

## A DISAGGREGATED FRAMEWORK FOR THE ANALYSIS OF STRUCTURAL DEVELOPMENTS IN PUBLIC FINANCES

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### 1. Introduction and overview

In this paper we analyse the fiscal development in six countries – Belgium, Finland, Germany, Italy, the Netherlands and Portugal – over the period from 1998 to 2005, *i.e.* in the period following the year relevant for the qualification for EMU. We make use of the disaggregated framework for public finance analysis proposed by Kremer *et al.* (2006).<sup>1</sup> The framework allows us to distinguish the factors that affect public finances in broad categories and provides a standardised method to evaluate their impact. In particular, it separates the influence of the economic environment from factors relating to the legal and institutional setting and to policy decisions. The framework provides a clear structure and, thus, helps to increase the transparency and effectiveness of public finance analysis, in particular, in a multi-country setting.

We focus on “structural” developments, defined as changes in the ratio of individual budgetary categories with respect to nominal trend GDP excluding the transitory effects of the economic cycle and the temporary measures taken by governments. The assessment of cyclical effects on each budgetary category is based on the methodology developed within the European System of Central Banks (ESCB). Contrary to most other cyclical adjustment methods that focus on the aggregate output gap, *i.e.* the deviation of output from its potential level, the ESCB

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<sup>1</sup> A slightly different version was previously proposed by Kremer and Wendorff (2004). The disaggregated framework is also useful to assess the consistency and increase the transparency of fiscal forecasts, see Kremer *et al.* (2006) for an example.

approach also corrects budgetary outcomes for the impact of cyclical fluctuations in the composition of aggregate demand and national income.<sup>2</sup>

Cyclical effects and temporary measures are usually the most important transitory factors.<sup>3</sup> Many institutions – the European Commission, the IMF and the OECD among them – now regularly produce indicators of cyclically adjusted budget balances. The issue of discretionary measures with a temporary impact on the budget has come to the fore more recently, largely in the European context. The European Commission (2004) and Koen and van den Noord (2005) have shown that the effects of one-off measures have been substantial and persistent in some European countries in the last years. Recent stability and convergence programmes submitted by the European member states indicate that the resort to one-off measures continues to be substantial.

On the revenue side, a distinction is made between direct and indirect taxes, social contributions and non-tax-related revenue. Changes in the structural revenue ratios of taxes and social contributions are attributed to:

- (i) the impact of macroeconomic developments,
- (ii) discretionary fiscal policy measures of a permanent nature, and
- (iii) residual developments.

The residual captures the effects of irregular, mostly country-specific factors, which need to be explained on a case-by-case basis. On the expenditure side, changes in the structural expenditure ratio are split into the contribution of interest payments, social payments, subsidies, compensation of public employees, intermediate consumption, government investment and an aggregate of other categories. Additional information is provided concerning changes in the number of public employees, health expenditure, old-age pensions, unemployment benefits and social transfers in kind.

The analysis shows that the primary budget balance ratios worsened in structural terms in all six countries with the exception of Finland, even though the unadjusted budget balances do not display a common trend over the 1998-2005 period. As the analysis reveals, in general both structural macroeconomic developments – via their impact on revenue from taxes and social contributions – as well as policy measures contributed to this deterioration. On the revenue side, fiscal drag, differences between the trend growth of GDP and the respective macroeconomic bases, and legislation changes – in particular cuts in direct taxes – explain in general a significant part of the changes in budgetary ratios. However, in

<sup>2</sup> For an extensive description of the ESCB's cyclical adjustment procedure see Bouthevillain *et al.* (2001). A description of methods based on the output gap, together with recent estimates of budgetary sensitivities, can be found, for example, in Girouard and André (2005). A review of some alternative approaches to the cyclical adjustment of government budgets, as well as a discussion of the role of this indicator in the European context, can be found in Banca d'Italia (1999).

