# The development of public finances in Germany following qualification for European monetary union

The current situation of public finances in Germany is extremely tense. The deficit ceiling of 3% of GDP as set by the Maastricht Treaty was clearly overshot in 2002. The extremely sharp rise in the deficit over the past two years brought about by the macroeconomic slowdown and the tax relief measures which entered into effect in 2001 were the main reasons. Although the deficits had declined continuously in the three preceding years, this seemingly welcome development was based on favourable cyclical influences and the extraordinarily positive tax revenue during that period. Without these effects, the deficits would have risen. Since 1997 the increase in expenditure has been more moderate than in the years between reunification and 1997, averaging around 2% a year. Given the sluggish macroeconomic growth trend, however, the contribution to consolidation of the expenditure side admittedly remained very limited. Fiscal policy is now faced with the task of lowering the large structural deficit. Owing also to the already adopted comprehensive income tax cuts, this will require central, state and local government to curb expenditure in the coming years more strongly than in the preceding years.

## Preliminary remarks

*1997: a year of key decisions in connection with monetary union*

This article explains the development of public finances since 1997, the decisive year in which Germany qualified for being a founder member of European monetary union. In addition, 1997 saw the adoption of the Stability and Growth Pact, which specified and expanded the fiscal policy regulations for the European Union which were contained in the Maastricht Treaty. Despite a continuation of unfavourable economic developments, the government deficit, after having still been above the ceiling of 3% of GDP in 1995 and 1996, fell to 2.7% in 1997, thus meeting the Maastricht deficit criterion. The debt ratio did rise to 61% against the background of low nominal economic growth, thereby overshooting the reference value of 60%. However, given the special reunification-related burdens, the fact that the limit was overshot by only a small margin and the prospect of the debt ratio receding in the following years, the Ecofin Council decided to stop the excessive deficit procedure it had instituted following Germany's overshooting of the 3% deficit ceiling. This meant that the fiscal policy convergence criteria were met.

*General government as defined in the national accounts*

When analysing public finances, this report will use the definition of general government according to the European System of Accounts (ESA). This system provides the basis for the deficit criterion of the Maastricht Treaty and the monitoring of the budgetary situation pursuant to the Stability and Growth Pact. In most cases, the budgetary outturns of the individual levels of government, which are reflected in the financial statistics, form the basis for the national accounts in Germany. However, there are some differences between the two accounting systems (see overview on p 17).

## Two phases of government financial development

### 1998 to 2000: seeming improvement in public finances in a relatively favourable economy

*Positive cyclical impact*

Having fallen slightly below the 3% ceiling in 1997, the government deficit ratio continued to fall gradually, reaching 1.4% in 2000.[1] This was caused mainly by the generally favourable economic climate. Whereas in 1997 public finances had been affected by an economic downturn, during the next three years the average annual growth rate of real GDP (+2.3%) was well above the medium-term trend. The improvement in the overall economic situation led to a cyclically-induced reduction in the deficit which is likely to have amounted to around 1% of GDP by 2000 (for more details on the method of cyclically adjusting government deficits and the procedures on which this analysis is based see the comments in the annex, pp 29-32).

*Gushing springs of taxes*

Another factor which played a significant role in the reduction of the deficit was that the "profit-related taxes"[2] developed much more

1 For this analysis the one-off proceeds from the auctioning of UMTS licences (€50.8 billion or 2½% of GDP) have been factored out of the national accounts outturns because of their temporary character and their volume.
2 These include – to simplify matters extremely – corporation tax, non-assessed tax on earnings, trade tax (local business tax (which is classified as an indirect tax in the national accounts), interest withholding tax and assessed income tax. These taxes are levied above all on business profit and income from financial assets.

## Public finances as defined in the national accounts

The Maastricht Treaty of 1992 which created European monetary union also set criteria regarding the public finances of the member states, which had to be met as part of the terms for accession. The budgetary outturns (as defined in the government's financial statistics), which show revenue and expenditure in accordance with the national budget system of the individual countries, were however only comparable to a very limited extent owing to differences in methodology and definition. For that reason, recourse was taken to a system of national accounts which is largely uniform throughout Europe and which likewise contains a statistical documentation of government finances. This concept has since been refined and – for over three years as the third edition of the European System of Accounts (ESA 95) – forms the basis for monitoring the development of public finances and compliance with fiscal policy rules in the European Union. Eurostat, the European Commission's statistical office, oversees the calculation of the national accounts outturns in the individual member states in terms of the excessive deficit procedure, and in cases of doubt, after consulting national and, if necessary, international expert bodies, takes accounting decisions with European implications.

The two statistical concepts pursue different goals. The financial statistics are closely tied to the budgetary process. Their primary intention is to systematically record payments in public budgets. This is intended not only to provide an overview of the financial situation but also to make it possible to examine the extent to which budget plans have been implemented. By contrast, the national accounts provide a picture of the macroeconomic process by which income is generated, used and distributed. Within this framework, the government sector is a sub-segment which is systematically linked to the other sectors. Although the budget outturns usually form the basis of the national accounts for the public sector, the different definitions may result in large differences in the amounts recorded in the statistics.

In the financial statistics, the date of an entry is decided by its allocation to a budget year, which is generally based on when it matures. In the national accounts, by contrast, the moment when a claim arises is the decisive moment. Tax revenue, social security contributions, and interest expenditure are thus, in contrast to financial statistical recording, always transferred back to the point in time when a payment obligation arises. On the expenditure side, in the case of construction investment, the national accounts focus on the progress of construction. For general government budgets, these phase shifts alone could result in an overall deviation between the two concepts of several billion euro.

The financial statistics' focus on payment flows means that shifts in financial assets such as the sales of participating interests and loan repayments have an impact on the government deficit. However, in the national accounts such purely financial transactions, which do not directly pertain to incomes, do not affect the budget balance. These differences in the method of entry are sometimes quite important when reporting government budget deficits. In the past few years, government revenue from the sale of financial assets (especially through privatisation) for the most part clearly surpassed comparable expenditure (especially lending). For the Federal Government, this effect amounted to a total of over €30 billion in the period from 1997 to 2002. In addition, that part of the Bundesbank's profit – such as profits from sales of foreign currency – which is not generated by normal central bank activities resulting mainly from the creation of money, is entered as a financial transaction without any impact on the deficit in the national accounts. However, it is not always possible to draw such a clear line between shifts in financial assets and a transaction with an impact on the deficit. For instance, in the case of injections of capital to public sector enterprises, it may sometimes be assumed that this is not an acquisition of a participating interest with lasting value but instead the offsetting of a loss, which then has to be posted in the national accounts in a manner which increases the deficit. One example of this is the injection of capital to Bankgesellschaft Berlin in 2001, which was recorded in the national accounts as a transfer of assets.

