# Economic Trends 2004/2005 in Germany

## Hopes of recovery

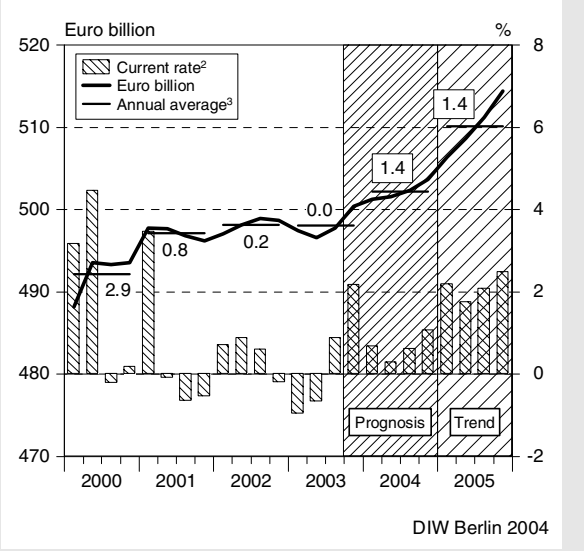
The German economy is at a crossroads. Last year was characterised by tenacious stagnation – a continuation of the trend that has dominated the economy since the middle of 2000, notwithstanding frequent faint signs of possible recovery. However, last autumn brought not only substantially improved economic climate indicators – previously so often a cause of subsequently disappointed hopes of recovery – but also, for the first time since the beginning of the lull, a distinct upward trend in output (cf. figure 1 and table 1).

Over the course of 2003, not only was private consumption extremely weak, but investment in machinery and other equipment, in particular, had also declined, in some cases substantially so. However, both incoming orders and turnover in this area have recently increased markedly, indicating that investors had already begun to overcome their reticence at the end of 2003. All in all, prospects have brightened up, and the conditions for the beginning of an upturn this year would basically be favourable were it not for certain dampening factors, in particular wages and fiscal policy.

The driving force behind the recovery is external demand. The upward trends in the USA and Asia already began stimulating the German export economy in mid-2003, despite the substantial appreciation in the value of the euro. Now these positive impulses are spreading to domestic demand as investment activity – encouraged by growing sales abroad – increases markedly. The trend is being reinforced by the expectation of a long-term turnaround in interest rates, which is encouraging enterprises to invest sooner rather than later (cf. figure 2).

Private consumption remains the German economy's Achilles heel. The most recent economic policy measures agreed by the lower and upper houses of the German parliament will not bring an end to the lull in consumption. Weak demand in Germany is still primarily a result of the continued decline in employment, the extremely low level of wage growth and the uncertainty of consumers, which is manifesting itself in a rising savings ratio. The government's plan to bring forward the third phase of the tax reform, which would only have provided a rather weak impetus for growth anyway, will only be partially implemented. However, the measures to counter-finance this phase of the reform will also be less extensive than initially intended. All in all, the most recent economy policy decisions will boost

Figure 1
Real Gross Domestic Product in Germany
Adjusted for seasonal and working days effects[1]




1 On the basis of X-12-ARIMA. — 2 Change (%) on the previous quarter, annualised rate (right-hand scale). — 3 Change (%) on the previous year.
Sources: Federal Statistical Office; DIW Berlin calculations.

overall output by 0.2%. If the government had stuck to its original intention of implementing the entire third phase of the reform ahead of schedule and without counter-financing measures, the boost would have amounted to 0.3%.[1] All in all, however, the figures are of a magnitude that falls below the threshold for measurement errors, and so it is impossible to speak of a noteworthy boost for the economy generated by the package of fiscal policy measures.

The high value of the euro will lead to much stronger growth in imports relative to previous years. As long as the basic impetus for growth continues to come from abroad and the domestic economy remains feeble, overall growth can only gain momentum slowly. Thus, national output will show an average cyclical increase of only 0.8% this year, or of 1.4% when the working-day effect is taken into account.

The trend is likely to improve slightly next year. Assuming that the euro exchange rate remains more or less unchanged and that the pace of world growth slows down to some extent, exports will not show the same rate of increase over the course of 2005 as in 2004. Domestic demand, on the other hand, will expand at a somewhat brisker pace. In particular, investments are likely to show more dynamic growth in view of persist-

[1] Cf. 'Economic Trends 2003/2004'. In: *DIW Economic Bulletin*, vol. 40, no. 8, August 2003.

Table 1
## Contribution to Growth in Real GDP
In percentage points

| | DIW estimate July 2003[1] | | DIW estimate January 2004[2] | | Difference between estimates | |
|---|---|---|---|---|---|---|
| | 2003 | 2004 | 2003 | 2004 | 2003 | 2004 |
| Private consumption | 0.5 | 0.7 | –0.1 | 0.4 | –0.6 | –0.3 |
| Government consumption | 0.2 | 0.1 | 0.1 | –0.1 | –0.1 | –0.2 |
| Machinery | 0.1 | 0.4 | –0.2 | 0.2 | –0.3 | –0.2 |
| Other equipment | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 |
| Construction | –0.4 | 0.0 | –0.4 | 0.1 | 0.0 | 0.1 |
| Investment in stocks | 0.3 | 0.2 | 0.6 | 0.1 | 0.3 | –0.1 |
| Domestic demand | 0.7 | 1.4 | 0.0 | 0.8 | –0.7 | –0.6 |
| Exports | 0.7 | 1.3 | 0.5 | 1.6 | –0.2 | 0.3 |
| Imports | 1.5 | 1.4 | 0.5 | 1.0 | –1.0 | –0.4 |
| Trade surplus/deficit | –0.8 | –0.1 | 0.0 | 0.6 | 0.8 | 0.7 |
| GDP[3] | –0.1 | 1.3 | 0.0 | 1.4 | 0.1 | 0.1 |

1 Data as at June 2003. — 2 Data as at December 2003. — 3 Change (%) on the previous year.
Sources: Federal Statistical Office; DIW Berlin calculations.

ing low base interest rates and improved sales conditions. As employment begins to rise again, private consumption will also stabilise (despite further austerity measures that will take effect in 2005 and significantly burden private households) so that growth in 2005 will basically be driven by the domestic economy. National output will increase by 1.4% next year, and thus at a rate which in cyclical terms is significantly higher than in 2004.

## Moderate export growth

Goods exports showed only slight overall average growth in 2003. The reason was a significant decline in German goods exports to the EU and the USA in the first half of the year. While there was little European demand for German investment goods because of the persisting economic lull in the euro zone, goods exports to the USA declined primarily as a result of the sharp appreciation of the euro against the US dollar. Export growth was boosted by substantial increases in goods exports to Central and Eastern European (CEE) countries (especially to Poland and Russia) and to South-East Asia. In particular, trade with China – which has now become Germany's most important Asian trading partner – showed high growth rates (cf. figure 3).

Investments will liven up again somewhat in the euro zone over the forecast period, and this will spark off demand for German investment goods. Goods exports to the EMU countries can thus be expected first to recover this year and then to expand more robustly next year. This trend will be bolstered by a further improvement in the price competitiveness of German exporters as German inflation remains much lower than the average for the euro zone.

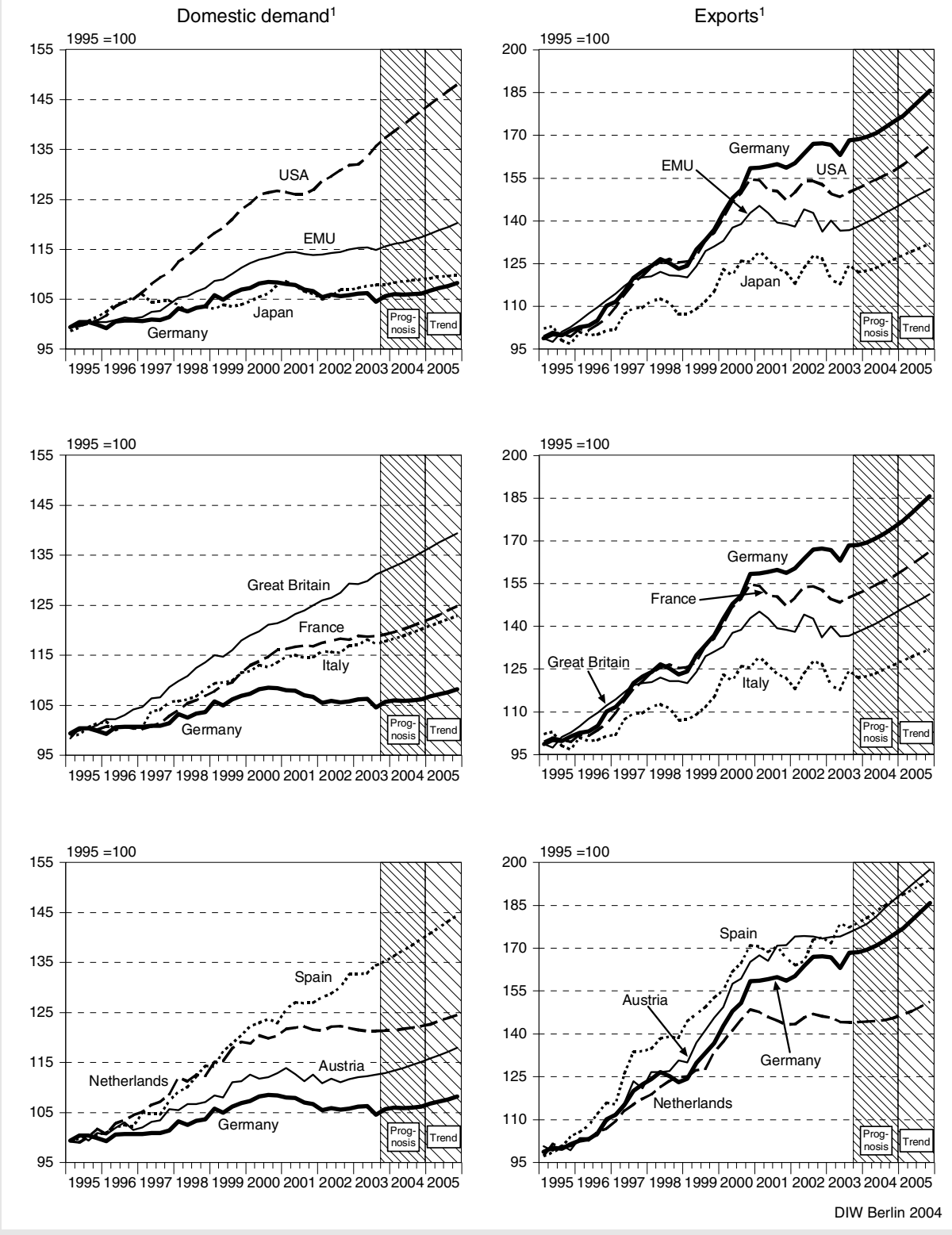
The upturn in investment in the USA will stimulate the German export economy. However, the negative effect of the euro's appreciation on the price competitiveness of German exporters will continue to be felt this year. The future still looks bright for goods exports to CEE countries and to South-East Asia and China. All in all, exports of goods and services will increase by 4.4% in 2004, while they will grow by 5.1% in 2005 (cf. figure 4).

## Private consumption on the economic policy see-saw

Private consumption in Germany was extremely weak last year. The two main causes were the weak growth in disposable income – primarily a result of the significant decline in employment – and extremely moderate wage growth. The real value of disposable income barely increased at all last year (0.3%). In addition, consumers were disconcerted by the long-drawn-out discussions on the future direction of economic and social policy. Real private consumption has not yet begun to recover to any substantial extent. It declined by an average 0.2% in 2003 (cf. figure 5).