<sup>3</sup> The report *Improving the Implementation of the Stability and Growth Pact*, approved by the European Council of 22-23 April 2005, proposes the same correction to identify the adjustment effort of member states of the euro area or ERM II which are not satisfying the medium-term objective.

individual years and, in some instances, also over longer periods, specific factors that are not necessarily linked to the macroeconomic development or recent policy decisions had a significant impact on the structural revenue ratios. The analysis of the structural development of individual budget categories on the expenditure side shows the main driving factors underlying the expenditure stance. In the countries under review, the evolution of social payments were particularly relevant for the fiscal deterioration.

In Section 2 the proposed framework of analysis is briefly described. In Section 3 we present an overview of the common features of the budgetary developments which emerge from the analysis, followed by six paragraphs, each dealing with a specific country.

## 2. The disaggregated framework

In the disaggregated framework, first the structural levels of revenue and expenditure categories are determined and, second, the changes in those corrected aggregates are attributed to a few relevant factors common to all countries (see also the tables in Section 3).<sup>4</sup>

### 2.1 Measuring structural balances

The structural levels of the main budgetary categories are derived by subtracting the cyclical component and the impact of temporary measures for the individual categories. To determine *cyclical impacts*, the ESCB method is used.<sup>5</sup> In this approach, revenue and expenditure categories are adjusted individually on the basis of the deviation from trend of the respective macroeconomic bases in real terms. The trend is estimated using a Hodrick-Prescott filter with a smoothing parameter of  $\lambda = 30$ . The cyclical component of a specific budgetary category is calculated by applying a constant elasticity to the trend deviation. In the standard implementation the following budgetary categories are adjusted (with corresponding macroeconomic bases in brackets): direct taxes on private household income (average compensation of employees and employment in the private sector), direct taxes on corporate income (operating surplus), social contributions paid in the private sector (average compensation of employees and employment in the private sector), indirect taxes (private consumption), unemployment-related expenditure (number of unemployed persons). Average compensation of employees and private consumption are expressed in real terms using the private consumption deflator; for the operating surplus the GDP deflator is used.

<sup>4</sup> Cf. Kremer *et al.* (2006) for a detailed description.

<sup>5</sup> Cf. Bouthevillain *et al.* (2001).

Concerning *temporary measures*, their effects on budgetary categories have been assessed by each of the authors for his or her own country on the basis of the following precepts. First, effects on public finances are considered as temporary if they affect the budgetary outcomes for a limited number of years (in practice up to three years). The temporary influence can be either strictly one-off or self-reversing; in the latter case measures will be regarded as temporary even if the reverse effects take more than three years to unwind (e.g. a capital transfer in return for the assumption of pension liabilities). Second, only significant effects with a favourable or unfavourable budgetary impact of at least close to 0.1 per cent of GDP are taken into account. In particular, the effects of uncoordinated decisions taken by regional or local authorities that are not significant in themselves are excluded. Third, attention is restricted to government policy actions, excluding events outside the control of governments. In general, the definition of a temporary measure requires a clear benchmark. Usually, this is particularly difficult to obtain for expenditure-side measures, and the major impact of the measures considered occurs on the revenue side.<sup>6</sup>

The structural revenue and expenditure categories are expressed as *percentages of nominal trend GDP* defined as real trend GDP (estimated using the Hodrick-Prescott filter with  $\lambda = 30$ ) multiplied by the actual GDP deflator.

## 2.2 Identifying the sources of changes in structural balances

The tables in the country chapters of Section 3 display the decomposition of *changes in the structural ratios*, as defined above, of the balance and the main budgetary categories. The tables first summarise the impact of the main adjustments made to construct the structural ratios, showing the role of the changes in the effects of the cycle and temporary measures. By adding the structural ratio of interest payments to GDP to the structural balance ratio the *structural primary balance ratio* is derived. This is the starting point for analysing structural revenue and primary expenditure developments. As additional information, the annual change in interest payments that is attributable to changes in the average interest rate on public debt and to changes in the stock of debt is shown.