Along with the differences in respect of the level of the deficit, the two concepts may also indicate deviating trends in expenditure and revenue. The reason lies in the principle of gross accounting which is adhered to more closely in the national accounts. Child benefit, for example, is offset in the financial statistics against wage tax receipts, whereas in the national accounts it is recorded on the expenditure side as a monetary social benefit. An increase in child benefit is thus reflected in the national accounts as an increase in expenditure and in the financial statistics as a decrease in revenue without deficits being recorded differently. The treatment of tax breaks diverges in similar fashion, such as the grant to home buyers and investment grants. As child benefit has been increased and additional generations of recipients of grants have become eligible for grants to home buyers, which have been in existence since 1996, the growth in spending between 1997 and 2002 as defined in the national accounts was ½ percentage point higher than defined in the financial statistics. Accordingly, the tax ratio as defined in the financial statistics decreased by nearly 1 percentage point during that period, whereas the comparable national accounts ratio went down only slightly.

The method of presenting the government's finances in the national accounts introduced in this article is different from that used in the ESA because domestic transactions with the EU budget are all listed under the state sector, whereas the ESA assumes, among other things, that the turnover taxes forwarded by the member states go directly to the rest of the world (which includes the EU budget). The method used here keeps the waning medium-term significance of VAT resources and the conversely increasing share (listed in the state sector under ESA) of GNP resources from leading to a distortionary trend in the tax ratio as well as the expenditure ratio over time. Without such a statistical adjustment, these ratios would increase even though, in actual fact, the burden on taxpayers and Germany's overall contributions to financing the EU budget would not change at all.

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favourably than was to be expected owing to the impact of changes in tax legislation and the development of property and entrepreneurial income calculated in the national accounts (which, in the Bundesbank's cyclical adjustment procedure as well as in official tax estimates, are regarded as a point of reference for the assessment basis of these taxes). This unexpectedly sharp increase in revenue was reflected by the fact that tax revenue distinctly outpaced official tax estimates during that period.[3] The sharp increase in tax revenue, however, was largely temporary in nature, as developments over the following years indicated, and was therefore not indicative of a fundamental improvement in government finance (see overview on p 19 for more information).

*Slight net reduction in levies*

On balance, the growth of government revenue was dampened by a slight reduction in levies. There was a structural shift from social security contributions towards excise taxes. Other revenue declined, with a sharp reduction in the Bundesbank's profit in 2000 having a particularly pronounced effect.

*No consolidation contribution by the expenditure side*

The expenditure side made no contribution to consolidation. Although expenditure rose by an annual average of only 2% – with the overall expenditure ratio having been reduced by one percentage point – when adjusted for the favourable cyclical development, which had also been reflected in a distinct decline in unemployment figures, this rise in expenditure was around 2½%. Budget management which tended to be more stringent, and which was associated with a distinct reduction in the number of staff, was offset by considerable increases in expenditure on child benefit, grants to homebuyers and old-age provision for Post Office pensioners. In addition, the year 2000 saw one-off expenditure on indemnification payments for wartime forced labourers.

*Structural deterioration in the budget situation between 1998 and 2000*

On the whole, the structural situation of public finance did not improve between 1997 and 2000 but in fact even deteriorated – despite the sharp decline in the overall deficit. A golden opportunity (from today's perspective) to undertake comprehensive structural consolidation was missed – not least because expectations regarding overall economic developments in the subsequent years were overly optimistic, leading to a misjudgement of the structural budgetary situation.

## 2001 and 2002: Sharp rise in the deficit during the downturn

*Sharp rise in the deficit*

In 2001 and 2002 the government deficit in Germany expanded sharply. Last year the deficit ratio reached 3.6%, thus exceeding the Maastricht Treaty's 3% limit by a considerable margin and prompting the Ecofin Council to declare an excessive deficit for Germany in January 2003.

*Negative cyclical impact ...*

The rise in the deficit which equalled more than 2% of GDP in total, is partly the result of the sharp economic downswing. The cyclical adjustment procedure used here shows that in 2002 public finances deteriorated by

3 For information on the development of tax revenue see also Deutsche Bundesbank, Recent tax revenue trends, *Monthly Report*, December 2002, pp 15-36.

around ½% of GDP compared with the figures for 2000 due to cyclical impacts.

*... only partly to blame for collapse of tax revenue*

Moreover, there were additional factors which reduced tax revenue. The sizeable tax cuts which entered into force at the beginning of 2001 had a major impact. The revenue shortfalls caused by this reform are likely to have amounted to just over 1% of GDP. Although these contrasted with increases in levies in 2002 – especially excise taxes and contributions to the health insurance funds – they were much lower than the previous year's tax cuts. In addition, the overflowing "profit-related" tax revenue of the previous years experienced a pronounced turnaround. Therefore, such tax revenue has recently been exceptionally low. For instance, the revaluation of balance sheet assets led to extensive write-downs due not least to the sharp slide in prices on equity markets. In the aggregate, the development of revenue was the decisive factor in the sharp rise in the deficit. The tax measures and the aforementioned negative influences conspired to reduce the levy ratio by 2½ percentage points in two years.

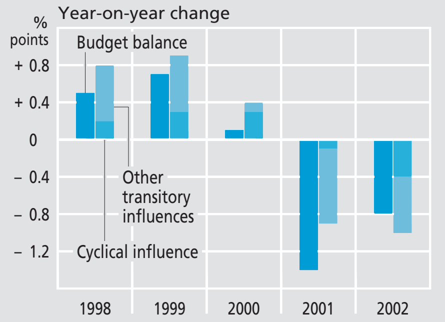
*Dampened expenditure growth*

As in the preceding phase, expenditure rose by an average of around 2% a year. This reflected a more favourable trend to the extent that it was not associated with an improvement in the economy. Adjusted for this cyclical factor, expenditure grew by only 1¾%, thus contributing to consolidation. The main reasons were tight budget management along with declining investment expenditure, relief caused by the low level of interest rates, and reduced transfers to the EU budget. This more than offset expansions of payments in

## The development of the deficit ratio between 1997 and 2002 — an assessment of the contribution of cyclical and other temporary factors

The chart below shows the year-on-year change in the budget balance. It also contains an assessment of cyclical and other transitory effects which have affected the development of the balance. The "cyclical influence" was calculated using the Bundesbank's cyclical adjustment procedure (see Appendix, p 29). "Other transitory influences" are understood to mean, on the one hand, major one-off effects. They include extraordinary surpluses (1999) or deficits (2002) in the pension insurance funds caused by errors in assessing the contribution rate, one-off burdens connected with the indemnification payments to wartime forced labourers (2000), injection of capital into Bankgesellschaft Berlin (2001) and the extremely low Bundesbank profit in 2000 as shown in the national accounts. On the other hand, changes in "profit-related" taxes which were caused neither by changes in tax legislation (according to information from the Federal Ministry of Finance) nor by cyclical fluctuation (as is estimated on the basis of the cyclical adjustment procedure) are roughly assessed. For this purpose, the tax revenue was first adjusted for these factors. The difference between the growth rate of the adjusted variable and the growth rate of the nominal GDP trend (which is largely identical to the growth of the trend of corporate and property income) was approximated as a transitory influence (for the development of "profit-related" taxes see the chart on p 20).