Figure 2

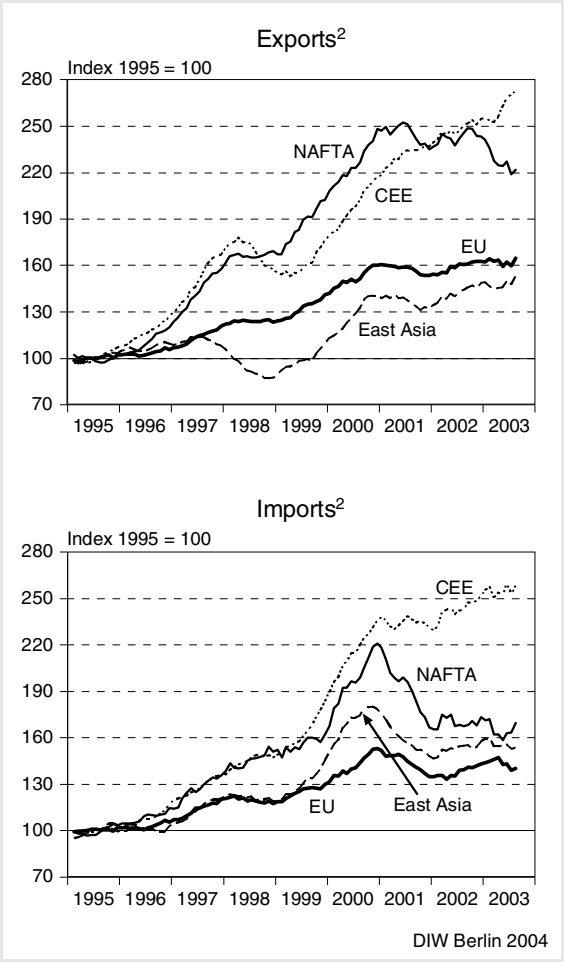
## Domestic Demand and Exports by International Comparison




1 Seasonally adjusted, at constant prices.

Sources: OECD; Federal Statistical Office; DIW Berlin calculations.

Figure 3
## Regional Trends for German Foreign Trade[1]

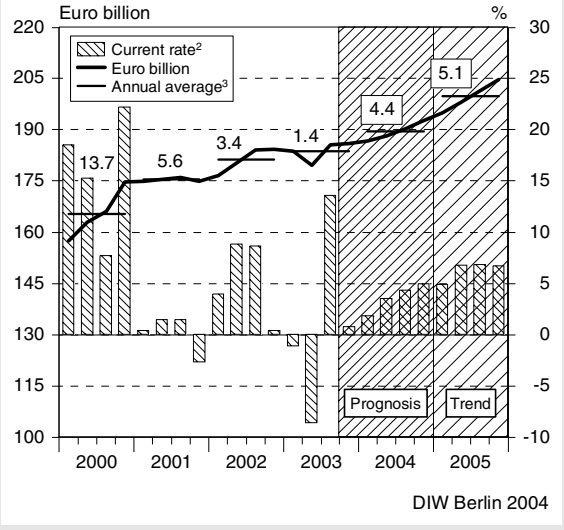



1 NAFTA: USA, Canada, Mexico. CEE: Baltic states, Poland, Hungary, Czech Republic, Slovakia, Slovenia, Bulgaria, Romania, Russia, Ukraine, Belarus, Republic of Moldova. East Asia: Japan, China, Hong Kong, Taiwan, Singapore, Thailand, Indonesia, Malaysia, Philippines, South Korea. — 2 Special trade, nominal; seasonally adjusted according to Berlin method (BV4); moving three-month average.
Sources: Federal Statistical Office; DIW Berlin calculations.

The negative employment trend together with low wage growth will dampen the prospects for consumption this year, too. The impetus provided by the tax cuts will boost private consumption to some extent until the middle of the year. Then the planned health cuts (which will increase the burden on consumers via fees for visits to doctors and higher patient contributions for medicines) and reduced social transfers will curb consumption again over the further course of the year. The fact that pensions will not be adjusted this year and that retirees will now have to pay the full cost of nursing care insurance will also curtail the propensity to consume. These changes mean that monetary social benefits will increase only moderately. There will be a slight reduction in social insurance contribution rates. Contribution rates to health insurance will fall slightly, but only in the second half of this year. Net wages and salaries will rise by 0.9%. The real value of disposable income will increase by 1% in 2004. The annual average increase in real private consumption will amount to 0.7%.

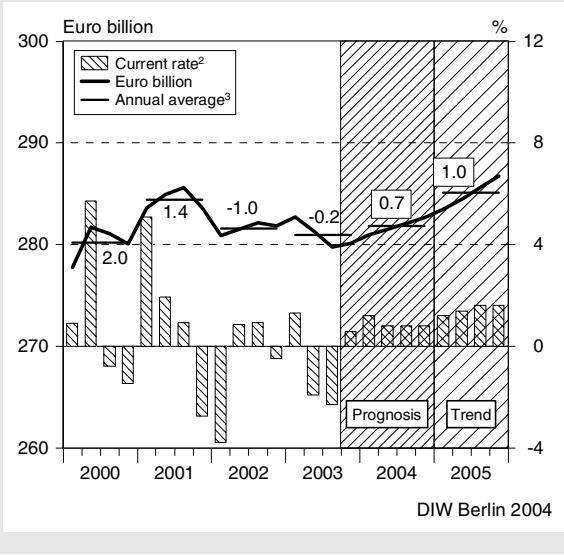
Consumption prospects will brighten up to some extent next year. While employment will rise on average in 2005, the increase will mainly be in the area of low-wage (marginal) employment, so that the wage and salary bill will increase only slightly. In addition, consumers will be faced with further health cuts. For example, dental prostheses will be financed in future only by private insurers. Thus, contribution rates to health insurance will no longer be divided evenly between employers and employees. The shift towards a higher burden on the employee amounts to 0.3 percentage points. Social transfers ('Unemployment Benefit II', which will replace unemployment assistance) will at best stagnate in 2005 due to the abolition of certain benefits. On the other hand, the part of the third phase of the tax reform that was not brought forward will reduce the burden on incomes in 2005. The disposable income of private households will increase nominally by almost 2% in 2005, with the increase mainly deriving from the accelerated growth in the income of the self-employed and income from assets. Real consumption spending is likely to rise by 1%.

Figure 4
## Real Exports
Adjusted for seasonal and working days effects[1]




1 On the basis of X-12-ARIMA. — 2 Change (%) on the previous quarter, annualised rate (right-hand scale). — 3 Change (%) on the previous year.
Sources: Federal Statistical Office; DIW Berlin calculations.

Figure 5
## Real Private Consumption of Private Households
Adjusted for seasonal and working days effects[1]




1 On the basis of X-12-ARIMA. — 2 Change (%) on the previous quarter, annualised rate (right-hand scale). — 3 Change (%) on the previous year.
Sources: Federal Statistical Office; DIW Berlin calculations.

The third phase of the tax reform will bring about greater relief for private households with an above-average income. As these households generally save more than those with lower incomes, a further increase in the overall savings ratio of private households is likely this year. However, the planned health cuts will force households to use a higher share of their disposable income for health-related spending, which in turn will reduce the savings ratio. On balance, the savings ratio will increase by 0.2 percentage points to 11.1% this year, and this trend is likely to continue in 2005 (11.3%).

## Recovery in machinery investments

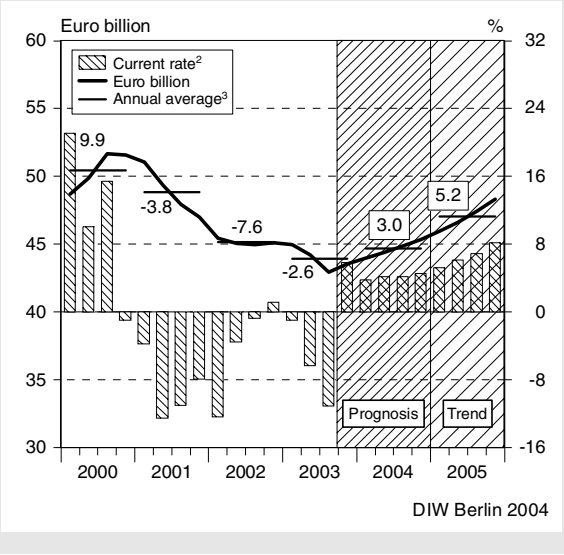
Real investment in machinery declined by 3.4% last year. The weak investment activity is mainly a result of persistently weak domestic demand and slower export growth. The impetus provided by monetary policy was not strong enough to counteract the dampening influences (cf. figure 6).

Following a downward trend that has lasted for three years, machinery investments are likely to pick up again this year. The general conditions have improved markedly, and export prospects, in particular, are more favourable again. The expectations of enterprises as regards the future of the economy have brightened considerably, as the ifo business confidence index has been indicating for several months. Low interest rates and more stable share prices will facilitate financing of industrial investments, while investment activity will also be boosted by the tax cuts and optimistic profit expectations. Investment in other equipment, which has been stable in recent years, will show strong growth this year. Investment in machinery and other equipment will increase on average by 3% in 2004, while 2005 will see an even stronger increase (5.2%).

## Building investments remain weak

The decline in building investments has persisted. Although the downward trend was somewhat less severe last year than in 2002, there is as yet no sign of a turnaround. The reduction in investments mainly affected the commercial construction sector, and the reason was the weak economic cycle, which was particularly felt in the service sector. Vacancies in office buildings, warehouses and residential buildings discouraged enterprises from investing, even though mortgage rates were favourable. The uncertainty of private households about future incomes also curtailed growth in the building sector (cf. figure 7).

Figure 6
## Real Investment in Machinery and Other Equipment
Adjusted for seasonal and working days effects[1]

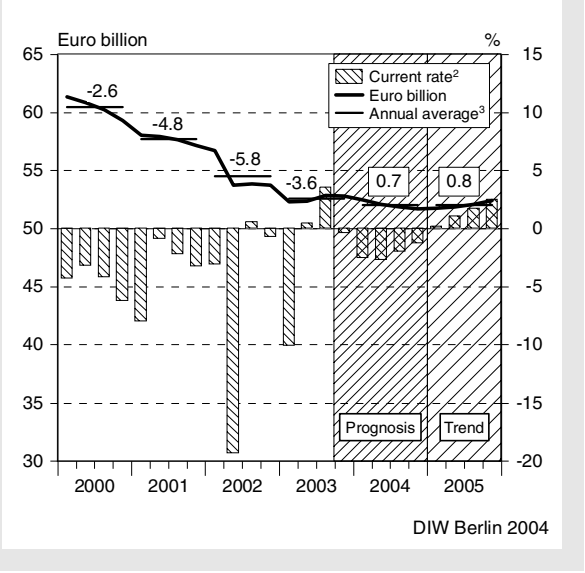



1 On the basis of X-12-ARIMA. — 2 Change (%) on the previous quarter, annualised rate (right-hand scale). — 3 Change (%) on the previous year.
Sources: Federal Statistical Office; DIW Berlin calculations.

Figure 7

## Real Investment in Construction

Adjusted for seasonal and working days effects[1]




1 On the basis of X-12-ARIMA. — 2 Change (%) on the previous quarter, annualised rate (right-hand scale). — 3 Change (%) on the previous year.
Sources: Federal Statistical Office; DIW Berlin calculations.