In the next part of the tables the changes in the *structural revenue ratios* are analysed. Taxes and social contributions, on the one hand, and non-tax-related revenue, on the other, are examined separately. Taxes are further broken down into:

- 1) direct taxes payable by corporations,
- 2) direct taxes payable by households,

<sup>6</sup> Revenues from the sales of UMTS licences and real estate, which are classified as negative “acquisition of non-financial assets” and “investment”, respectively, form the major exceptions. Sales of UMTS licences improved the 2000 budget balance in Germany by 2.5 per cent of GDP, in the Netherlands by 0.6 per cent of GDP and in Italy by 1.2 per cent of GDP. Sales of real estate improved the balance in Italy by 0.9 per cent of GDP in 2002. For detailed information on the temporary measures included in the analysis see Kremer *et al.* (2006).

- 3) social contributions and
- 4) indirect taxes.

The changes in the structural revenue ratios of taxes and social contributions are attributed to four factors: *fiscal drag*, *decoupling of the tax base from GDP*, *legislation changes* and a *residual*. As an additional piece of information, the tables give also an estimate of those parts of revenue which have an equal impact on both the revenue and expenditure side and therefore do not affect the balance, *i.e.* direct taxes and social contributions on the civil servants' wage bill and indirect taxes paid by general government.

### 2.2.1 Fiscal drag

We use the term *fiscal drag* in a broad sense: it applies not only to progressive income taxes which have elasticities with respect to tax bases larger than one, but to all revenue items which have elasticities different from unity. As such, the fiscal drag associated with a positive income change can even be negative as, for instance, for excise taxes: as they are volume-based, price increases may leave tax revenues unaffected or lead to revenue decreases while the corresponding nominal tax base would rise. Consequently, the ratio of excise taxes to the nominal trend base would decrease. The contribution of *fiscal drag* in a revenue category to the change of the structural revenue ratio is generally computed as<sup>7</sup> (where  $\varepsilon$  denotes the elasticity of the revenue category  $R$  with respect to its macroeconomic tax base,  $g$  the nominal trend growth rate of the base and  $Y$  the nominal trend GDP):

$$\frac{(\varepsilon - 1)g_t R_{t-1}}{Y_t}$$

### 2.2.2 Decoupling of the tax base from GDP

In the absence of legislation changes, the ratio of a revenue category to nominal (trend) GDP might change even when the elasticity with respect to the macroeconomic base amounts to unity. This can happen when the (trend) growth rate of the tax base deviates from the (trend) growth rate of nominal GDP. This deviation is denoted as *decoupling of the tax base from GDP*. The contribution of the decoupling to the change of the structural revenue ratio (for each revenue category) is generally computed as (where, in addition to the notation above,  $\gamma$  denotes the growth rate of nominal trend GDP):

$$\frac{(g_t - \gamma_t)R_{t-1}}{Y_t}$$

<sup>7</sup> This and the following formula are simplifications; see Kremer *et al.* (2006) for details. Similar to nominal trend GDP, the nominal trend of a macroeconomic base used for the calculation of fiscal drag and decoupling is calculated by multiplying its real trend with the respective deflator.

### 2.2.3 Legislation changes

Usually, a significant part of the change in the structural revenue ratios is due to changes in tax and social contributions laws. Expressed as a percentage of nominal trend GDP, the estimated direct impact of such changes is given in the row *legislation changes*. When interpreting the presented results, it has to be kept in mind that the estimation of the fiscal effects of legislation changes is sometimes subject to considerable uncertainty.

### 2.2.4 Residual

Changes in the structural ratio of taxes and social contributions to GDP not explained by the three factors above are attributed to the *residual*. The residual component is an important element of the disaggregated framework and may contribute in various ways to the analysis of public finances. It may help to understand better the past developments, indicating the quantitative importance of particular unsystematic events. It may show favourable or unfavourable tendencies in specific budgetary categories, requiring further analysis. It may also reveal a need to reassess the impact of legislation changes or biases in revenue elasticities. In many cases, a specific reason for a residual can be given. However, a full explanation of past residuals is not always possible *ex post* because tax revenues are affected by various factors. By contrast, *ex ante* explanation of residuals in a forecasting exercise should be part of the “story” underlying the forecast.

