	6.1	4.8	3.2	4.2	3.4	4.6	4.0	1.8	1.9	2.7	1.8	1.2
Services															
1996	3.0	2.5	2.1	10.3	3.9	2.4	2.9	4.6	1.4	3.1	3.4	5.0	1.2	5.3	1.3
1997	2.5	1.7	2.3	9.0	3.6	1.4	2.3	3.3	2.5	2.1	2.2	4.1	1.7	3.8	0.6
1998	2.0	2.1	1.3	6.3	3.6	1.4	3.0	2.8	1.7	2.5	2.0	3.6	2.8	1.7	0.6
1999	1.6	1.8	0.6	3.8	3.3	1.2	3.8	2.5	1.5	2.6	1.2	3.3	2.4	1.1	1.0
2000	1.5	2.3	0.7	2.5	3.6	0.6	5.7	2.3	2.5	1.5	1.9	4.0	3.5	1.9	2.1
2001	2.5	2.1	1.7	3.9	3.9	1.5	6.0	2.9	3.6	4.5	3.2	4.8	3.8	1.6	1.7
2002	3.1	2.6	2.1	4.5	4.6	2.8	7.6	3.4	3.3	5.0	3.0	5.9	3.5	2.2	2.4

¹ Change (%) on the previous year. — ² Unit labour costs and compensation of employees: EU8.
Sources: Eurostat; DIW Berlin calculations.

comparison with that of another, when second-round effects in wages do not occur.

- *Differences in the economic cycle:* Higher rates of inflation due to a relatively tense labour market situation (and wage pressures) can be the result of a country's cyclical overheating. The accompanying deterioration of the competitive position lowers demand and brings with it a cool-down. At the same time, however, the cyclical divergence between the countries becomes stronger as a result of different real interest rates. Several EMU member states demonstrated this tendency to overheat in 2000, in particular the Netherlands. From this developed a noticeable weakening.
- *Different ways of dealing with supply shocks in the member states:* Experience suggests that wage formation in some member states does not adequately take into account the actual conditions of monetary union. Higher rates of inflation due to excessively high wage agreements require contrasting adjustments in the medium term. Within the framework of a stability-oriented wage policy, wages increase to the extent of trend productivity increases and the central bank's target inflation rate. With the appearance of a supply shock, such as the increase in the price of oil, monetary policy should accept the temporary increase in the rate of inflation. However, this increase must not be compensated for with higher wages, for this would put in motion a price-wage spiral.

While the first two points do not justify a sustained divergence of inflation rates and do not obstruct the ability of monetary union to function, pronounced cyclical divergence and different wage policies can endanger the macro-economic stability of monetary union. In the past few years, this has been true in particular for wage policy.

A problem for wage formation in the euro zone resulted from the fact that the central bank's target inflation rate was not clearly defined and was therefore variously interpreted. Another problem was that some euro zone countries experienced second-round effects resulting from the increase in oil prices, partly because of systematic compensation for unexpectedly high inflation. The latter permits a divergence of inflation rates over a longer term. The most visible example of this is Spain. Here there is arrears-oriented indexation, which envisages compensation payments for differences between expected and actual inflation. Such an indexation was suitable in a phase of falling inflation rates, so as to enhance the credibility of the disinflation programme. However, arrears-oriented indexation implies that the consequences of the increase in the price of oil as well as those of higher food prices were extrapolated.

In Italy, too, compensation payments were made in the last two years for divergence of the actual inflation rate away from the target inflation rate stipulated by the government. However, the increase in wages, at 2.1% (measured by remuneration per employee), was lower than in the euro zone in 2002.⁷ Here additional pressure on prices developed since the strong expansion of employment – favoured by tax breaks – was linked to a considerable slowing down of growth in productivity.

Belgium is another country in which compensation payments were made for previously higher inflation rates. The visible calming down of inflation here, evident in the 2002 annual average, is due to favourable special factors, such as falling energy prices; wage rises constituted 4%, the increase in unit labour costs still 3.1%. A respectable share (2.3%) of wage rises is due to a form of automatic indexation. In addition, the Belgian mechanism that sets wage increases in collective agreements also takes into account how collective wages develop in neighbouring economies. This is a mistake, since wage developments should be oriented along domestic productivity trends and the ECB's target inflation rate.

Fiscal policy unable to attain consolidation goals

With the weakened cycle, the situation of public budgets in the euro zone has also deteriorated. The aggregate deficit will rise to approximately 2.6% this year, following 2.2% last year (cf. table 5). For the first time since the mid-1990s, the level of gross debt is also again rising quite considerably.⁸ Despite partly considerable efforts at consolidation, the financial position everywhere is set to deteriorate this year. This is due in large part to the effect of automatic stabilisers. In a weak cycle, revenue falls and expenditure, to finance rising unemployment, rises. In addition, in individual cases, there may be additional discretionary expenditures, for example to encourage investment in Italy or labour market programmes in France.