Conditions will basically remain the same this year. As in 2003, investment activity will be positively influenced both by low mortgage rates and by the proposed abolition of the subsidy for owner-occupied housing construction, which will encourage investment ahead of schedule. On the other hand, the volume of owner-occupied housing construction will be curbed by the difficult situation on the labour market.

Figures on building permits granted and incoming orders in the commercial construction sector and in public building investments suggest that the construction industry will remain weak for some time. The recovery of the economy overall this year will not be strong enough to boost commercial construction. The strained budgets of the local authorities will lead to a further decline in public building investments.

Building investments will continue to decline over the course of 2004. They will show an average annual increase of 0.7% in 2004 as a result of investments ahead of schedule at the end of 2003 and the higher number of working days this year. Building investments will decline again by 0.8% in 2005 (cf. table 2).

## Increase in imports

The insignificant growth in imports last year was mainly a result of the decline in service imports, more than half of which consist of spending on tourism and transport. There were two reasons for the sharp decline: on the one hand, weak domestic consumption, which was reinforced as regards tourism by uncertainty about global events; on the other, weak export growth (cf. figure 8).

Livelier domestic demand and expanding exports will help imports recover again this year and lead to significant import growth next year. An average increase of 3.1% can be expected for imports in 2004, and this will increase to 5.2% the following year. This forecast is based on the assumption that tourism will stabilise.

The sharp appreciation of the euro caused import prices to fall last year, which brought about a significant improvement in the terms of trade. As the world economy livens up this year, export prices will rise somewhat more rapidly than import prices because the strength of the euro will initially continue to curb the increase in import prices. The result will be a slight improvement in the terms of trade in 2004; these will then probably remain unchanged the following year.

## Little improvement on the labour market

The situation on the labour market still basically reflects economic stagnation, although there are now some signs of improvement. The decrease in the number of employed was less severe in the second and third

Table 2

## Building Investment[1] in Germany

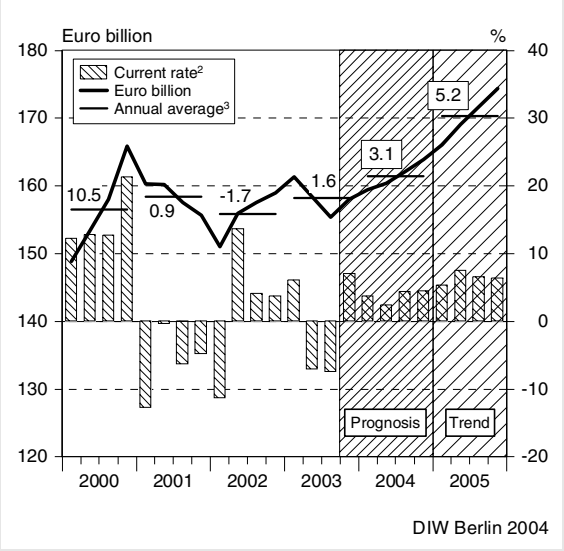
| | 2002 | 2003 | 2004 | 2005 |
|---|---|---|---|---|
| | Euro billion | | | |
| Housing | 124.7 | 121.4 | 123.6 | 122.7 |
| Non-residential[2] | 92.3 | 87.9 | 87.0 | 86.4 |
| Government | 28.0 | 26.4 | 25.9 | 25.2 |
| Other sectors | 64.3 | 61.5 | 61.2 | 61.1 |
| Total[3] | 217.1 | 209.3 | 210.7 | 209.1 |
| | Change (%) on the previous year | | | |
| Housing | –5.8 | –2.7 | 1.9 | –0.8 |
| Non-residential[2] | –6.0 | –4.8 | –1.0 | –0.8 |
| Government | –4.7 | –5.9 | –2.0 | –2.4 |
| Other sectors | –6.5 | –4.3 | –0.6 | –0.1 |
| Total[3] | –5.8 | –3.6 | 0.7 | –0.8 |

1 At 1995 prices; on national accounting definitions (ESNA 95). — 2 Building construction and civil engineering for the public and private sectors. — Figures may not sum due to rounding.
Sources: Federal Statistical Office; 2003 to 2005: DIW Berlin estimate and prognosis.

quarters of 2003 (50 000 and 100 000 persons, respectively, on seasonally adjusted figures) than in the previous quarters. Although there was no change in trend in manufacturing or in the construction sector, and the sector 'public and private services' saw an even sharper decline, employment has actually been rising for two quarters in 'finance, real estate and business services'. The number of employed declined in total by 1.5% in 2003.

In addition to this trend, the labour market is going through a remarkable structural shift: the number of persons employed (exclusively) in low-wage jobs is growing rapidly, while the number of employees subject to mandatory social insurance is declining. In other words, there is a massive substitution effect taking place between marginal and normal employment (cf. table 3).[2] The new regulation on marginal employment (known as 'mini-jobs' in Germany), which came into force in April 2003, increases the incentive to take up low-wage employment as a second job. In these cases, the wages an employee earns in a mini-job (only the

Figure 8
## Real Imports
Adjusted for seasonal and working days effects[1]




1 On the basis of X-12-ARIMA. — 2 Change (%) on the previous quarter, annualised rate (right-hand scale). — 3 Change (%) on the previous year.
Sources: Federal Statistical Office; DIW Berlin calculations.

[2] Cf. Helmut Rudolph: 'Geringfügige Beschäftigung im neuen Outfit'. In: *IAB-Kurzbericht,* no. 6 of 23.5.2003.

Table 3
## Low-wage Employment

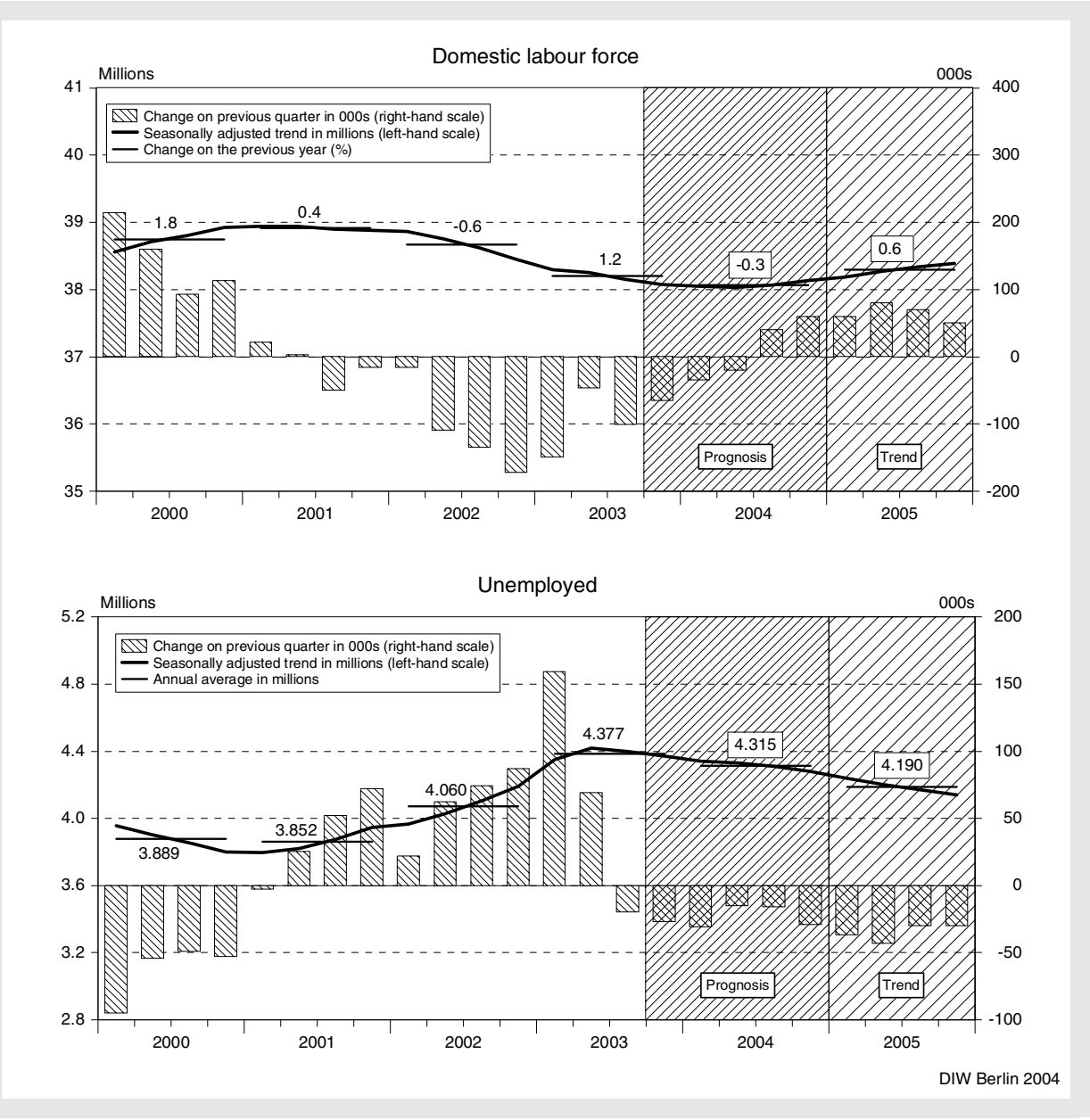
| | Employees subject to mandatory social insurance | Employees exclusively in low-wage employment | Employees subject to mandatory social insurance | Employees exclusively in low-wage employment |
|---|---|---|---|---|
| | 000s, at end of month | | Absolute year-on change in 000s | |
| June 1999 | 27 483 | 3 658 | 275 | . |
| September 1999 | 27 943 | 3 826 | 194 | . |
| December 1999 | 27 756 | 3 930 | 390 | . |
| March 2000 | 27 633 | 3 950 | 468 | . |
| Juni 2000 | 27 826 | 4 052 | 343 | 394 |
| September 2000 | 28 285 | 4 056 | 342 | 230 |
| December 2000[1] | 27 980 | 4 199 | 223 | 269 |
| March 2001[1] | 27 710 | 4 087 | 77 | 137 |
| June 2001[1] | 27 817 | 4 132 | –9 | 79 |
| September 2001[2] | 28 205 | 4 083 | –80 | 27 |
| December 2001[2] | 27 864 | 4 202 | –116 | 3 |
| March 2002[2] | 27 548 | 4 147 | –162 | 61 |
| June 2002[2] | 27 571 | 4 169 | –246 | 37 |
| September 2002[2] | 27 853 | 4 100 | –352 | 17 |
| December 2002[2] | 27 360 | 4 184 | –504 | –18 |
| March 2003[2] | 26 992 | 4 136 | –557 | –12 |

1 Revised results (Federal Labour Office, May 2002). — 2 Preliminary results (Federal Labour Office, March 2003).
Note 1: The Federal Labour Office statistics on persons in low-wage employment (June 1999 to March 2003) refer to persons exclusively engaged in marginal employment. The number of persons who have a mini-job as a second job was estimated at around 1.2 million in April 2003 and at 1.4 million at the end of August 2003 (Federal Labour Office, Monthly Report of October 2003, p. 3).
Note 2: The Federal Miners' Insurance Fund has been responsible for gathering statistics on low-wage employees since the beginning of 2003. However, these figures deviate substantially from those of the Federal Labour Office. A total of 5.769 million low-wage employees are reported for June 2003 and 5.875 million are reported for September 2003. However, these figures include employees who are engaged in low-wage employment as a second job and thus cannot be compared with the statistics published by the Federal Labour Office. The Insurance Fund has estimated the number of persons carrying out a mini-job as a second job at around 170 000 in June 2003 (Balance Report of July 2003, p. 8).
Sources: Federal Labour Office; DIW Berlin calculations.