The final part of the tables is devoted to the analysis of annual *changes in the structural expenditure ratios*. It also provides background data on changes in the number of public employees and in health expenditure. The breakdown into components allows the main factors affecting the structural expenditure ratio to be identified and quantified and their effect on the evolution of the fiscal balance to be quantified.

## 3. Analysing budgetary developments in individual countries

The results presented in this section cover the period from 1998 to 2005 for six countries: Belgium, Finland, Germany, Italy, the Netherlands and Portugal. The first subsection summarises some features of the public finance developments in the various countries. In the following sections a detailed analysis for each country is provided.<sup>8</sup>

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<sup>8</sup> This section is based on the national accounts data and projections available in the summer of 2006.

In contrast to the ESA 95 figures, revenue include, with a positive sign, taxes paid by the non-government sector to the EU budget and, with a negative sign, transfers from the EU budget to government, while expenditure include, with a positive sign, subsidies and other transfers paid by the EU budget to the non-government sector, and with a negative sign, transfers from government to the EU budget. Net payments from government to the EU budget are included in expenditure, if positive, and in revenue, if negative, so that net lending/net borrowing is not affected, cf. also Kremer *et al.* (2006), p. 62.

### 3.1 General remarks

Over the 1998-2005 period, the unadjusted and structural budget balances of the six countries do not show a common trend. In three countries (Belgium, Finland and the Netherlands) the structural balance ratio improved while in the other three countries it worsened (Germany, Italy and Portugal). This picture changes, however, for the structural primary budget balances, since the favourable refinancing conditions reduced interest payments as a percentage of trend GDP in all countries, despite diverging debt developments. In most countries the structural primary balance ratio clearly worsened (see the following table).

The exception regarding the development of the structural primary balance ratio is Finland. Here, a significant reduction of the fiscal burden was more than compensated for on the expenditure side. The fall in the structural primary expenditure ratio was supported by the strong trend GDP growth. In Germany, too, both the structural revenue and primary expenditure ratios declined. Expenditure-side improvement in the later years of the period was, however, not strong enough to offset the overall increase, in particular, in the social payments ratio and several adverse revenue-side developments. In the other four countries, the structural primary expenditure ratios rose over the reporting period. Here, increases, in particular, in the structural ratios of old-age and healthcare-related expenditure to GDP played a role. While the Netherlands took significant compensatory measures at the end of the period, the structural primary expenditure ratios of Belgium, Italy and Portugal increased or were roughly constant in most years. In Belgium and Italy legislation changes let overall to a decrease of the tax burden. In the Netherlands there was also noticeable consolidation on the revenue side in the later years. In Portugal the structural revenue ratio increased over the whole period. It has to be noted, however, that this was, *inter alia*, related to public sector developments that are also reflected on the expenditure side.

The development of structural revenue was generally significantly influenced by legislation changes. More specifically, in all countries the direct tax burden was reduced and in most cases this was partly compensated by an increase in indirect taxes (for Italy, this pattern was caused by the 1998 tax reform which introduced a new regional tax on productive activities (IRAP) which was classified under indirect taxes). However, other factors also played a role in revenue developments. For example, in some countries a low trend growth in wage income relative to GDP had a negative influence on the structural ratios of direct taxes payable by households and social contributions to GDP. Furthermore, in individual years and, in some instances, also over longer periods, specific factors that are not necessarily linked to the macroeconomic development or recent policy decisions had a significant impact on the structural revenue ratios. For example, the high volatility of profit-related taxes is generally reflected only partly in the macroeconomic base (operating surplus which *inter alia* does not reflect write-offs on corporate balance sheets). In some cases also indirect taxes developed differently from what would have been expected on the basis of the development of the macroeconomic base and legislation changes. Here, changes in the efficiency of tax collection or in the average VAT rate relating