Even at this point, Germany, France and Portugal are already exceeding the 3% limit on their financing deficit quite substantially, thereby fulfilling the 'excessive deficit' requirements. Italy could follow suit next year. With the implementation by the European Com-

⁷ Measured against the average of those eight countries for which there are detailed data and which have been included in table 4.

⁸ The debt level does not necessarily develop in tandem with the financial balance, since in many countries extra-budgetary transactions (e.g., profits from privatisation) can either lower or raise the level of debt.

Table 5

Public Budget Indicators for the EMU Countries

	Gross debt ¹					Financial balance ¹				
	2000	2001	2002	2003	2004	2000	2001	2002	2003	2004
Germany	60.2	61.8	64.3	67.5	69.3	-1.4	-2.8	-3.6	-3.7	-3.0
France	57.2	56.8	59.1	60.9	62.1	-1.4	-1.6	-3.1	-3.6	-3.3
Italy	110.6	109.5	106.7	106.6	106.4	-1.8	-2.6	-2.3	-2.7	-3.0
Spain	60.5	56.9	54.0	52.5	51.5	-0.9	-0.1	-0.1	-0.5	-0.3
Netherlands	55.8	52.8	52.6	53.0	53.0	1.5	0.1	-1.1	-1.9	-1.8
Belgium	109.6	108.5	105.3	102.5	100.5	0.1	0.3	0.1	-0.5	-0.3
Austria	66.8	67.3	68.7	68.5	68.0	-1.9	0.2	-0.6	-1.5	-1.2
Finland	44.5	43.8	42.7	41.5	40.5	6.9	5.1	4.7	3.2	2.5
Greece	106.2	107.0	104.9	103.0	101.5	-1.9	-1.9	-1.2	-1.2	-1.0
Portugal	53.3	55.6	58.1	60.0	60.5	-3.2	-4.2	-2.7	-3.6	-3.2
Ireland	39.3	36.8	33.3	32.5	31.5	4.3	1.1	-0.1	-0.8	-1.1
Luxembourg	5.6	5.6	5.3	5.5	5.5	6.1	6.4	2.6	-0.5	-0.3
EMU countries ²	70.2	69.9	70.2	71.2	71.7	-1.0	-1.6	-2.2	-2.6	-2.4

¹ As % of gross domestic product; apportionment according to Maastricht Treaty; financial balance excluding extra revenue from the sales of mobile transmission licences. —

² Total of countries listed. Weighted by 2002 GDP in euro.

Sources: ECB; Eurostat; European Commission; 2003 and 2004: DIW Berlin estimate and prognosis.

mission of an excessive deficit procedure, and possible financial sanctions, countries could be pressured into raising taxes and/or cutting public expenditure. The European Commission's requirement to lower the so-called structural deficit by at least 0.5% annually by means of discretionary measures cannot, however, be maintained for all countries.

In 2003, the euro zone's financial policy is still slightly expansionary, as a result of the automatic stabilisers. Next year, however, it could be restrictive, since further consolidation measures look likely to be taken up; the financial deficit will fall slightly.

Euro revaluation worsens monetary conditions

Since the beginning of last year, the ECB has lowered the decisive refinancing rate for banks in a number of stages by a total of 1.25%; the last rate cut took place at the beginning of June. Despite this expansionary course, monetary conditions have in general deteriorated noticeably, since, during the same period, the euro revalued against the US dollar by approximately 30% and effectively by 17% (cf. figure 3).

Short-term interest rates in the euro zone are very low, standing at 2.2% in nominal and at 0.3% in real terms. Yield on 10-year government bonds is also low, at 3.7% in nominal terms and almost 2% in real terms, so that interest rates exert a noticeably stimulating effect on the economy. However, stock market rates (Euro-