Figure 9

## Persons in Employment and Unemployed

Seasonally adjusted[1]




1 On the basis of X-12-ARIMA.

Sources: Federal Statistical Office; Federal Labour Office; DIW Berlin calculations.

first, if he/she has more than one) are exempt from taxation and social insurance contributions.[3] The new regulation also raised the maximum wage limit for mini-jobs from 325 to 400 euro, which further strengthens the substitution effect. This forecast is based on the assumption that the increase in the number of persons in low-wage employment is mainly a result of substitution effects. An expansion of low-wage employment at the expense of normal employment relationships has a negative effect on per capita working time.

[3] Under the new regulation, the employer pays a flat rate of 25% or 12% (when the employer is a private household), regardless of whether the mini-job represents the employee's only employment or a second job. Of this flat rate, 23 percentage points (10 for private households) are paid to the social insurance fund, while the remaining 2 percentage points (in both cases) are wage tax.

Table 4
## Key Labour Market Indicators, Germany
000s

| | 2000 | 2001 | 2002 | 2003 | 2004 |
|---|---|---|---|---|---|
| Employment (domestic concept) | 38 748 | 38 911 | 38 671 | 38 193 | 38 068 |
| Change (%) on previous year | 1.8 | 0.4 | –0.6 | –1.2 | –0.3 |
| Dependent employees (domestic concept) | 34 747 | 34 834 | 34 581 | 34 057 | 33 848 |
| Change (%) on previous year | 1.8 | 0.3 | –0.7 | –1.5 | –0.6 |
| Self-employed (domestic concept) | 4 001 | 4 077 | 4 090 | 4 136 | 4 220 |
| Change (%) on previous year | 1.6 | 1.9 | 0.3 | 1.1 | 2.0 |
| Paid hours of work | 58 914 | 58 890 | 58 246 | 57 343 | 56 779 |
| Change (%) on previous year | 1.5 | 0.0 | –1.1 | –1.6 | –1.0 |
| Unemployed | 3 889 | 3 852 | 4 060 | 4 377 | 4 315 |
| Absolute change on previous year | –211 | –37 | 209 | 317 | –62 |
| Unemployment rate, as %[1] | 9.1 | 9.0 | 9.5 | 10.3 | 10.2 |
| Unemployed (ILO)[2] | 3 065 | 3 110 | 3 396 | 3 666 | 3 601 |
| Absolute change on previous year | –268 | 45 | 286 | 270 | –65 |
| Unemployment rate, as %[3] | 7.3 | 7.4 | 8.1 | 8.8 | 8.7 |
| Labour market policy instruments | | | | | |
| BSM (ABM, SAM and BSI)[4] | 316 | 243 | 193 | 141 | 110 |
| of which: BSI | – | – | 0.4 | 1.3 | 2.3 |
| PSA[5] | – | – | – | 9 | 50 |
| Direct promotion of regular employment | 219 | 211 | 222 | 271 | 345 |
| of which: Ich-AG[6] | – | – | – | 36 | 100 |
| Further vocational training | 352 | 345 | 332 | 251 | 200 |

1 Unemployed as % of domestic labour force (employed plus unemployed). — 2 ILO definition. — 3 Unemployed (ILO definition) as % of domestic labour force (employed plus unemployed). — 4 BSM: Employment-creating schemes; ABM: Job-creation schemes; SAM: Structural adjustment schemes (traditional and eastern German); BSI: Employment-creating infrastructure schemes. — 5 PSA: Personal Service Agencies. — 6 Subsidies for business foundations.
Sources: Federal Statistical Office; German Bundesbank; Federal Labour Office and DIW Berlin calculations; 2003 and 2004: DIW Berlin estimate and forecast.

As usual, the number of employed will not immediately reflect the economic cycle and will only begin to increase again from the middle of the year onwards. Employment will decline on average this year by 130 000 persons. An average increase of 230 000 persons (0.6%) is expected only in 2005. Because the measures proposed by the Hartz commission foresee the transformation of traditional active labour market policy schemes such as BSM[4] into new schemes such as the Ich-AG (Me, Inc.), the number of self-employed will be higher in 2004. Accordingly, the number of dependent employees will show a stronger decline (of 0.6% or around 200 000 persons) than the employed overall. Next year, the effect of this regrouping of categories will become less significant. The number of dependent employees will increase by 0.5%. The volume of work will continue to decline by 1% this year, following a decrease of 1.6% last year. It will remain more or less unchanged in 2005 (cf. figure 9).

The number of unemployed (seasonally adjusted figure) has been falling since May 2003, despite the weak economy. The average number of unemployed in 2003 was 4.4 million persons. This trend primarily reflects the adjustment of the statistics, while the changes in labour market policy have also had an effect. Thus, the direct promotion of regular employment has been expanded from 50 000 beneficiaries to 270 000 beneficiaries. Of these people, 36 000 were helped under the Ich-AG scheme. The traditional schemes (further vocational training and BSM, including BSI[5]) have, however, been reduced further (cf. table 4).

These effects will also be felt this year. Together with the brisker pace of growth, the result will be a continued decline in unemployment in the second half of the year. On annual average, the number of unemployed will amount to 4.3 million persons in 2004, and will thus be somewhat lower than last year. A larger decrease – of 125 000 persons – is expected in 2005.

[4] 'Employment-creating schemes'.

[5] 'Employment-creating infrastructure schemes'.

## Economic policy

The year 2003 was an exceptionally difficult one for economic policy-makers. The stagnation dogging both Germany and the euro zone proved impossible to overcome – with disastrous consequences for the labour market, the social security systems and the public budgets. The grim economic conditions doomed all efforts at progress in these areas to failure. Indeed, the situation in Germany at the beginning of 2004 is actually worse than it was a year ago: 2003 brought Germany's citizens a decrease in their standard of living.

The deterioration in the situation cannot be blamed exclusively on economic policy either in the euro zone or in Germany. Thus, the substantial appreciation of the euro constitutes a weighty burden for the economy in the entire euro zone, while the global uncertainty generated by sporadic terrorist attacks is also felt in the euro zone. However, economic policy must be held responsible for its reaction to these problems and for the measures implemented in an effort to turn the economy around. There are two major misconceptions in this respect.

The first is the idea that economies turn around under their own steam. This notion is based on the fact that prices rise more slowly in weak growth phases than when the economy is expanding robustly. If then nominal overall demand remains constant, real incomes increase more rapidly. Higher real incomes lead over time to increased purchasing power, which manifests itself in higher private consumption, so that ultimately the economy gains momentum again.

This conception is correct when it is assumed that nominal overall demand remains constant, for in phases of weak growth, inflation is curbed by low wage growth and heightened competition as capacities remain underutilised. However, this is a problematic assumption because it requires prices to react both more rapidly and more sensitively to the weak economy than output and employment. This is the only way that the curtailment of price growth could more than offset the loss in real income created by lower demand for goods and lower employment. Keynes, in his day, called this assumption into question for macroeconomic reasons.[6] Furthermore, New Keynesian theory, on microeconomic grounds, has confirmed the idea of 'market-endogenous' wage and price rigidity relative to quantities.[7] However, if this is the case, then the idea of economies kick-starting themselves is essentially ruled out. For an economy to recover, it requires external impulses in the form of additional demand. A boost of this kind can come from abroad or can be generated by domestic policy. Incidentally, monetaristic considerations based on the assumption of constant money supply growth imply an economic policy reaction in phases of weak growth that stimulates the weak demand for money via interest rates such that money supply returns to the constant growth path. Recent research results show that the effects of such impulses are by no means only short term in nature, but rather are actually capable of exerting a long-term positive influence on economic growth.[8]

The second major misconception is the common expectation that policy measures with a structural orientation, such as those proposed by the Hartz commission or under the Agenda 2010 programme, will turn the German economy around. Structural measures can improve the incentive structure, and some elements of the Hartz proposals are therefore certainly suited to increase the pressure on the unemployed to take up work. However, this has no implications for the business cycle. The higher incentive will either result only in wasted effort because the actual problem is the lack of labour demand, which will not change in the slightest (at least in the short term) or – it is widely hoped – it will create stronger pressure on wages, which will lead in turn to increased labour demand. However, this could only happen if it were possible to have wage reductions without demand reductions.

Two channels of influence are often cited as capable of keeping demand constant. One is external markets. The argument is that the gain in international competitiveness leads to larger market shares which, at the least, compensate for the loss in domestic demand. This may be true for a small, open economy, but it becomes unlikely even for a medium-sized economy because of the huge significance of domestic demand. Simulations carried out using the DIW Berlin business cycle model have shown that in Germany the loss in domestic demand cannot be offset via exports.[9]

The second channel thought to be capable of stabilising demand in the event of wage reductions are the expectations of enterprises. The idea here is that enterprises would expect lower wages to lead to an overall rise in employment so that demand would not weaken.[10] Enterprises would therefore not reduce output, but

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[6] Cf. John Maynard Keynes: *The General Theory of Employment, Interest and Money*. Cambridge 1936, chapters 2 and 19.

[7] On this point, cf. the classic collection of essays edited by N. Gregory Mankiw and David Romer: *New Keynesian Economics*, MIT Press 1992.

[8] Cf. Monika Kuranassou, Victor Sala and Dennis Snower: 'The European NAIRU: Does the Phillips Curve Exist?' In: *Applied Economics Quarterly*, no. 2, 2003.

[9] Cf. 'Economic Trends 2003/2004', loc. cit.

[10] Cf. Hans-Werner Sinn: 'Ist Deutschland noch zu retten?' Munich 2003.

rather increase it. The decisive question is whether microeconomic incentives would not prevent such expectations from ever arising. And in fact they would: the expected stabilisation of demand could only come about if, as a consequence of the lower wage level, all enterprises recruited additional labour without first checking to see whether the other enterprises were acting the same way. This would be rational behaviour only in conditions of complete certainty. In conditions of uncertainty, however, the rational way to behave is to wait and see if all the other enterprises are really expanding their labour forces and only then to follow suit.[11] In other words, despite the fact that wages are lower, there is still an incentive to wait before recruiting new labour.[12] Consequently, demand cannot be assumed to remain stable, and wage moderation will not provide the desired boost for growth.

The real advantage of structural measures is that they will increase employment in the event of an upturn, both because they will have expanded the supply of labour and because labour market tensions that could result in inflation effects will take longer to emerge. In other words, the economy's productive capacity will be increased. The benefits of the structural reforms can thus only be reaped after an upturn has set in.

If an economy is not to depend exclusively on impulses from abroad, it must therefore adopt an expansive policy stance during weak growth phases. This is what has happened in the entire euro zone to a sorely inadequate extent – unlike the USA – over the last few years. Europe's monetary policy-makers were much more hesitant than their US counterparts in embarking on an expansive course. While monetary policy is now exerting expansive impulses, these came too late to be able to combat the stagnation in the euro zone as a whole and the tendency towards deflation in Germany, in particular, at an early stage.