Change in the budget balance [1] between 1998 and 2002




**1** Budget balance: as a percentage of GDP. A positive (negative) value indicates a fall (rise) in the deficit ratio.

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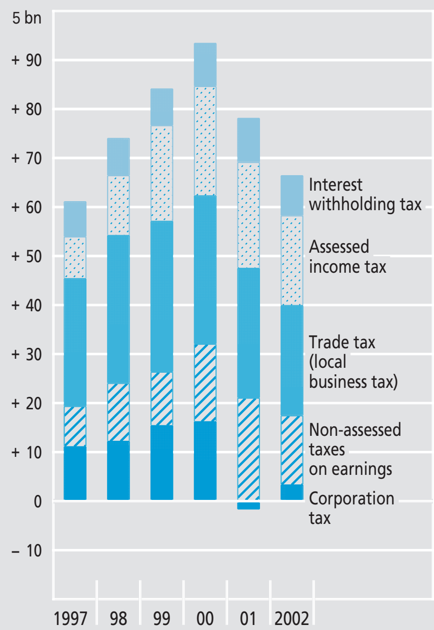
"Profit-related" taxes*




* Adjusted for changes in tax legislation; the base year is 2002.

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other areas (eg child benefit, unemployment benefits and sickness benefit).

*2001 and 2002: unfavourable economy and tax cuts*

All in all, the growing deficits in 2001 and 2002 were largely attributable to cyclical and other transitory influences (see overview on p 19). In addition, the extensive tax cuts that came into force in 2001 also caused a structural deterioration in the financial situation since these tax cuts were not adequately funded by budget relief measures in other areas. In recent years, with the structural deficit not having been reduced, and a sufficient distance to the upper deficit limit not having been maintained, the macroeconomic downturn, combined with considerable tax cuts, caused the government deficit to clearly overshoot the 3% deficit limit. During this entire period, the government did not by any means implement austerity measures. Instead, not only did the automatic stabilisers work, but taxes were also reduced by a considerable amount in net terms.

## Government revenue trends

*Direct taxes volatile*

During the period under review, budgetary developments were decisively influenced by the revenue side. Between 1997 and 2000, revenue from direct taxes rose sharply, even though, on balance, revenue-reducing changes to tax legislation prevailed (such as the cut in the solidarity surcharge). In terms of GDP, revenue from direct taxes went up by nearly 1½ percentage points. The decisive factor was that "profit-related" direct taxes grew exorbitantly, by around 80% (or 1½% of GDP) in just three years. During that period, large additional payments for previous years coincided with a sharp increase in prepayments. This also reflected developments on financial markets. The picture reversed itself in 2001 and 2002. The extensive tax cuts were associated with a slumping economy and falling share prices. The direct tax ratio went down by nearly 2 percentage points, with large write-downs in the corporate sector also playing a role.[4] The sluggish profits were reflected in lower prepayments. In some cases there were also larger refunds for earlier years.

4 For example, the fact that this was the last chance for enterprises to claim tax write-downs on their participating interests before the tax exemption of capital gains from the sale of equity stakes came into force, thus eliminating the write-down options, may also have played a role. By contrast, the distribution of profits retained in earlier years probably had only a limited impact, if at all, on tax revenue. See also Deutsche Bundesbank (2002), op cit, pp 23-25.