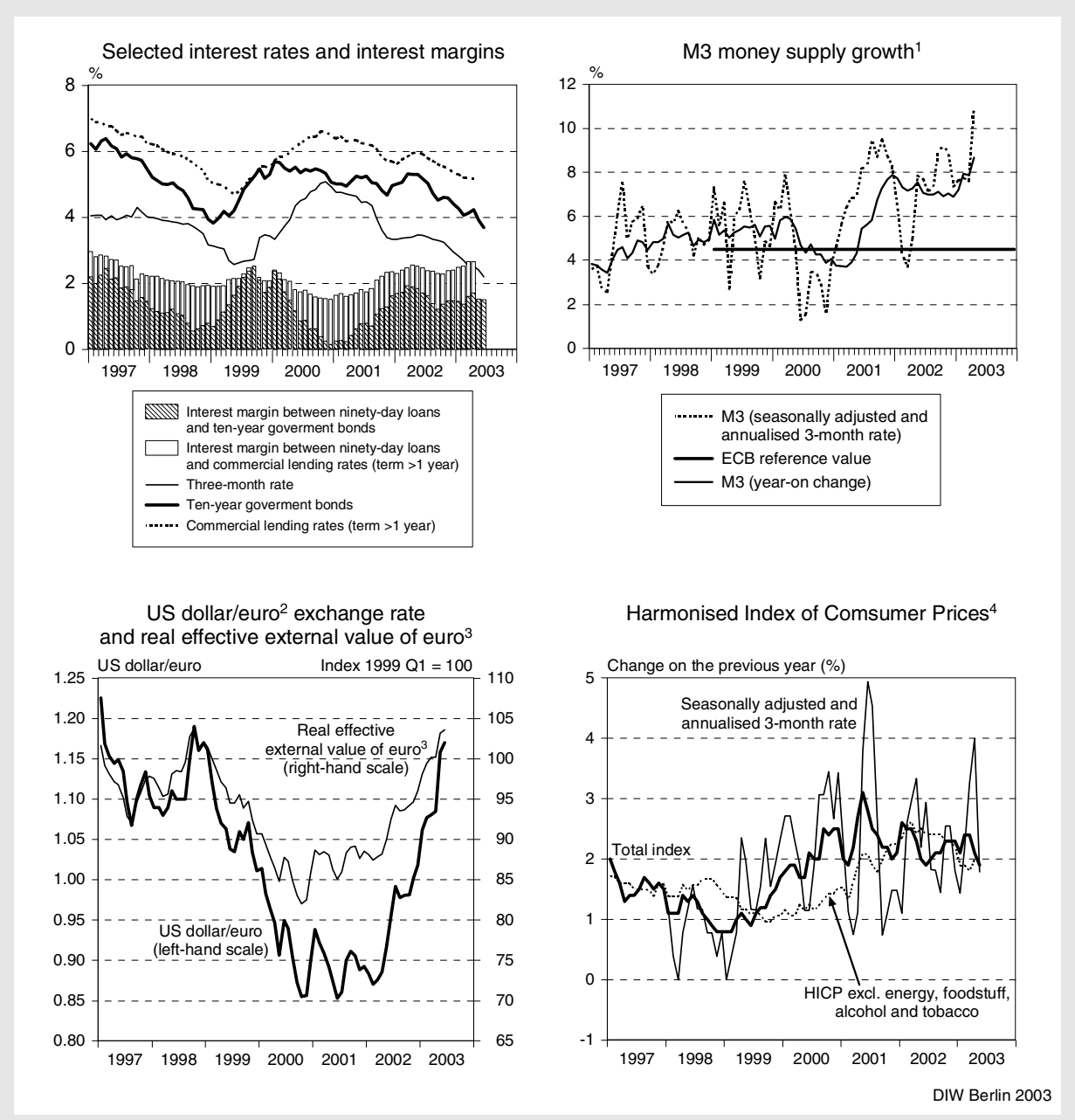
STOXX total index) have once again fallen during the last 12 months – by some 20%; as a result, companies' financing conditions have deteriorated. A very timid recovery has been noticeable quite recently.

The revaluation of the euro is having a clear delaying effect on the European economy. At the end of May, the value of the euro against the US dollar was higher than at its initial level in January 1999 – for the very first time. Based on econometric estimates, the revaluation since the beginning of last year has had the effect of a fall in growth of approximately 1.5%. The real economic effect generated by lowering interest rates by 1.25% during the same time period is anticipated to be merely around 0.6% of GDP.⁹

The expansion of credit to individuals increased at the beginning of the year – from 4.2% (current annual rate) in the second half of 2002 to 5.2% between January and April 2003. In real terms, however, this level is still below the average of past years. The money supply, which has been expanding strongly, continues to be influenced by the tendency of investors to make short-term investments, and has therefore overdrawn the increase of demand-effective liquidity.

⁹ Based on an econometric analysis by the economic research institutes, the real economic effect of a 10% upward valuation of the euro against the dollar in the first two years corresponds approximately to a 1% drop in interest rates. In: 'The World Economy in the Spring of 2003'. In: *DIW Economic Bulletin*, vol. 40, no. 5, May 2003, p. 139. The ECB's econometric studies permit the conclusion that the effect of a 1% drop in interest rates equals about 0.5% of GDP; cf. 'Jüngste Erkenntnisse über die geldpolitische Transmission im Euro-Währungsgebiet'. In: *Monatsbericht der Europäischen Zentralbank*, October 2002, p. 49.

Figure 3
The Monetary Situation in the Euro Zone
 January 1997 to December 2002



1 Up to April 2003. — 2 Preceding 1998 exchange rate between US dollar and synthetic euro. — 3 Compared with a wide group of countries, based on consumer prices. — 4 Up to May 2003.
 Sources: European Central Bank; Eurostat; DIW Berlin calculations.

This year the increase in the HCPI is also likely to fall below the 2% mark as a result of falling import prices and to stand at 1.4% on average next year. Given the high and – for the duration of the forecast period – increasing production gap, and an inflation rate that is expected to fall substantially short of the ECB's stability

goals next year, a further drop in interest rates by 0.5% is likely in the not-too-distant future.

'Arbeitskreis Konjunktur' in the DIW Berlin
 (Study Group 'Business Cycle')