The response of German fiscal policy was even more problematic. Its principal aim was to consolidate the public budgets by last summer in accordance with the European Stability and Growth Pact. However, the weak business cycle doomed this endeavour to failure. The government therefore tried to impose its will on the cycle by bringing the third phase of the tax reform forward to this year. The planned tax cuts would in themselves have boosted growth, which would have been highly welcome in the current lull.[13]

The new version of the reform should not be expected to deliver too much in economic terms, especially given that there is no consensus that the priority of German economic policy should be to stimulate growth and – as agreed at the most recent negotiations – measures will be implemented to immediately counterfinance the reform.

All in all, the relevant decision-makers – both in the euro zone as a whole and in Germany, in particular – have not made adequate use of the economic policy instruments at their disposal. The stagnation, but also the slow pace of recovery predicted in the forecast, have basically been caused by strong impulses from abroad. The fact that Europe and especially Germany are now lagging behind the USA is thus ultimately a consequence of insufficiently decisive and occasionally inconsistent economic policy.

## Monetary policy bears responsibility for upturn

There is no doubt that interest rates in the euro zone are currently low compared with past rates. This applies both to nominal and to real long-term and short-term rates. However, it does not necessarily mean that they are also compatible with a policy of stability. The situation in the USA alone, where inflation-free growth of over 3% is expected in each of the years from 2003 to 2005 and where short-term interest rates stand at 1%, suggests that once price stability has been achieved as expected in the euro zone, and given GDP growth of 0.5% last year and 1.7% this year, interest rates could well be lower than the given 2%.

Over the last two years, the ECB has significantly reduced its forecasts for GDP in the euro zone. Between December 2002 and December 2003, alone, the growth forecast for 2003 was revised downward by 1.2 percentage points, while that for 2004 was reduced by 0.8 percentage points. While the inflation forecast was increased somewhat at the same time – by 0.3 percentage points for 2003 and by 0.2 percentage points for 2004 – the inflation rate expected for 2005 (1.6%) is lower than the ECB's inflation target. Given that the ECB draws up its projections on the basis of current interest and exchange rates, from this point of view there is no immediate need to act in the interests of price stability. On the other hand, the much weaker growth rate will widen the output gap in the euro zone, and the ECB does not expect it to narrow to any extent in 2005

[11] Cf. Laurence Ball and Stephen Cecchetti: 'Imperfect Information and Staggered Price Setting'. In: *American Economic Review*, vol. 78, 1988, p. 999.

[12] An additional argument from the Keynesian point of view would be the preference for liquidity in times of uncertainty. Cf. John Maynard Keynes, loc. cit.

[13] In summer 2003, the DIW Berlin estimated that the tax cuts would have a positive growth effect of 0.3% in 2004. Cf. 'Economic Trends 2003/2004', loc. cit.

either. According to the latest ECB forecasts, GDP will be 2% lower in 2004 than was expected in December 2002. The reaction so far to this unfavourable development was an interest-rate reduction of 0.75 percentage points. According to econometric estimates, the reduction should have a real economic effect of around 0.4% of GDP within two years.[14]

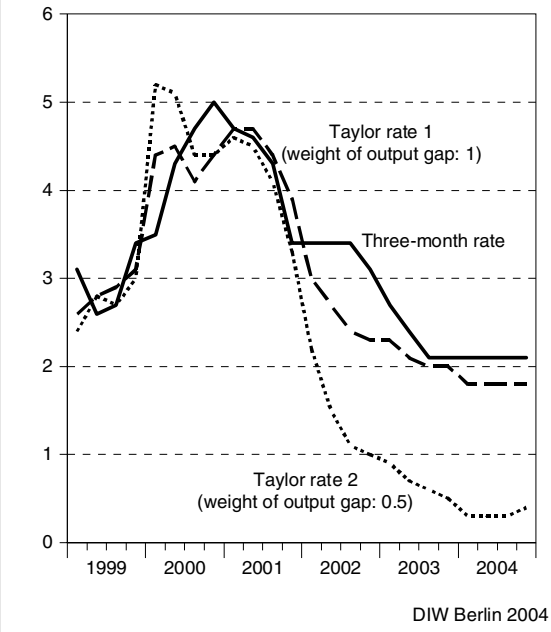
The monetary conditions, which can be used as a further guideline in the evaluation of monetary policy, have not improved, as might have been expected, since December 2001; rather they have deteriorated further. The monetary conditions encompass interest rates and exchange rates, in particular, but also share prices. Whilst short-term interest rates have been reduced by 1.25 percentage points over the last two years, the external value of the euro has increased by 19% in real effective terms and by 37% against the US dollar. According to macroeconometric estimates, the interest-rate reductions of 1.25 percentage points will cause GDP to rise by around 0.6% in the first two years, while the euro's appreciation will reduce GDP by around 2%.[15]

A third reference point for the assessment of monetary policy is the Taylor interest rate. We calculated two variations of Taylor interest rates for this forecast. In the first, both the output gap and the inflation gap (the difference between the current inflation rate and the targeted inflation rate) are given a weight of 0.5. In the second variation, the output gap is given a weight of 1 and the inflation gap a weight of 0.5.[16] In this way an attempt can be made to achieve greater stability in output with only slightly higher inflation variability.[17] These calculations are based on the assumption of an equilibrium real interest rate of 2% and potential growth of 2.25% in the euro zone. The ECB's target inflation rate is set at 1.9%. While the original Taylor rule is calculated on the basis of the contemporaneous inflation and output gaps, our calculation includes the values of the two variables for four future quarters so as to take account of the delayed effect of monetary policy. According to this calculation, the short-term interest rate more or less corresponds to the Taylor interest rate when the inflation and output gaps are both given a weight of 0.5. When the output gap is given a weight of 1, however, then the short-term interest rate exceeds the Taylor rate by 1.5 percentage points. This leads us to the conclusion that the ECB's interest-rate reductions were at best adequate, but in actual fact were probably not substantial enough (cf. figure 10).

All in all, monetary policy could have been less hesitant and considerably more expansive over the last two years. A central bank which is pursuing the goal of stability does not follow simple rules. Given the huge number of factors of influence that must be taken into account and the uncertainty surrounding the strength of their impact, this would be impossible anyway. Even if the goal of monetary policy is maintaining price stability, this does not mean that the output gap, in other words the current economic trend, can be neglected. After all, the output gap is one of the determinants of the future inflation rate. The result is that the ECB not only takes account of the prospects for inflation in its

Figure 10

## Three-month and Taylor Interest Rates for the Euro Zone, 1999 to 2004




Potential growth was calculated on the basis of the assumption that the output gap was closed in the fourth quarter of 2001. This assumption is supported by the OECD and IMF estimates of the output gap. In accordance with the ECB, a growth rate of 2.25% was assumed for potential output. The inflation gap was given a weight of 0.5 in both interest rates. The inflation rate used was the core inflation rate (HICP minus energy, unprocessed foodstuffs, alcohol and tobacco). The values of the inflation gap and the output gap in four future quarters were also included in the calculation; the values for 2004 and 2005 are DIW Berlin forecasts.
Sources: Eurostat; ECB; DIW Berlin calculations and prognosis.

[14] Cf. European Central Bank: *Monthly Bulletin*, October 2002, p. 49.

[15] According to calculations carried out in the Economic Institutes' joint forecast using the Oxford Economic Forecasting Institute's world model, the real economic effect of a 10% depreciation of the US dollar against the euro corresponds to that of an interest-rate reduction of one percentage point in the euro zone. Cf. 'The World and the German Economy in the Spring of 2003'. In: *DIW Economic Bulletin*, vol. 40, no. 5, May 2003, p. 139.

[16] Cf. 'The World and the German Economy in the Autumn of 2003', loc. cit.

[17] Cf. Laurence Ball: 'Policy Rules for Open Economies'. In: John Taylor (ed.): *Monetary Policy Rules*. NBER, London 1999; John Taylor: 'A Historical Analysis of Monetary Policy Rules'. In: John Taylor (ed.), loc. cit.

Table 5

## Forecast of GDP and Inflation (HICP) in the Euro Zone, 2002 to 2005

Change on the previous year (%)

| | GDP | | | | GDP (HICP) | | | |
|---|---|---|---|---|---|---|---|---|
| | 2002 | 2003 | 2004 | 2005 | 2002 | 2003 | 2004 | 2005 |
| ECB projection December 2003[1] | 0.9 | 0.4 | 1.6 | 2.4 | 2.3 | 2.1 | 1.8 | 1.6 |
| ECB projection December 2002[1] | 0.8 | 1.6 | 2.4 | . | 2.2 | 1.8 | 1.6 | . |
| ECB projection December 2001[1] | 1.2 | 2.5 | . | . | 1.6 | 1.5 | . | . |
| OECD November 2003 | 0.9 | 0.5 | 1.8 | 2.5 | 2.4 | 2.0 | 1.5 | 1.4 |
| Consensus November 2003 | 0.8 | 0.5 | 1.7 | 2.2 | 2.3 | 2.0 | 1.5 | 1.7 |
| DIW Berlin January 2004 | 0.9 | 0.4 | 1.7 | 2.1 | 2.3 | 2.1 | 1.6 | 1.5 |

1 Mean value of spread.
Sources: ECB; OECD; DIW Berlin calculations.

interest-rate decisions, but also of the prospects for production. However, when price stability has been achieved and wage growth is moderate, the bank can also stimulate economic growth. The high unemployment rate and the fact that there is human capital left unexploited suggest that the ECB has plenty of room for manoeuvre. The extent to which this human capital can be integrated into the economic process depends substantially on monetary policy, especially given that fiscal policy's scope for action is extremely limited.

The low growth forecast for this year and next year (cf. table 5) illustrates the need to further strengthen domestic demand in the euro zone. A reduction in interest rates would also make sense with respect to the most recent appreciation of the euro. At the very least, the ECB should signal its willingness to maintain interest rates at the current low level for the foreseeable future in order to help the nascent upturn gain momentum.

The Ecofin Council's most recent resolutions have no relevance for current monetary policy. Fiscal policy in Germany and France is anything but inflationary at present; rather it is only (barely) counteracting the stagnant economy. Confidence in the euro will also not be served by a set of institutional rules that implies a procyclical fiscal policy stance. What is important is that no individual member state should enter into excessive debt that could bring the risk of a payment crisis. This would be damaging for the entire euro zone.

The recent proposals concerning the EU Constitution are also widely seen as a threat to the euro. However, neither the autonomy of the ECB nor its declared aim of price stability is at risk. According to the current proposals, amendments to the Statute of the European System of Central Banks would still be subject to the unanimous approval of the Council of Ministers; only the ratification by the national parliaments required to date would no longer be necessary.

## Fiscal policy: need to reform Stability Pact

The sustained economic lull has left deep holes in the public budgets. Not only have the government deficits of recent years been consistently higher than planned, with the result that the deficit targets defined in the stability programmes have required constant revision, but the ceiling on budget deficits stipulated in the European Stability and Growth Pact has been and is still being sharply exceeded. Fiscal policy prevented the automatic stabilisers from working to full effect and repeatedly reduced spending in reaction to the cyclically determined problems. However, the government's financial position is also being weakened by the tax cuts – both those that have already been implemented and those planned for 2004 and 2005.