## General government budget (national accounts)

| Item | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
|---|---|---|---|---|---|---|
| | € billion | | | | | |
| **Revenue** | 883 | 908 | 943 | 964 | 951 | 953 |
| Taxes | 438 | 459 | 490 | 512 | 488 | 485 |
| Direct taxes | 210 | 222 | 237 | 254 | 230 | 227 |
| Indirect taxes | 228 | 237 | 253 | 258 | 258 | 258 |
| Social security contributions | 368 | 372 | 376 | 379 | 384 | 389 |
| Other revenue | 77 | 77 | 77 | 74 | 80 | 79 |
| **Expenditure** | 934 | 951 | 973 | 992 | 1,009 | 1,029 |
| Personnel expenditure | 163 | 163 | 165 | 166 | 165 | 166 |
| Intermediate consumption | 72 | 74 | 77 | 78 | 82 | 84 |
| Social benefits 1 | 517 | 524 | 537 | 549 | 563 | 589 |
| Subsidies | 40 | 42 | 42 | 41 | 40 | 37 |
| Interest expenditure | 68 | 70 | 69 | 68 | 68 | 67 |
| Investment | 36 | 36 | 38 | 37 | 36 | 34 |
| Capital transfers | 23 | 27 | 27 | 30 | 36 | 35 |
| Other expenditure | 15 | 15 | 18 | 22 | 20 | 17 |
| *Memo item:* Benefits for | | | | | | |
| Old-age provision 2 | 234 | 241 | 252 | 260 | 268 | 278 |
| Health care 3 | 128 | 131 | 134 | 139 | 142 | 146 |
| Unemployment 4 | 67 | 66 | 68 | 64 | 66 | 72 |
| **Balance** | – 51 | – 43 | – 30 | – 28 | – 58 | – 76 |
| Federal Government | – 30 | – 36 | – 31 | – 25 | – 29 | – 35 |
| *Land* governments | – 22 | – 14 | – 10 | – 8 | – 27 | – 31 |
| Local authorities | 0 | 4 | 5 | 5 | 1 | – 4 |
| Social security funds | 1 | 3 | 5 | – 1 | – 3 | – 7 |
| | % of GDP | | | | | |
| **Revenue** | 47.2 | 47.1 | 47.7 | 47.5 | 45.9 | 45.2 |
| Taxes | 23.4 | 23.8 | 24.8 | 25.2 | 23.6 | 23.0 |
| Direct taxes | 11.2 | 11.5 | 12.0 | 12.5 | 11.1 | 10.8 |
| Indirect taxes | 12.2 | 12.3 | 12.8 | 12.7 | 12.5 | 12.2 |
| Social security contributions | 19.7 | 19.3 | 19.0 | 18.6 | 18.5 | 18.4 |
| Other revenue | 4.1 | 4.0 | 3.9 | 3.6 | 3.8 | 3.7 |
| **Expenditure** | 49.9 | 49.3 | 49.2 | 48.9 | 48.7 | 48.8 |
| Personnel expenditure | 8.7 | 8.5 | 8.4 | 8.2 | 8.0 | 7.9 |
| Intermediate consumption | 3.8 | 3.8 | 3.9 | 3.9 | 3.9 | 4.0 |
| Social benefits 1 | 27.6 | 27.2 | 27.1 | 27.0 | 27.2 | 27.9 |
| Subsidies | 2.1 | 2.2 | 2.1 | 2.0 | 1.9 | 1.8 |
| Interest expenditure | 3.6 | 3.6 | 3.5 | 3.4 | 3.3 | 3.2 |
| Investment | 1.9 | 1.9 | 1.9 | 1.8 | 1.7 | 1.6 |
| Capital transfers | 1.2 | 1.4 | 1.4 | 1.5 | 1.7 | 1.7 |
| Other expenditure | 0.8 | 0.8 | 0.9 | 1.1 | 0.9 | 0.8 |
| *Memo item:* Benefits for | | | | | | |
| Old-age provision 2 | 12.5 | 12.5 | 12.7 | 12.8 | 12.9 | 13.2 |
| Health care 3 | 6.9 | 6.8 | 6.8 | 6.8 | 6.8 | 6.9 |
| Unemployment 4 | 3.6 | 3.4 | 3.4 | 3.1 | 3.2 | 3.4 |
| **Balance** | – 2.7 | – 2.2 | – 1.5 | – 1.4 | – 2.8 | – 3.6 |
| | Percentage change | | | | | |
| **Revenue** | 1.3 | 2.8 | 3.9 | 2.2 | – 1.3 | 0.1 |
| Taxes | 0.8 | 4.7 | 6.9 | 4.3 | – 4.6 | – 0.7 |
| Direct taxes | – 0.3 | 5.8 | 6.8 | 7.1 | – 9.5 | – 1.2 |
| Indirect taxes | 1.9 | 3.7 | 7.0 | 1.8 | 0.2 | – 0.2 |
| Social security contributions | 3.4 | 1.0 | 1.0 | 0.8 | 1.3 | 1.3 |
| Other revenue | – 4.8 | 0.8 | 0.2 | – 4.9 | 8.3 | – 0.8 |
| **Expenditure** | 0.0 | 1.8 | 2.4 | 1.9 | 1.7 | 2.0 |
| Personnel expenditure | – 0.2 | 0.1 | 1.3 | 0.1 | – 0.4 | 0.6 |
| Intermediate consumption | – 1.7 | 2.8 | 4.3 | 2.1 | 4.0 | 3.3 |
| Social benefits 1 | 1.5 | 1.4 | 2.5 | 2.3 | 2.6 | 4.5 |
| Subsidies | – 6.6 | 3.7 | 0.8 | – 1.7 | – 2.4 | – 7.7 |
| Interest expenditure | 1.1 | 2.4 | – 1.3 | – 1.0 | – 0.5 | – 0.9 |
| Investment | – 9.1 | 0.7 | 5.7 | – 2.1 | – 3.3 | – 5.9 |
| Capital transfers | – 2.0 | 17.5 | – 0.7 | 9.9 | 19.8 | – 1.5 |
| Other expenditure | – 0.3 | 1.1 | 18.7 | 22.5 | – 12.0 | – 14.8 |
| *Memo item:* Benefits for | | | | | | |
| Old-age provision 2 | 2.3 | 3.2 | 4.5 | 3.2 | 3.1 | 3.7 |
| Health care 3 | – 2.1 | 1.8 | 2.9 | 3.2 | 2.2 | 3.0 |
| Unemployment 4 | 0.5 | – 0.9 | 1.8 | – 5.4 | 2.7 | 9.0 |

**1** Including transfers from the Federal Government to the Post Office pension funds. — **2** Expenditure of the statutory pension insurance funds, on civil servants' pensions and on transfers to Post Office pension funds. — **3** Expenditure of the statutory health insurance funds and on health care benefits for civil servants. — **4** Expenditure of the Federal Labour Office and on unemployment assistance.

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*Indirect taxes: increase in excise taxes*

Indirect taxes were raised noticeably; these served particularly to lower the immediate levy burden on labour as a factor of production by increasing the tax-based share of funding for the social security funds. Thus, in 1998 turnover tax was increased, and in 1999, as part of the "ecological tax reform", energy taxes were gradually increased and their scope expanded. All in all, this is likely to have generated added revenue worth 1% of GDP in 2002 (compared with 1997). However, the ratio of indirect taxes to GDP in 2002 was only equal to the 1997 figure after having risen by ½ percentage point in 1999.

There were several factors behind this development. Revenue from trade tax (local business tax) – which is classified as an indirect tax in the national accounts – rose sharply until 1999, even though the trade capital tax was abolished in the 1998 assessment year. It went back down sharply in 2001 and 2002, however. Revenue from the tax on the purchase of land and buildings likewise peaked in 1999. In addition, revenue from turnover tax (adjusted for the increase in the taxation rate in April 1998 which led to a temporary rise in the turnover tax ratio) as a percentage of GDP declined. A large part of this was accounted for by the fact that the components subject to turnover tax rose more slowly than overall GDP, which recently had mainly been supported by (non-tax-generating) exports. Moreover, revenue from turnover tax grew more weakly in the past two years than their macroeconomic assessment basis, a fact which can be approximately derived from the national accounts. In the light of measures to combat turnover tax fraud, the reverse development, in fact, would have been expected in the past year. Finally, taxable energy consumption grew much more weakly than overall GDP, not least because of the increase in the price of crude oil and the introduction of the "ecological tax reform".

*Revenue from social security contributions dampened*

Between 1997 and 2002 revenue from social security contributions rose by an average of only 1% per year. Their share in GDP consequently fell from 19.7% to 18.4%. This is due in large part to the decline in the contribution rate to the pension insurance scheme of more than one percentage point which was made possible by the increasing use of taxes to fund pension insurance, as mentioned earlier in this article.[5] It must also be borne in mind that the contribution rates for the social security funds had not been set sufficiently high in 2002. The deficit thus amounted to €7 billion, whereas a surplus of €1 billion was recorded in 1997. This explains nearly one-third of the decline in the social security contribution ratio. In addition, the development of social security contributions was dampened by lower contribution payments on wage substitution benefits, which were adopted, above all, to relieve the strain on the Federal budget and the Federal Labour Office.