Table 1

### Structural Fiscal Components – Summary of Country Results \*

(percent of trend GDP)

| Belgium                                | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 98-05 <sup>(1)</sup> |
|----------------------------------------|------|------|------|------|------|------|------|------|------|----------------------|
| Balance                                | -1.4 | -0.2 | -0.7 | -0.5 | -0.4 | -0.6 | -1.1 | -0.6 | 0.1  | 1.5                  |
| Interest payments                      | 7.7  | 7.3  | 6.9  | 6.7  | 6.5  | 5.8  | 5.3  | 4.8  | 4.3  | -3.3                 |
| Primary balance                        | 6.3  | 7.1  | 6.2  | 6.2  | 6.1  | 5.2  | 4.1  | 4.2  | 4.4  | -1.9                 |
| Total revenue                          | 50.0 | 50.4 | 50.1 | 50.2 | 50.2 | 50.2 | 49.6 | 49.8 | 50.2 | 0.2                  |
| Taxes and social contributions overall | 47.0 | 47.4 | 47.1 | 47.1 | 46.7 | 46.9 | 46.4 | 46.7 | 47.0 | -0.0                 |
| Non-tax-related revenue <sup>(1)</sup> | 3.0  | 3.1  | 3.0  | 3.1  | 3.4  | 3.3  | 3.2  | 3.1  | 3.3  | 0.3                  |
| Total primary expenditure              | 43.7 | 43.3 | 43.9 | 43.9 | 44.1 | 45.0 | 45.4 | 45.6 | 45.8 | 2.1                  |
| Social payments                        | 22.8 | 22.5 | 22.6 | 22.6 | 22.9 | 23.3 | 23.7 | 23.8 | 23.6 | 0.9                  |
| Subsidies                              | 1.5  | 1.6  | 1.6  | 1.5  | 1.6  | 1.5  | 1.6  | 1.6  | 1.9  | 0.3                  |
| Compensation of employees              | 11.8 | 11.6 | 11.8 | 11.8 | 11.8 | 12.2 | 12.2 | 12.0 | 12.1 | 0.3                  |
| Intermediate consumption               | 3.2  | 3.2  | 3.3  | 3.3  | 3.3  | 3.7  | 3.7  | 3.6  | 3.6  | 0.4                  |
| Government investment                  | 1.7  | 1.7  | 2.0  | 2.0  | 1.8  | 1.7  | 1.7  | 1.8  | 1.8  | 0.1                  |
| Other <sup>(2)</sup>                   | 2.7  | 2.7  | 2.6  | 2.7  | 2.6  | 2.7  | 2.6  | 2.7  | 2.8  | 0.1                  |
| Finland                                | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 98-05                |
| Balance                                | -1.2 | 0.7  | 0.6  | 6.2  | 4.2  | 4.2  | 2.4  | 2.2  | 2.6  | 3.8                  |
| Interest payments                      | 4.2  | 3.6  | 3.0  | 2.9  | 2.7  | 2.1  | 1.7  | 1.5  | 1.5  | -2.7                 |
| Primary balance                        | 3.0  | 4.2  | 3.6  | 9.0  | 6.9  | 6.3  | 4.2  | 3.7  | 4.0  | 1.0                  |
| Total revenue                          | 55.6 | 54.5 | 53.4 | 56.3 | 53.3 | 53.5 | 52.2 | 52.4 | 52.3 | -3.2                 |
| Taxes and social contributions overall | 46.8 | 46.1 | 45.8 | 47.7 | 44.7 | 44.9 | 43.6 | 43.4 | 43.6 | -3.2                 |
| Non-tax-related revenue <sup>(1)</sup> | 8.8  | 8.3  | 7.6  | 8.6  | 8.6  | 8.5  | 8.5  | 9.0  | 8.7  | -0.1                 |
| Total primary expenditure              | 52.6 | 50.2 | 49.8 | 47.2 | 46.4 | 47.1 | 48.0 | 48.7 | 48.3 | -4.3                 |
| Social payments                        | 22.6 | 21.5 | 21.1 | 19.8 | 19.4 | 19.6 | 20.0 | 20.2 | 19.9 | -2.8                 |
| Subsidies                              | 2.4  | 2.2  | 2.1  | 2.1  | 2.0  | 1.9  | 1.9  | 1.9  | 1.8  | -0.6                 |
| Compensation of employees              | 14.5 | 14.0 | 13.7 | 13.4 | 13.1 | 13.3 | 13.5 | 13.6 | 13.6 | -0.9                 |
| Intermediate consumption               | 8.8  | 8.4  | 8.4  | 8.2  | 8.1  | 8.5  | 8.7  | 9.1  | 9.2  | 0.4                  |
| Government investment                  | 3.1  | 2.9  | 2.8  | 2.6  | 2.6  | 2.7  | 2.9  | 2.9  | 2.8  | -0.3                 |