Public opinion tends to see the high deficits as evidence of unsound financial management, while there is also concern that they are jeopardising the stability of the euro. At the time when debt limits were introduced to the European Stability and Growth Pact, it was expected that when these limits were honoured, then the fiscal policies of the participating countries would help to stabilise the new currency. In particular, the ceiling of 3% of nominal GDP on new borrowing was intended, it was said at the time, to guarantee avoidance of public-sector crowding out as well as prevent fiscal policy-makers from exerting pressure on the central bank to provide more liquidity than would be compatible with inflation-free growth. At the same time, the debt limits

are intended to prevent individual member states from accumulating excessive deficits and thus exploiting the 'stabilisation annuity' of those countries that are complying with the terms of the treaty and ensuring that interest rates remain low. The major worry from the long-term perspective is that public debt is the result of an unduly high increase in government spending and will lead to misallocation of resources, a slowdown in growth, inflation, and an immoderate burden on future generations. In particular, the intention of the debt ceilings was to avoid the risk of a debt crisis in individual countries because this would burden the capital markets in the entire euro zone.

At the same time, it was clear to all parties that the choice of the limit of 60% of GDP on national debts was arbitrary in the sense that it simply corresponded to the EU average for the year 1991. The deficit limit, by contrast, was derived from the product of the debt ratio and a targeted nominal growth rate of 5% per annum, and was thus chosen on the basis of schematic considerations.

In addition to the debate about the deficit limits, there is also the related discussion as to the appropriate level for the structural deficit, in other words the share of the budget deficit that is independent of the cyclical trend. The inherent assumption in this discussion is that there is no great difficulty in breaking the budget deficit down into a structural and a cyclical component and then making policy recommendations on this basis. In actual fact, however, the result of such efforts is an extremely rough estimate which is rife with uncertainty and is highly sensitive to changes in the data. Various methods can be used to estimate the structural deficit, but they can produce quite divergent results and have only very limited use as a basis for concrete policy recommendations (cf. box). Thus, it is all the more surprising that the European Commission recently intended calling on Germany to reduce its structural deficit this year to 0.8% of GDP.

The question now increasingly requiring an answer is whether the Stability and Growth Pact is really a viable economic policy idea. The fiscal policy model pursued under the pact is that of balanced or even positive public budgets. However, in phases of weak growth, temporary high deficits may be required to stabilise the economy. Budget deficits are only a risk to stability when the demand effects of fiscal policy are so substantial that they push prices up, reducing private demand, so that more productive spending is not carried out and the growth of productive capacity is thus curtailed. This is a realistic scenario only when capacity is fully utilised. In this case, high deficits will accelerate inflation if monetary policy accommodates the fiscal policy course and negotiated wage increases are too high relative to productivity and the target inflation rate. When the economy is in recession or stagnation, however, inflation is not a threat. In these weak phases, all credit-financed public spending contributes to raising current income, demand and even savings. These spending surpluses are offset by income surpluses in another part of the economic cycle. If the government were to forgo higher demand for credit, capital market rates would fall, but the lack of government demand would further reduce capacity utilisation and profits would also decrease. In this kind of situation, the demand effect is likely to dominate over the interest-rate effect, given that the interest-rate effect in a monetary union is not likely to be significant.

Recent experience has confirmed that the debt limits were constructed on the basis of a 'fair weather scenario'; under the regime of the Stability and Growth Pact, even the fiscal policy efforts to let the automatic stabilisers take full effect rapidly come up against their limits in periods of prolonged stagnation. Differentiating between cyclical and structural deficits and then encouraging the reduction of the structural deficit while accepting the cyclical deficit is not much help in a situation of this kind. This type of policy would send out a mixture of different signals, which would further heighten uncertainty and reduce effective demand. Regardless of the motivation, a reduction of the government deficit will strengthen the overall reduction in demand and income.

The crux of the matter, therefore, is the fact that the debt ceilings are restricting the scope of fiscal policy during a weak growth phase, despite the fact that in a monetary union, fiscal policy is the principal means with which asymmetric shocks can be counteracted. The margins are reducing fiscal policy's breathing space to such an extent that it cannot adopt a stance which is compliant with growth. During a recession, and even more so during a period of prolonged stagnation, any attempt to comply with the reference values is inevitably doomed. However, it would be wrong to interpret this assessment as a plea for permanently rising government debt. A steadily rising government debt ratio would jeopardise fiscal policy's room for manoeuvre in the long term, for tax revenue would increasingly have to be used for debt servicing and would not be available to finance government spending. However, the right moment in time to push forward the consolidation of government finances is an economic upturn, and not a recession or stagnation. Thus, it becomes all the more important to differentiate between short-term and long-term fiscal policy planning.

So what is to be done? Fiscal policy-makers would be well advised to see the process of budget consolidation as a long-term task that cannot be carried out in the absence of economic recovery. At the same time, it must

Box

## The difficulty of measuring fiscal policy indicators

In the debate on the direction of fiscal policy, considerable attention is being given to the question as to what proportion of today's budget deficit is caused by the weak business cycle and what proportion is the result of 'structural' factors. In actual fact, it is extremely difficult to divide net government borrowing into a cyclical and a structural component. This is primarily because productive capacity – the basis on which the structural component is calculated – is an unobservable variable. Indeed, any attempt to measure unobservable variables is based on assumptions whose validity can always be called into question. Moreover, because of this reliance on assumptions, it is practically impossible to compare and contrast the quality of the various models.

Three main types of method are described in the literature: statistical or filter methods, estimates of production functions, and multivariate models with unobserved components. The first class includes the Hodrick-Prescott filter, the spectral filter proposed by Baxter and King, and the Rotemberg filter. These three filters are all constructed on the basis of an assumed typical business cycle that fluctuates around a trend component. For example, if a cyclical downturn lasts for a particularly long time, a filter method – which knows only one average cycle – would undoubtedly explain the slowdown in terms of a fall in trend growth.[1]

The methods based on production functions include the method used by the German Council of Economic Experts to estimate productive capacity using a limitational production function with capital as a constraining factor, as well as the methods used by the OECD, the IMF and the German Bundesbank. These methods also have strict constraints, such as the assumption of constant returns to scale and the specific functional form of the production function. The Council of Experts uses its method to calculate what it terms a 'technical' production possibilities frontier.[2] According to its calculations, for the last 30 years the German economy has persistently failed to live up to its production possibilities, and the deviation in the second half of the 1990s amounted to a hefty five to seven percentage points. The Council of Experts proceeds from the assumption that the threat of inflation looms even before this threshold is reached. This is why it defines productive capacity on the basis of the average utilisation of technical productive capacity over the last 30 years. This is an arbitrary definition and is ultimately based on the assumption that the economy fluctuates symmetrically around an average degree of utilisation.

Methods based on structural vector auto-regressions (SVAR) and structural vector error correction models (SVECM) are more sophisticated. The best-known examples are the approaches based on Blanchard and Quah's assumption that demand shocks do not have a long-term impact on the trend component. This allows time series to be broken down into the components determined by supply and demand factors, whereby the structural component is exclusively determined by the effects of supply factors, and the possibility of long-term effects exerted by demand factors is excluded a priori.

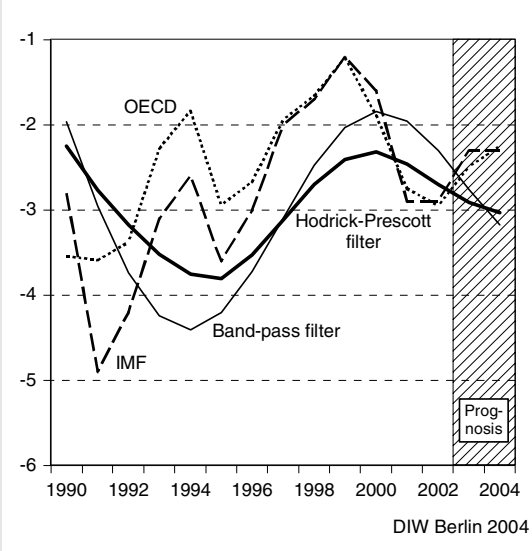
In addition to these methods, more recently so-called state-space models have increasingly been used to determine productive capacity. These models require the prior definition of the data-generating processes. However, it is also possible to build in economic behavioural equations and to explicitly investigate the influence of exogenous variables on the trend and cyclical components.

Figure 11 shows structural deficit ratios calculated on the basis of different methods. While the basic trend is similar, some years the measurements diverge quite considerably. This becomes particularly apparent at the beginning of the 1990s, where the methods used by the IMF and the OECD

Figure 11

### Calculation of German Structural Deficit Using Different Methods

As % of GDP




Sources: IMF: World Economic Outlook, Autumn 2003; OECD: Economic Outlook, no. 74; DIW Berlin estimates and calculations.

[1] Cf. R. Hodrick and E. Prescott: 'Postwar US Business Cycles: An Empirical Investigation'. In: Journal of Money, Credit and Banking, 29, 1997, pp. 1-16; M. Baxter and R.G. King: 'Measuring Business Cycles: Approximate Band-pass Filters for Economic Time Series', Review of Economics and Statistics, 81, 1999, pp. 573-593; L.J. Christiano and T.J. Fitzgerald: The Band Pass Filter, Working Paper 7257, NBER, 1999; J.J. Rotemberg: A Method for Decomposing Time Series into Trend and Cycle Components, MS, Harvard 1998 (http://www.people.hbs.edu/jrotemberg/trencyc2.pdf). Rotemberg's filter is a variant of the Baxter-King filter with the additional constraint that the covariance between the trend component and the cyclical component is minimised above a certain (given) interval. The Rotemberg filter was not used in this study because the results based on annual data showed a practically linear trend, rendering the calculation technically impossible. On methods of trend adjustment, also see the German Council of Economic Experts' most recent annual report (Jahresgutachten 2003, § 734 ff.).

[2] Basically, the Council of Experts carries out a 'peak-to-peak' extrapolation of the highest empirically measured capital productivities, where the trend between the 'peaks' is determined using a spline regression. Cf. German Council of Economic Experts: Jahresgutachten 2003, § 747.

Box continued

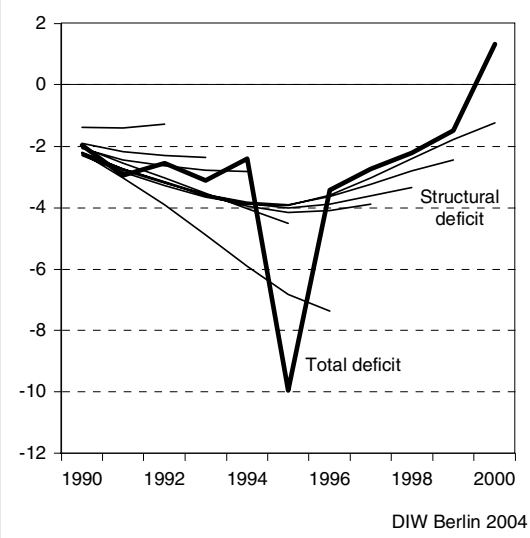
diagnosed a partial decline in the 'structural' deficit, while the statistical methods indicated that it was expanding. The results are also different for the latest figures: Again, the IMF and OECD methods show a reduction in the structural deficit, while the filter methods show an increase.[1]

The univariate statistical methods are easy to handle, which explains why they are so widely used, but they also have the weakest theoretical foundations. The greatest shortcoming of these methods is their sensitivity to data revisions. This weakness can be illustrated taking the Hodrick-Prescott filter as an example. This method is basically a variant of moving averages where, on the one hand, the deviations of the actual series from the trend are minimised and, on the other, the trend should manifest as smooth a course as possible. The two criteria are in contradiction and are weighted using a smoothness parameter. Each moving average with symmetrical weights is distorted at the end of the observation period. This effect is diminished if the time series is extended by a forecast. However, this does not resolve the basic weakness of these filters, which is that the measurement of the 'real' value always requires knowledge about the future. Figure 12 shows recursive calculations of the structural deficit ratio using a Hodrick-Prescott filter.[2]

In concrete terms, the structural deficit ratio calculated for each point in time between 1992 and 2000 is that which emerges mechanically on the basis of the available information at that point in time. The historical course of the structural deficit ratio emerging at each point in time is represented as thin lines that halt at the relevant end point in time. The period studied includes the year (1995) in which the financing of German reunification was included in national accounts. This undoubtedly represented an extreme value in the deficit ratio, but we did not remove it from our calculation because we wanted to illustrate how the assessment of an extreme value as a structural or a cyclical phenomenon alters when the filter is applied. It is not possible using a statistical method – even when the data is extended beyond the end point of the time series – to ascertain whether a very recent change will be a temporary or a sustained phenomenon. Thus, in 1996 the method shows a structural deficit of over 6% of GDP for 1995, but the calculation based on the state of knowledge in 1997 shows a deficit of only 4% for the same year.