*Weight of other revenue on the decline*

Other government revenue rose only marginally during the period under review (by an annual average of ½%), causing its share in GDP to decrease by nearly ½ percentage point to 3.7%. This reflects *inter alia* the fall in revenue from government sales (which are

5 However, over the same period the average contribution rate for the statutory health insurance scheme rose by one-half percentage point.

mostly collected fees). Admittedly, this is most likely to have its foundation in the fact that fee budgets have been factored out of government budgets as independent units.[6]

## Government expenditure trends

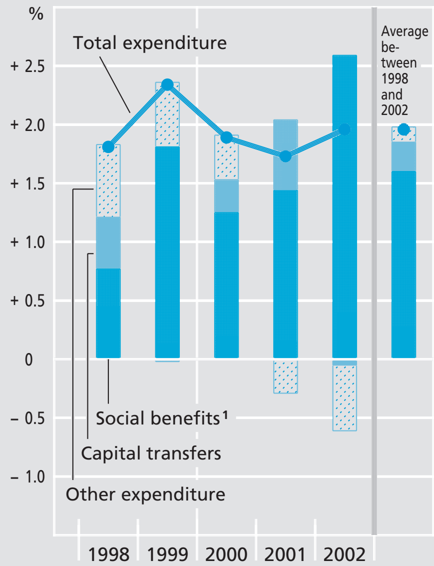
*Small contribution to consolidation from the expenditure side*

Between 1998 and 2002 expenditure rose relatively steadily by an average of around 2% per year. If cyclical factors are excluded, the adjusted expenditure ratio probably decreased slightly in the period under review, with the outsourcing of items from core government budgets having played a role. This makes it clear that, given a sluggish nominal economic growth trend, there is hardly any leeway left to increase government expenditure if public finances are to be consolidated without increasing the tax burden.

*Social benefits responsible for increase in expenditure*

The rise in expenditure was attributable in particular to social benefits,[7] which in 2002 made up 57% of government expenditure and were mainly accounted for by the social security funds. Hence around 80% of the annual average increase in overall expenditure between 1997 and 2002 can be explained by developments in this category (see the adjacent chart). This reflects the multiple increases in child benefit. Admittedly, growth in the area of old-age provision, by far the most important social benefit category, had a much greater impact. In the light of the continuous rise in the number of pensions paid and the regular pension adjustments (each +1½% on average per year) as well as the strong growth in expenditure on pensions, including payments to Post Office pension funds which

### Composition of expenditure growth by type of expenditure




1 Including transfers from the Federal Government to the Post Office pension funds.

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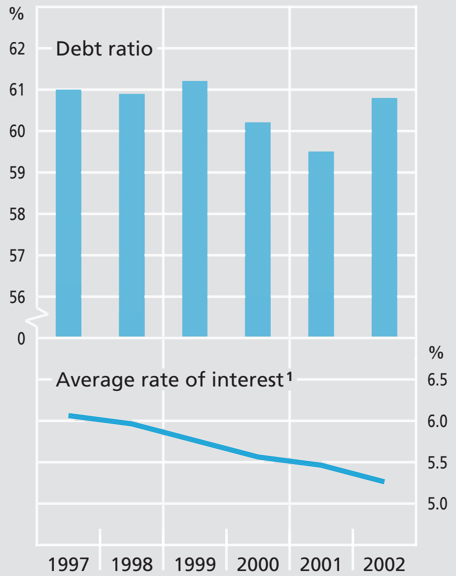
were introduced in 1999, this category rose by 3½% per year.

*Trend in expenditure on health care*

Expenditure on health care rose by an average of 2½% per year, with major differences between the various subsectors and, latterly, a strong increase in expenditure on pharmaceuticals, in particular. The fact that the ratio of expenditure on health care to GDP has remained largely constant during the entire period under review (although the trend has recently been back on the rise) is attributable

6 This contraction in the balance sheet total affects fees collected on the revenue side and particularly expenditure on human resources, purchases of intermediate inputs and investment on the expenditure side. For a more in-depth analysis see Deutsche Bundesbank, Trends in local authority finance since the mid-nineties, *Monthly Report*, June 2000, pp 50-53.
7 Including transfers from the Federal Government to the Post Office pension funds.

Debt ratio and
average rate of interest




1 Interest expenditure as a percentage of average annual government debt (as defined in the Maastricht Treaty).

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not least to the various rounds of cost-cutting measures. It must not detract from the need for a thorough reform of the overall structure of the health care system in order to increase efficiency.

*Expenditure on unemployment increased*

Whereas expenditure on unemployed persons fell by around 5% until 2000 as a result of the declining unemployment, it then rose again sharply and, by 2002, had exceeded its 1997 level – even though the number of unemployed persons was half a million fewer than in the starting year and the social security contribution payments for beneficiaries had been curtailed distinctly. The main reason for this development was that the number of recipients of unemployment benefits and the number of participants in labour market policy measures had, in fact, gone up slightly. Unemployment benefit payments, too, were raised considerably following a ruling by the Federal Constitutional Court in 2000.

*Visible decline in staffing*

Personnel expenditure – the most important expenditure category of central, state and local government – grew only moderately during the period under review (by an average of around +½% a year) and thus made a tangible contribution to consolidation. The decline in the number of staff working in the civil service by an annual average of around 1½% made a decisive contribution. Admittedly, it must be noted that the decline in staff numbers is due in part to outsourcing (especially of fee budgets) and that, in the eastern Federal states, the number of persons employed in this sector, which is still above average, has been adjusted. Negotiated wages and salaries in the public sector grew by an average of around 2% per year between 1997 and 2002. This growth was thus somewhat lower than in the private sector.

*Favourable terms of financing relieve pressure*

Interest expenditure actually went down slightly during the period under review. This was mainly attributable to low capital market rates which enabled (higher-yielding) debt instruments reaching maturity to be refinanced at favourable rates. By contrast, the debt rose by a total of 12% or over €140 billion even though proceeds from the auction of UMTS licences (€51 billion) were used to pay off debts. At 60.8% in the past year, the debt ratio once again surpassed the 60% mark, after having fallen below the limit in 2001 for the first time since 1996 (for the pattern of the debt ratio see the adjacent chart). The ratio between interest expenditure and debt, which can be approximated as the average interest on government debt, went down from 6.1% in 1997 to 5.3% last year.

*Declining fixed capital formation*

Government fixed capital formation declined by an average of 1% each year between 1997 and 2002; it rose between 1997 and 1999 and then declined markedly in the three years thereafter. In 2002 investment made up just under 3½% of government expenditure (compared with nearly 4% in 1997). This development is partly the consequence of the extreme deterioration of the municipal budget balances over the past few years since the municipalities account for the largest portion of expenditure on tangible fixed assets and react to pressure on budgets primarily by reducing investment. The outsourcing of fee budgets and the government real estate administration (including investment activity) from core budgets is also likely to play a role. As part of the process of consolidating government budgets, a decline in government investment is not to be regarded as negative if it reflects greater efficiency in administrating government fixed assets or more targeted government investment activity – possibly combined with increased private sector provision of infrastructure. All the same, the maintenance and development of the government infrastructure is a general government task which is particularly significant for macroeconomic growth; this means that the reduction in the weight of this category of expenditure tends to have worsened the structure of government finance.