| Other <sup>(2)</sup>                   | 1.1  | 1.2  | 1.6  | 1.1  | 1.2  | 1.1  | 1.0  | 1.0  | 1.0  | -0.2                 |
| Germany                                | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 98-05                |
| Balance                                | -2.0 | -1.8 | -1.4 | -1.6 | -3.4 | -3.9 | -3.7 | -3.3 | -2.9 | -0.9                 |
| Interest payments                      | 3.4  | 3.3  | 3.1  | 3.2  | 3.1  | 2.9  | 3.0  | 2.8  | 2.8  | -0.5                 |
| Primary balance                        | 1.3  | 1.5  | 1.7  | 1.6  | -0.3 | -0.9 | -0.7 | -0.5 | -0.1 | -1.5                 |
| Total revenue                          | 46.3 | 46.4 | 46.9 | 47.3 | 45.4 | 44.5 | 44.2 | 43.1 | 43.4 | -2.9                 |
| Taxes and social contributions overall | 42.2 | 42.4 | 43.0 | 43.5 | 41.5 | 40.7 | 40.5 | 39.6 | 39.8 | -2.5                 |
| Non-tax-related revenue <sup>(1)</sup> | 4.1  | 4.0  | 3.9  | 3.8  | 3.9  | 3.8  | 3.7  | 3.4  | 3.6  | -0.5                 |
| Total primary expenditure              | 44.9 | 44.8 | 45.2 | 45.7 | 45.6 | 45.4 | 44.9 | 43.6 | 43.5 | -1.4                 |
| Social payments                        | 26.6 | 26.5 | 26.6 | 27.1 | 27.4 | 27.5 | 27.4 | 26.7 | 27.0 | 0.4                  |
| Subsidies                              | 2.1  | 2.1  | 2.1  | 2.0  | 1.9  | 1.8  | 1.7  | 1.6  | 1.5  | -0.6                 |
| Compensation of employees              | 8.4  | 8.3  | 8.2  | 8.2  | 8.0  | 7.9  | 7.7  | 7.6  | 7.4  | -1.0                 |
| Intermediate consumption               | 4.0  | 4.0  | 4.1  | 4.1  | 4.1  | 4.2  | 4.1  | 4.0  | 4.2  | 0.2                  |
| Government investment                  | 1.8  | 1.8  | 1.9  | 1.8  | 1.8  | 1.7  | 1.5  | 1.4  | 1.3  | -0.5                 |
| Other <sup>(2)</sup>                   | 2.0  | 2.2  | 2.3  | 2.6  | 2.6  | 2.4  | 2.5  | 2.3  | 2.2  | 0.2                  |
| Italy                                  | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 98-05                |
| Balance                                | -3.4 | -3.9 | -2.3 | -2.6 | -4.5 | -5.1 | -5.6 | -4.9 | -4.3 | -0.9                 |
| Interest payments                      | 9.2  | 8.1  | 6.6  | 6.5  | 6.4  | 5.7  | 5.2  | 4.8  | 4.6  | -4.6                 |
| Primary balance                        | 5.8  | 4.2  | 4.4  | 3.9  | 2.0  | 0.7  | -0.4 | -0.1 | 0.3  | -5.5                 |
| Total revenue                          | 47.0 | 45.6 | 45.9 | 45.8 | 45.1 | 44.0 | 43.0 | 43.1 | 43.5 | -3.5                 |
| Taxes and social contributions overall | 43.3 | 42.1 | 42.2 | 42.4 | 41.5 | 40.6 | 39.9 | 39.9 | 40.4 | -2.8                 |
| Non-tax-related revenue <sup>(1)</sup> | 3.7  | 3.6  | 3.8  | 3.4  | 3.5  | 3.4  | 3.1  | 3.2  | 3.1  | -0.7                 |
| Total primary expenditure              | 41.2 | 41.4 | 41.6 | 41.8 | 43.1 | 43.3 | 43.4 | 43.2 | 43.2 | 2.0                  |
| Social payments                        | 19.4 | 19.2 | 19.2 | 19.4 | 19.5 | 19.8 | 19.9 | 20.1 | 20.1 | 0.7                  |
| Subsidies                              | 1.7  | 1.7  | 1.6  | 1.6  | 1.7  | 1.6  | 1.5  | 1.4  | 1.3  | -0.4                 |
| Compensation of employees              | 11.4 | 10.5 | 10.5 | 10.6 | 10.7 | 10.7 | 10.8 | 10.8 | 10.8 | -0.6                 |
| Intermediate consumption               | 4.8  | 4.8  | 5.0  | 5.1  | 5.2  | 5.2  | 5.3  | 5.4  | 5.4  | 0.6                  |
| Government investment                  | 2.1  | 2.3  | 2.4  | 2.5  | 2.6  | 2.6  | 2.7  | 2.7  | 2.5  | 0.4                  |