Subsequently, however, the estimate changes depending on whether the deficit has become entrenched or not. The results therefore reveal a fundamental problem with estimations of the current economic trend: Only theoretical and practical considerations in each individual case can decide whether a weak phase is caused by a cyclical or a structural weakness.

Figure 12
Calculation of Structural Deficit Using Hodrick-Prescott Method at Different Points in Time
As % of GDP




Sources: DIW Berlin calculations.

[1] The Hodrick-Prescott and band-pass filter calculations for 2003 and 2004 were based on the values predicted in the Economic Institutes' joint forecast of autumn 2003; the years 2005 to 2007 were forecast using an ARIMA estimate. Despite these efforts to minimise the end-point problem, optically there is still a phase shift with respect to the IMF and OECD indicators.

[2] Expenditure and revenue as well as real GDP and the GDP deflator were each adjusted separately using a value of 20. Cf. Matthias Mohr: Ein disaggregierter Ansatz zur Berechnung konjunkturbereinigter Budgetsalden für Deutschland: Methoden und Ergebnisse. Deutsche Bundesbank Economic Research Centre, Discussion Paper no. 13/01, 2001. The structural deficit is given as the ratio of the difference between the trend components of revenue and expenditure to the product of the trend components of real GDP and the GDP deflator. For all points in time in the recursive estimation, the end points were extended by three years using appropriately adjusted ARIMA forecasts.

not – as has happened all too often in the past – be based on overly optimistic targets for the economy as a whole, as this only diminishes the credibility of fiscal policy. But the nature of the debt ceilings themselves and the stability programmes based on them[18] may also be drawing fiscal policy into a 'credibility trap'. Policymakers can only lay down the expenditure side of the equation with a relative degree of reliability; the income side, by contrast, is basically determined by the economic trend, meaning that policy has no influence on it in the short term. Nonetheless, the government is held responsible for the success or failure of the efforts to meet its declared deficit target. It is also difficult to

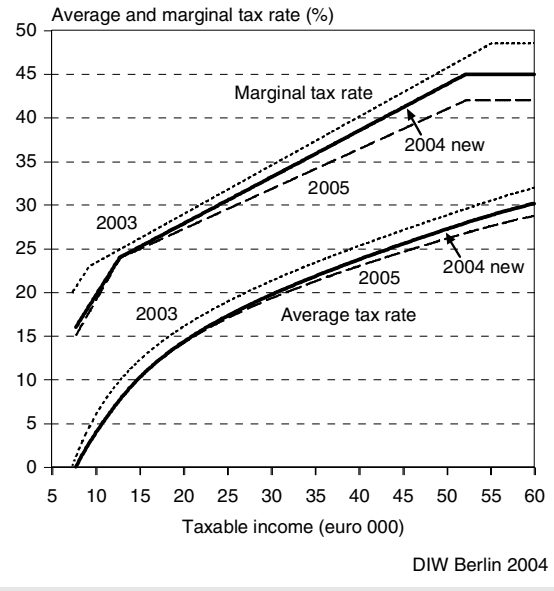
[18] According to the terms of the Stability and Growth Pact on extending budget policy supervision, the participating countries are obliged to present annually updated stability programmes to the Ecofin Council that provide information on the level of their deficit ratios and the relevant economic and fiscal policy background.

make use of fiscal policy measures, such as implementing the tax reform ahead of schedule, because this alters the original deficit target and failure to meet it could be adjudicated negatively by the public.

For all these reasons, the DIW Berlin advocates a fiscal policy that is not based on a deficit target, but bound to a spending plan. The federal subsidies to the Federal Labour Office, which are closely linked to the growth trend, should not be included in this path, however. The proposed programme, which would be less dependent on cyclical influences, should be drawn up for several years at a time and be reviewed at regular intervals at national level by the financial planning council and at EU level by the European Commission. The formulation of spending targets would render policy much easier to monitor, the success or failure in meeting the targets would be more transparent, and it would be easier to clearly attribute responsibilities.[19] Another reason why a medium-term programme is necessary is so as to avoid adjustment shocks and give the actors a chance to adapt to the changed conditions. The guideline for the plan should be medium-term nominal potential growth. Thus, at the same time, fiscal policy would be programmed to have an anti-cyclical effect: As capacity utilisation decreases, government influence on demand increases, and it decreases as capacity utilisation rises. However, there would also still be room for revisions. If government debt is considered excessive, lower spending growth can be planned. The important elements are the fact that the programme would be planned for the medium term, which would enable flexibility as regards timelines, and the fact that the spending plan would be binding. This regulation would have to be flanked by the additional prescription that in boom periods, procyclical cuts of taxes and duties would not be permitted.

The most recent fiscal policy choices must also be viewed in this context. The half-hearted early implementation of the tax reform is bound to lead to disappointing results for cyclical reasons. What would have been important was first of all financing a large share of the reform via loans, and even then the restrictive effects of the spending policy would only have been reduced. However, it must not be forgotten that the third phase of the reform mainly favours higher income earners with an above-average savings ratio. Thus, the expansive influence on overall demand is diminished. Looking only at the part of the phase that is now being brought forward, this argument is somewhat weakened as regards its effect in 2004, because the basic tax rate is still being

Figure 13
Income Tax Scale 2003, 2004 (new) and 2005
Basic table




Sources: Federal Income Tax Act; DIW Berlin calculations.

reduced to 16% while the maximum tax rate will fall not to 42% but only to 45% (cf. figure 13).

Fiscal policy has failed to indicate its willingness to view the consolidation of the public budgets as a medium-term task. In concrete terms, in the current situation it should have pushed forward additional measures (especially cuts in financial subsidies and tax concessions) towards the reduction of the deficits that will not be quasi-automatic when the economic recovery sets in. These measures could have been agreed on now, but marked for future implementation – when the upturn has gained momentum. The magnitude of the cuts in subsidies agreed by the federal government also reflects the half-heartedness of the efforts. Much more decisive resolutions were required here. The prospect of a more substantial reduction in subsidies over the coming years would have made it much easier for policy-makers not only to bring forward the entire tax reform and to finance it via loans, but also to give a new direction to spending policy.

It is high time that Germany's spending priorities were reviewed. Government infrastructure spending urgently needs to be increased. Back in 1992, the volume of gross public investment amounted to 47 billion euro, or 2.9% of GDP; in 2005 public-sector investment was limited to 32 billion euro, or 1.4% of GDP. This figure places Germany far below the European average for

[19] Incidentally, the Stability and Growth Pact is being implemented at domestic level in a very similar way in that the Länder and local authorities have committed themselves to restricting spending growth to an average 1% per annum in 2003 and 2004.

infrastructure investments.[20] Spending on education and research as a share of GDP, which is vital for the development of a knowledge-based economy and especially for the profile of its human capital, has fallen over the last two decades. A change in course is urgently required here.

## Wages policy

Between prolonged stagnation and rising unemployment, wages policy came under severe pressure last year in the euro zone and particularly in Germany. As already pointed out in the introduction to this section, it is often hoped – in vain – that a turnaround in the growth trend can be brought about on the basis of a moderate wages policy. A glance beyond Germany's borders can throw some light on a few circumstances that should be taken into consideration in the current discussion on this issue.

If, as a point of departure, we compare nominal wage growth in different countries inside and outside the euro zone, it emerges that in no country bar Japan have nominal wages grown as little since 1995 as in Germany[21] (cf. figure 14). This variable can be used to measure the pressure exerted on costs by wage growth. The relatively low value of the latter in Germany was due, on the one hand, to moderate wage agreements but, on the other, also to the distinctly negative wage drift seen especially in the last few years. This is a result both of the cuts in non-negotiated benefits and of the strong growth of low-wage employment. The rise in ancillary wage costs was largely absorbed and did not significantly increase wage costs.

The ultimate effect of wage increases on growth and employment depends primarily on the reaction of the market system to wage pressure, and other factors come into play here. Whether or not nominal wage growth exerts significant cost pressure on enterprises, forcing them to either raise prices or reduce profits, is revealed by unit labour costs,[22] which set wage growth in relation to the advance in productivity (cf. figure 15). The result for Germany as regards unit labour costs is the same as for nominal wage growth. The upward pressure on wage costs was weaker only in Japan, where unit labour costs actually decreased. It is also worth noting that the relatively high nominal wage increases in the USA did not generate upward cost pressure because productivity showed such strong growth. The situation is different in Great Britain, Spain, the Netherlands and Italy, where high wage increases were not absorbed by the increase in productivity. As a result, unit labour costs showed much higher growth in these countries than in Germany.

Wage pressure measured in this way is reflected in the inflation rate because enterprises usually try to pass their cost increases on to prices. This is not a problem when the economic trend is favourable, but when it is not, profits decline. The amount of scope available for passing on cost increases to prices varied significantly across the countries examined here (cf. figure 16).

Inflation is measured here using the GDP deflator so as to illustrate the price trend from the point of view of domestic enterprises because then the direct influence of import prices is taken into account. It emerges that nowhere, once again with the exception of Japan, was the scope for passing on prices so limited as in Germany.

Narrow scope for passing on prices is decisive for the situation regarding real wages. While real wage growth has certainly been moderate in Germany in the last eight years compared with other countries, it has not been as weak as nominal wage growth. In Italy and Spain, by contrast, which had high wage cost pressure, real wage growth was ultimately more moderate than in Germany, and especially more moderate than in Japan.

Low nominal wage growth is therefore absolutely no guarantee for low real wage growth or an increase in employment. In a market economy with functioning competition, the savings made through wage restraint are passed on in lower prices, which do not necessarily lead to lower real wages.[23] Real wages could even rise if the growth in demand – as currently in Japan and in Germany – is weak and the scope for passing on prices is shrinking.

It is therefore not surprising that there is a strong correlation between a relatively high inflation rate, higher nominal wage increases and higher employment.

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[20] Cf. 'The German Public Budgets in 2003/2004: No Sign of Improvement – Deficits Set to Rise Further'. In: *DIW Economic Bulletin*, vol. 40, no. 12, December 2003.