*Distinct rise in capital transfers*

By contrast, government capital transfers rose steeply. These include, in particular, investment grants to the corporate sector and the grant to home buyers, which is posted in the national accounts as a capital transfer to households. The latter shows strong growth because it was introduced in 1996 and is given for eight years at a time, with the effect that an additional generation will have grown into this promotion measure every year until 2003. Between 1997 and 2002 the annual volume of the grant to home buyers rose by €7½ billion.[8]

## Trends at individual levels of government

*Fluctuations in tax revenue characterise central, state and local government budgets*

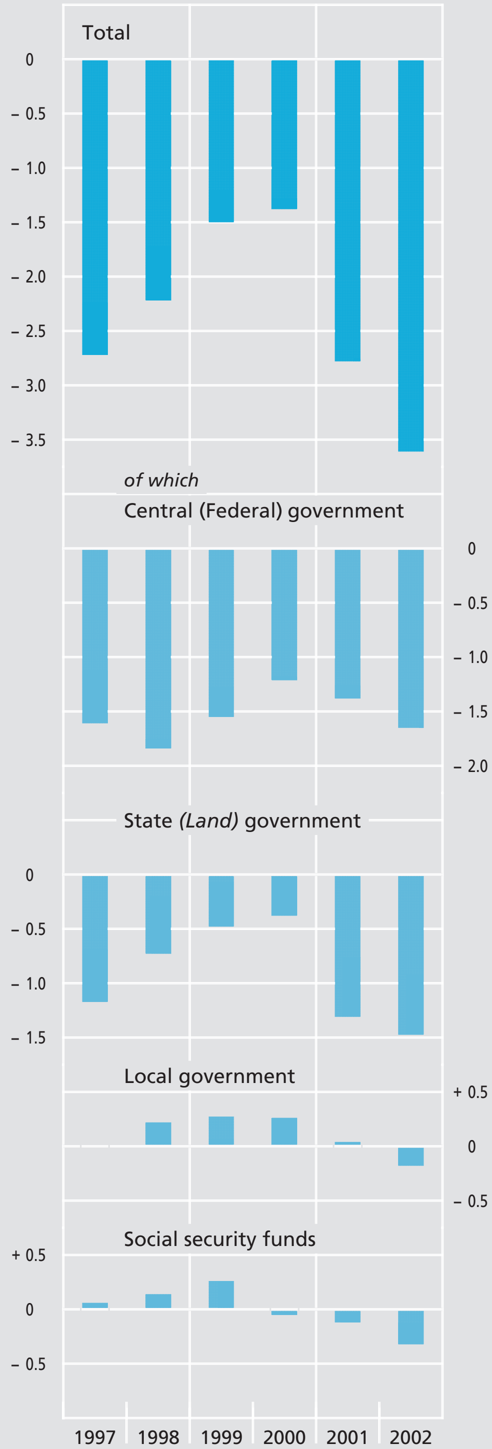
The central, state and local government budget trend was characterised by sharp fluctuations in tax revenue. The local governments, which are the beneficiaries of trade tax, which is particularly vulnerable to the business cycle, experienced the sharpest decline in the past two years, with the increase in the levy on trade tax payable to central and state government playing a role. However, local government had, in earlier years, greatly benefited at times from increases in profit-related tax revenue. On the whole, the Federal Government's revenue grew the strongest during the period under review. This, admittedly, was attributable above all to the tax increases which the Federal Government then used to play an increasing role in financing the pension insurance scheme.

Central, state and local government expenditure rose by 2.2% on an annual average. If one looks at expenditure less payments to social security funds, whose growth was above

8 The grant to home buyers is generally designed to replace the previous promotion pursuant to section 10e of the Income Tax Act. The "expiry" of section 10e is reflected above all by an increased volume of wage tax revenue.

Budget balances of the individual levels of government

as a percentage of GDP

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average, central, state and local government expenditure increased by an average of 1.3% a year, with central and local government raising expenditure by around 1% and state government by 2%. The staff-heavy state government budgets were subjected to particular strains caused by rising expenditure on pensions. These payments have gone up by around one-quarter and now already account for over 6% of all state government expenditure.

*Dramatic growth of central, state and local government deficit*

The general government deficit in 2002 was €70 billion, nearly €20 billion more than in 1997. In many cases, the upper net borrowing limits under budgetary law were overshot. The deficit is attributable – more or less in equal parts – to central government, on the one hand, and to state and local government, on the other.

*Social security funds slid into deficit*

The debt financing of social security funds is not permitted as a general rule. All the same, many health insurance institutions, after having depleted their reserves, recently took up loans. On the whole, the social security funds recorded rising surpluses[9] between 1997 and 1999, especially because the fluctuation reserves of the statutory pension insurance scheme had to be replenished to a statutory minimum level after this level had been undershot in previous years due to vast deficits. Beginning in 2000, the social security funds slid back into the red. In 2002 the shortfalls totalled 0.3% of GDP and were accounted for in roughly equal parts by the pension insurance fund and health insurance

9 The deficit of the Federal Labour Office is covered by grants from the Federal Government.

funds. Unexpectedly weak growth of income subject to compulsory insurance contributions, particularly during the past year, was the main factor behind this development, which took place despite an increase in the contribution rates to the health insurance funds and in Federal grants to the pension insurance scheme. Negative wage drift had a major impact (not least as a result of reduced special payments and fewer overtime hours worked). The decline in employment also played a role. The growth in expenditure on social security funds (+2¾%) during the period under review considerably outpaced that of central, state and local government.

## Outlook

*2003 associated with great uncertainty*

The development of public finances this year is subject to great uncertainty in the light of macroeconomic risks. From today's vantage point, the continued unfavourable macroeconomic trend will be reflected in rising cyclically-induced revenue shortfalls from taxes and social contributions as well as in added labour-market-related expenditure. Assistance to flood disaster victims will put an additional strain on central, state and local government, albeit probably to a lesser extent than originally expected. These, however, contrast with a considerable volume of revenue-enhancing measures with a total scope of around ½% of GDP.[10] Moreover, there are tax measures still in the legislative process which are designed to increase revenue. As regards expenditure, very prudent budget management is to be expected in the light of the agreements reached by the Financial Planning Council and of the extremely tense budget situation which central, state and local government are facing. In addition, cost-cutting measures affecting the health insurance funds and the Federal Labour Office will probably curb expenditure growth. On the whole, therefore, during the current year the structural deficit is expected to decrease, representing consolidation progress. It seems probable from today's vantage point, however, that the 3% overall deficit ceiling will be overshot. The outcome will ultimately hinge on subsequent macroeconomic developments and on the extent of consolidation measures taken.