| Other <sup>(2)</sup>                   | 1.8  | 2.8  | 2.9  | 2.7  | 3.3  | 3.4  | 3.2  | 2.9  | 3.0  | 1.2                  |
| The Netherlands                        | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 98-05                |
| Balance                                | -0.2 | -0.8 | 0.3  | 0.5  | -2.0 | -3.7 | -3.4 | -1.5 | 0.8  | 1.0                  |
| Interest payments                      | 4.9  | 4.7  | 4.4  | 3.8  | 3.2  | 2.6  | 2.6  | 2.4  | 2.4  | -2.5                 |
| Primary balance                        | 4.7  | 3.9  | 4.6  | 4.3  | 1.3  | -0.9 | -0.8 | 1.1  | 3.2  | -1.5                 |
| Total revenue                          | 46.4 | 45.7 | 47.1 | 46.9 | 45.0 | 43.3 | 43.4 | 44.6 | 45.7 | -0.7                 |
| Taxes and social contributions overall | 40.2 | 39.7 | 41.2 | 40.9 | 38.3 | 37.0 | 37.2 | 38.5 | 39.1 | -1.1                 |
| Non-tax-related revenue <sup>(1)</sup> | 6.2  | 6.0  | 5.9  | 6.0  | 6.8  | 6.3  | 6.1  | 6.1  | 6.6  | 0.3                  |
| Total primary expenditure              | 41.7 | 41.8 | 42.4 | 42.6 | 43.7 | 44.2 | 44.2 | 43.5 | 42.5 | 0.8                  |
| Social payments                        | 20.0 | 19.8 | 19.6 | 19.5 | 19.5 | 19.7 | 19.8 | 19.7 | 19.3 | -0.7                 |
| Subsidies                              | 1.9  | 1.8  | 1.9  | 1.8  | 1.8  | 1.8  | 1.7  | 1.7  | 1.7  | -0.3                 |
| Compensation of employees              | 9.7  | 9.8  | 9.9  | 9.9  | 9.8  | 9.8  | 9.9  | 9.9  | 9.7  | -0.1                 |
| Intermediate consumption               | 5.9  | 6.0  | 6.3  | 6.2  | 7.1  | 7.1  | 7.1  | 7.0  | 6.8  | 0.9                  |
| Government investment                  | 2.8  | 2.8  | 2.9  | 3.1  | 3.3  | 3.5  | 3.3  | 3.1  | 2.9  | 0.2                  |
| Other <sup>(2)</sup>                   | 1.4  | 1.7  | 1.8  | 2.1  | 2.3  | 2.2  | 2.3  | 2.2  | 2.1  | 0.7                  |
| Portugal                               | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 98-05                |
| Balance                                | -2.9 | -2.9 | -3.4 | -4.6 | -5.4 | -4.8 | -4.8 | -4.7 | -5.2 | -2.3                 |
| Interest payments                      | 3.9  | 3.3  | 3.1  | 3.1  | 3.1  | 2.9  | 2.7  | 2.7  | 2.7  | -1.2                 |
| Primary balance                        | 1.0  | 0.4  | -0.4 | -1.5 | -2.4 | -1.9 | -2.0 | -2.0 | -2.5 | -3.5                 |
| Total revenue                          | 40.5 | 40.5 | 41.1 | 40.4 | 40.3 | 41.0 | 41.2 | 41.9 | 41.8 | 1.3                  |
| Taxes and social contributions overall | 33.8 | 33.9 | 34.5 | 34.8 | 34.8 | 34.8 | 34.7 | 35.5 | 36.5 | 2.7                  |
| Non-tax-related revenue <sup>(1)</sup> | 6.7  | 6.5  | 6.7  | 5.6  | 5.6  | 6.2  | 6.5  | 6.4  | 5.4  | -1.3                 |
| Total primary expenditure              | 39.5 | 40.1 | 41.5 | 41.9 | 42.7 | 43.0 | 43.3 | 43.9 | 44.3 | 4.8                  |
| Social payments                        | 12.5 | 12.8 | 13.3 | 13.9 | 14.4 | 14.9 | 16.7 | 17.1 | 17.9 | 5.4                  |
| Subsidies                              | 1.9  | 2.1  | 2.3  | 1.8  | 2.1  | 2.1  | 2.4  | 2.1  | 2.2  | 0.3                  |
| Compensation of employees              | 12.9 | 13.3 | 13.8 | 14.6 | 14.7 | 15.0 | 14.1 | 14.1 | 14.3 | 1.3                  |
| Intermediate consumption               | 3.9  | 3.8  | 4.2  | 4.4  | 4.5  | 4.3  | 3.8  | 4.0  | 4.0  | 0.1                  |
| Government investment                  | 4.2  | 3.9  | 4.1  | 3.9  | 4.0  | 3.6  | 3.1  | 3.1  | 2.8  | -1.4                 |
| Other <sup>(2)</sup>                   | 4.0  | 4.2  | 4.1  | 3.3  | 3.1  | 3.1  | 3.2  | 3.5  | 3.2  | -0.9                 |