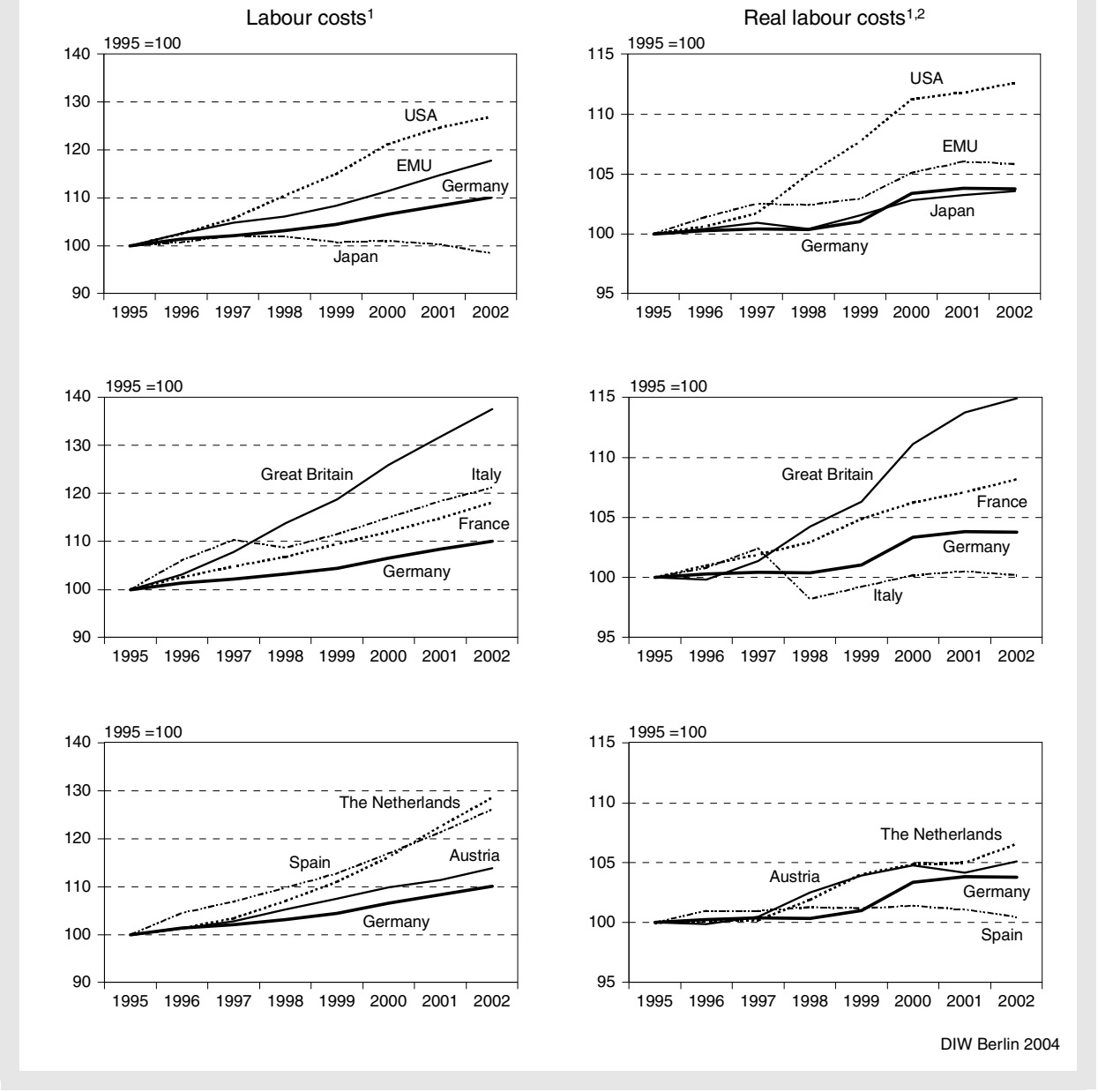
[21] The wage variable used here is national wages/salaries per employee, which includes all ancillary wage costs. The per-capita variable was chosen in order to allow international comparison, since data on labour volume, which would have been a more suitable reference variable from the economic point of view, is not available for all the countries observed. The wages in each case were calculated in the local currency in order to eliminate exchange-rate effects. Sectoral wage variables, which are frequently used for manufacturing industry, would have been unsuitable because they usually disregard intermediate input, which also has a significant effect on cost structure.

[22] Gross income from dependent employment, including all ancillary wage costs, as a share of real GDP.

[23] This effect is also overlooked by the Council of Experts in its calculation of the scope for distribution. Cf. German Council of Economic Experts: 'Staatsfinanzen konsolidieren – Steuersystem reformieren', Jahresgutachten 2003/2004, § 637 ff.

Figure 14

## Labour Costs in International Comparison

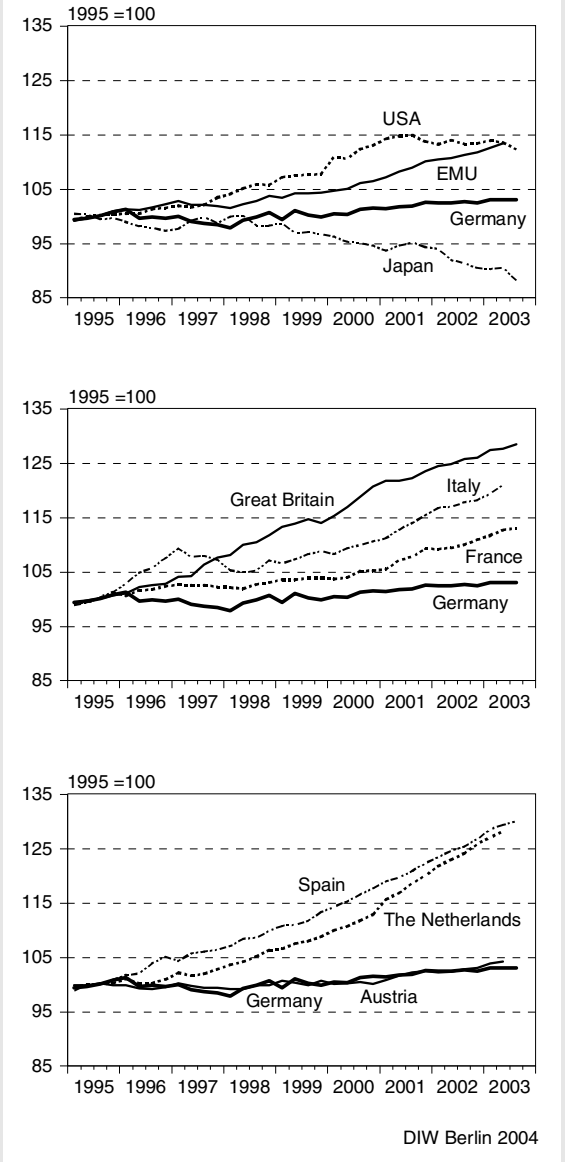



1 Compensation of employees per capita; seasonally adjusted. — 2 Deflated by GDP deflator.
Sources: European Commission; Federal Statistical Office; DIW Berlin calculations.

Wage restraint in Japan contributed to strengthening deflation, and Germany came dangerously close to deflation for the same reason.[24] Spain and Italy are examples of the other extreme. Wage pressure was relatively high in these two countries, but as the demand situation was more favourable, enterprises were able to pass this pressure on to prices. Consequently, the inflation rate was also relatively high and real wage growth was extremely moderate. This approach is not unproblematic either, however – especially in a monetary union – even though wages policy in the euro zone was compatible with the aim of overall stability and did not impede job creation. The ultimate result was excessive inflation rates in these countries – relative to the ECB's target

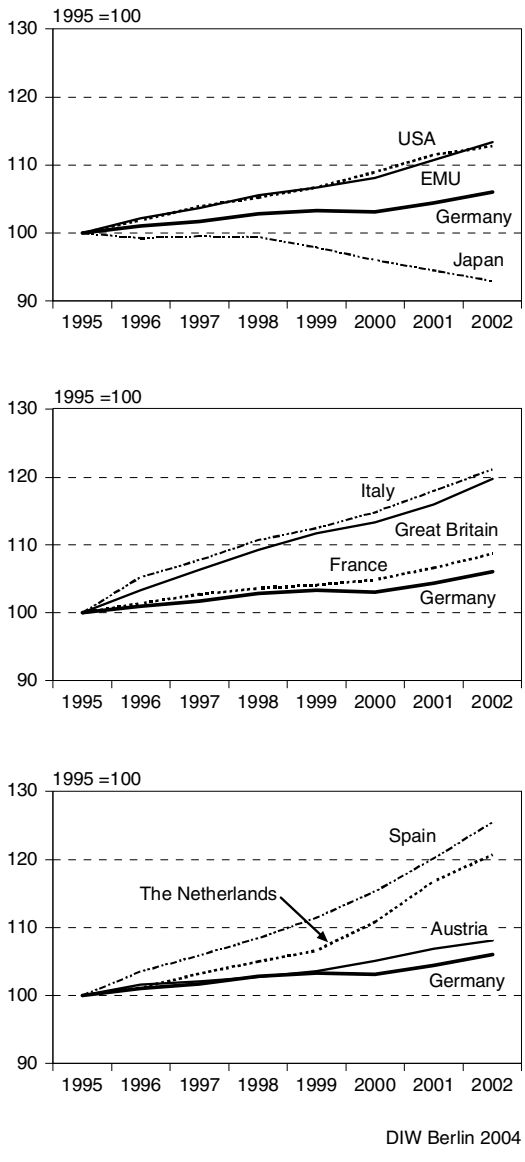
[24] Cf. 'Economic Trends 2003/2004', loc. cit.

Figure 15
Unit Labour Costs[1]
in International Comparison




1 Gross income from dependent employment as a share of real GDP; seasonally adjusted.
Sources: OECD; Federal Statistical Office; DIW Berlin calculations.

Figure 16
GDP Deflator
in International Comparison




Sources: European Commission; Federal Statistical Office; DIW Berlin calculations.

rate.[25] The question is whether this will turn out to be a temporary phenomenon without further consequences or whether it will create more serious economic difficulties for some countries. The real depreciation related to this development has a stabilising effect in Germany, which in the long term will lead to market share gains at the expense of the countries with higher inflation rates. The result will be downward pressure on inflation in these countries – as desired – and a boost for growth in Germany. In addition, the EMU countries with high wage growth are behaving like free-riders. If wages had grown in the other countries at the same rate as in Spain and Italy, the inflation rate in the euro zone would have significantly exceeded 2%; the ECB would then have

[25] Cf. 'Economic Trends 2003/2004', loc. cit.

had to raise interest rates and curtail growth. If inflation had been lower, the ECB might have reduced interest rates earlier and more substantially.

Different inflation rates also lead to different real interest rates, and this curbs growth in the very countries that have a relatively low inflation rate, while growth in the countries with a higher inflation rate is stimulated. Thus, the gap is reinforced. Monetary policy cannot directly counteract this situation. However, it would help if it were to send the appropriate signals to wages policy. In other words, the ECB should make it known to individual countries when their wages policy is inappropriate. Errors in wages policy have not been made over the last few years, as is occasionally suggested, in Germany, but in Spain, Italy and the Netherlands, where the reaction to the oil price shock was inappropriate. At the end of the day, however, only a national business cycle policy – which ultimately is fiscal policy – will be able to diminish this divergence. And to this end, fiscal flexibility is required.

All in all, wages policy is not a suitable means to bring about an economic turnaround. Neither significant wage restraint nor substantial wage growth can lead an economy out of a lull. What is recommended, instead, is a medium-term wages policy based on trend productivity growth and the ECB's inflation target. This would thwart the risk of falling back into the deflation zone, but also prevent excessive wage agreements when the economy improves. It is not important whether this path is easier to achieve via centralised wage negotiations, which have prevented Germany in recent years from embarking on this path, or via decentralised negotiation processes, which led the USA to adopt this course. One advantage of centralised negotiations – apart from the lower transaction costs – is the fact that national economic considerations are given greater consideration in wage formation than in decentralised procedures.

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