*Consolidation unavoidable over the medium term*

Seen over the medium term, a comprehensive structural consolidation of public finances will be necessary. Sound public finances are an important foundation for sustainable macroeconomic growth amid stable prices. They foster confidence in the ability of general government to limit the burden of tax and social security contributions in the future and to handle the demographic strains on public finances. A structurally balanced budget is, not least, a key requirement of the European Stability and Growth Pact. It enables the pressing burden of interest rates to be reduced and gives government budgets room to breathe over the cycle without running the risk of overshooting the 3% ceiling.

10 Besides increasing the tax on energy, temporarily raising the corporation tax rate and further raising the tobacco tax, the contribution rate to the pension insurance scheme was increased, as was the maximum level of earnings subject to pension and unemployment insurance contributions. In addition, the average contribution rate to the statutory health insurance funds was already distinctly increased at the beginning of the year.

Germany's most recent stability programme of December 2002 embarks on a path of consolidation which, in line with European commitments, envisages a balanced budget in 2006. However, this is based on optimistic growth assumptions. Now it is vitally important to put the announced structural improvements on a sound basis by means of suitable fiscal policy measures. Short-term unforeseen deficits caused by a temporary economic slump can be handled if the path on which the stability programme is based is implemented. What this also means, though, is that, in an upswing, deficits have to be reduced much more quickly. Developments in the period between 1998 and 2000 should serve as a warning: the opportunity to reduce structural deficits was missed because favourable economic developments and special effects created the illusion of consolidation. Fundamentally, it seems advisable based on the experience of the past few years to derive budget plans from conservative macroeconomic assumptions. This also means that the self-financing effects of tax policy measures should not be factored into the plans from the outset. To be better able to assess structural budgetary developments, analyses of public finances should be supplemented by a cyclically adjusted analysis and by estimations of other transitory influences.

*Central, state and local government have no scope for increasing expenditure*

The reduction in government deficits must begin with central, state and local government budgets. Their deficit ratio in 2002 was 3.3%, half of which was accounted for by the Federal Government and the other half by the *Land* governments and local authorities. That results in a need for structural consolidation totalling just under 2½% of GDP,[11] on top of which there will be, in 2004 and 2005, income tax cuts totalling just over 1% of GDP. However, if it is assumed that levies are not to be raised elsewhere, central, state and local government expenditure must be kept largely unchanged until this objective has been attained in order to meet European commitments. All levels of government are called upon here to work towards making their government activities more efficient and ultimately "leaner". Structurally balanced budgets should be the key fiscal policy yardstick for all levels of government to be judged by.

*Need for social security reform*

In 2002 the social security funds posted relatively small deficits compared to central, state and local government. In the light of the general ban on debt financing, it may be necessary to raise contribution rates in order to balance the budget. This does not absolve social security funds of the need for radical reforms, however. The high and rising social security contributions and the attendant rise in the cost of labour as a factor of production, are posing a considerable impediment to growth. Demographic trends will make the problem even worse in the future. This means that the statutory social security benefits need to be reviewed comprehensively – not only to prevent contribution rates from rising, but to actually reduce them visibly.

11 This assumes that the objective is a structural deficit of ½% of GDP and that cyclical and other temporary factors have put a strain on central, state and local government in 2002 totalling ½% of GDP.

## Annex

### The role of cyclical adjustment in assessing public finances

When analysing public finances, it is of particular interest to know whether an observed change is attributable to sustained – structural – factors or whether it is just a temporary development that shows up in public budgets on a one-off or temporary basis. Structural developments are characterised in particular by fiscal policy. However, they can also be rooted in other factors such as demographics. Of the transitory influences, cyclical effects are usually the most important. They are considered to be induced by the fluctuation of macroeconomic developments around a "normal" situation; influences on government budgets generated by these movements will "automatically" recede. Additionally, further transitory measures or influences (eg indemnification payments to former forced labourers or one-off proceeds from the auction of UMTS licences) could be reflected in government budgets.

"Cyclical adjustment" is an attempt to calculate the cyclical influence on the government budget – and, here, particularly on the government budget balance. Cyclical adjustment procedures are used by the European Commission when evaluating the stability and convergence programmes as well as public finances in the European Union's member states, for instance. The Deutsche Bundesbank, the European System of Central Banks (ESCB) and international organisations such as the IMF and the OECD likewise use cyclical adjustment methods in support of their fiscal policy analyses.[12]

The common feature of the approaches used by the European Commission, the Bundesbank and the ESCB is that they perceive cyclical fluctuations as medium-term, symmetrical deviations from a trend which balance out across the business cycle. This ensures that positive and negative influences offset one another over time. This concept of automatic stabilisers is also an underlying element of the European Stability and Growth Pact, by means of which the member states have undertaken to bring their government budgets close to balance or into surplus in the medium term, ie over the business cycle.

The business cycle generally affects government budgets both in terms of revenue and expenditure. On the revenue side, the Bundesbank's cyclical adjustment procedure covers wage tax, "profit-related" taxes, turnover tax and excise tax, as well as social security contributions to the Federal Labour Office and to the statutory health insurance funds and nursing care insurance scheme. On the expenditure side, it is essentially unemployment benefits which are considered cyclically dependent.[13]

12 For more on the European Commission's method see European Commission (2003), Cyclical adjustment of budget balances, ECFIN/158/2003-EN. A description of the methods used by the Bundesbank and the ESCB may be found in Deutsche Bundesbank, Cyclical adjustment of the public sector financial balance in Germany – a disaggregated approach, *Monthly Report*, April 2000, pp 31-44; M Mohr (2001), Ein disaggregierter Ansatz zur Berechnung konjunkturbereinigter Budgetsalden in Deutschland: Methoden und Ergebnisse, *Discussion paper 13/01*, Deutsche Bundesbank, and C Bouthevillain et al (2001), Cyclically adjusted budget balances: an alternative approach, *ECB Working Paper No 77*. On the OECD's method see Van den Noord (2000), The size and role of automatic fiscal stabilizers in the 1990s and beyond, *Economic Department Working Papers No 230*, OECD; for the International Monetary Fund's approach see Hagemann, R (1999), The Structural Budget Balance, *IMF Working Paper No 99/95*.
13 Moreover, the cyclical part of the Federal grant to the statutory pension insurance scheme is calculated as well. For the exact specification and other aspects see Deutsche Bundesbank, Cyclical adjustment of the public sector financial balance in Germany – a disaggregated approach, loc cit and C Bouthevillain et al, Cyclically adjusted budget balances: an alternative approach, loc cit.

The cyclical component of these budget items is largely determined by the cyclical swings of the respective macroeconomic assessment bases and by their dependency on this reference value (revenue and expenditure elasticities). The underlying approach used here takes recourse to the nominal macroeconomic bases. Wage tax is tied to total gross wages and salaries per employed person and private sector employment, "profit-related" taxes to property and entrepreneurial income, the turnover tax to private consumption and private homebuilding investment, excise tax to private consumption, and social security contributions to gross wages and salaries in the private sector. The cyclically-induced expenditure on unemployment benefits is determined from the pattern of unemployment figures (adjusted for changes caused by labour market policy measures). The respective revenue and expenditure elasticities are largely derived from legal regulations.

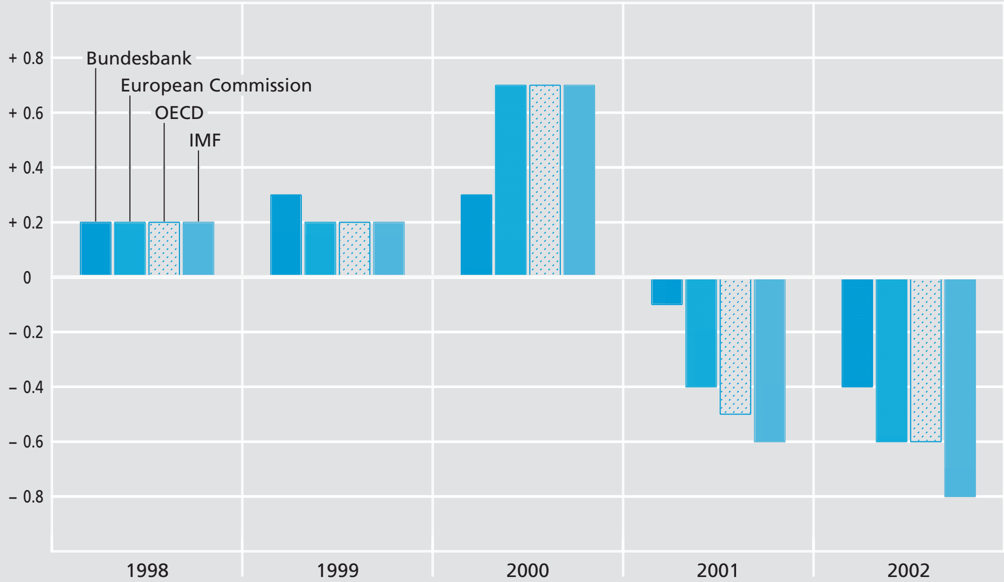
A statistical detrending technique is applied to calculate the cyclical component of the various macroeconomic bases. A Hodrick-Prescott (HP) filter is used to calculate the medium-term trend for all macroeconomic bases and the deviation of the observed variable from its trend is interpreted as the cyclical component (temporary trend deviation).[14] For the results of the cyclical adjustment procedure which are on the current end, in particular, it is important to know how macroeconomic developments are assessed in the next few years (the "end-point problem"). A correction of results and of the interpretation can occur if the forecast has to be revised, thus making ex post adjustments to the trend estimate necessary. This is an expression of the fact that the assessment of the current situation (relatively good, bad or normal) depends significantly on – uncertain – future developments. However, ex post revisions usually only affect the level of the cyclical balance. Pronounced ex post adjustments of the estimation of the year-on-year change in the cyclical influence are rarely necessary.

As opposed to the "disaggregated method" used in this Monthly Report article, in which the individual macroeconomic bases are analysed separately and which relies on nominal reference variables, the "aggregated approaches" used by the European Commission, the OECD and the IMF assume a proportional relationship between the cyclical component of the budget balance and real GDP.[15] This means specific developments in individual macroeconomic bases or phase shifts between budgetary components and GDP are not taken into account. For instance, macroeconomic developments in 2000 had a relatively minor positive cyclical impact on public sector budgets because the structure tended to generate little in the way of taxes. In this year the disaggregated approach therefore shows a weaker cyclical improvement in the budget balance than aggregated procedures. For 2001 the Bundesbank's procedure shows a relatively weak decline in the cyclical components, especially because the average unemployment figures hardly changed and private consumption rose relatively strongly. For that reason, the cyclical expenditure on unemployment and the cyclical share of turnover tax and excise tax revenue have remained largely constant. In addition, prices went up relatively strongly this year, which means that the cyclical deterioration had a less pronounced

14 Here the HP filter is based on a smoothing parameter (lambda) of 30, which corresponds to an average business cycle length of around eight years. Although the choice of smoothing parameter affects the level of the estimated cyclical components, the crucial statements remain unchanged even if other common values are used, such as 20 or 100.
15 For an overview of methods of calculating the cyclical component of GDP, please see Deutsche Bundesbank, The development of production potential in Germany, *Monthly Report*, March 2003, pp 41-52.

## Change in the cyclical component of the budget balance *

Year-on-year change in percentage points




* Budget balance: as a percentage of GDP. A positive (negative) value means a positive (negative) cyclical influence. This chart shows the results of the procedures used by the Bundesbank, the European Commission (see European Commission (2003), op cit), the OECD (see OECD, Economic Outlook, No 72, December 2002) and the IMF (see IMF, World Economic Outlook, April 2003).

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impact on the general government budget than is suggested by basing the observation on real GDP.

An additional difference between the two cyclical adjustment methods is that the approaches used by the European Commission, the OECD and the IMF to calculate the cyclical situation do not rely on a statistical detrending method but on a production potential approach.[16] Finally, the method on which this Monthly Report article is based uses a more sophisticated approach to defining the part of revenue and expenditure which is sensitive to the cycle – what this does, for instance, is to consolidate payments within the government sector, thereby not taking account of them as being cyclically induced.

Although the various procedures lead in some cases to different assessments of the level of the cyclical influence on the general government budget for the reasons cited above, the statements regarding the year-on-year change in the cyclical influence are for the most part very similar. The calculations made by the European Commission, the OECD and the IMF, as well as the disaggregated approach used here, all state that the reduction in the deficit ratio by around 1¼ percentage points between 1997 and 2000 can be explained largely by cyclical developments (see above chart). The subsequent rise of around 2¼ percentage points in 2001 and 2002 are to a large degree regarded by the various approaches as not cyclically induced.

16 Since autumn 2002 the European Commission has been using a production potential approach after previously having used a HP filter for detrending. The cyclical component of the budget balances reported for Germany and some other countries, however, will still be calculated using the old procedure for a transitional period. See European Commission, Cyclical adjustment of budget balances, loc cit.

For this period, the Bundesbank's approach shows a lesser cyclical influence. Besides the factors listed above, another factor worth mentioning is that the nominal budget components displayed a less profound cyclical impact, owing to opposing price effects, than the development of real GDP.

The sharp fluctuations in the "profit-related" taxes between 1998 and 2002 (even if changes in tax law are taken into account) are seen as cyclically induced to just a very minor extent by the approaches being looked at here. This is attributable to the fact that some of the relevant factors may have been reflected in total GDP or in property and entrepreneurial income to only a very limited extent. Generally, when judging budgetary developments, other influences above and beyond the cyclical adjustment procedure should be taken into account.