\* The fiscal balance is given according to the EDP definition, interest includes settlements under swaps and FRAs (The Netherlands: ESA 95 definition).

<sup>(1)</sup> Other current transfers receivable, sales and total capital revenue.

<sup>(2)</sup> Other current transfers payable, other net acquisitions of non-financial assets and capital transfers.

<sup>(3)</sup> Change in the ratios between 1997 and 2005.



to changes in the composition of private consumption might have had an impact. On the expenditure side, the development was relatively heterogenous and reference is made to the country sections for further information.

### 3.2 Belgium

From 1997 to 2005 general government improved its budget balance by some 2 per cent of GDP. This was to a very minor extent due to a better cyclical environment, which explains only 0.1 percentage point of the change, and, to a larger extent, to a favourable contribution from temporary measures, that had marginally worsened the 1997 balances but improved them by about 0.5 per cent of GDP in 2005. The *structural budget balance*, i.e. the budget balance corrected for cyclical influences and temporary measures, improved from a deficit of 1.4 per cent of trend GDP in 1997 to a balanced budget in 2005 (after having approached the zero mark in 1998).

This improvement was due to the substantial fall in *interest* charges – attributable to both the trend reduction in the debt ratio and the decrease in the implicit interest rate on public debt – that was, however, largely offset by the strong decline of close to 2 per cent of trend GDP in the structural *primary surplus*. This was due entirely to expenditure developments as the structural revenue ratio increased slightly.

The structural *revenue* ratio increased by 0.2 percentage point in the 1998-2005 period. The limited increase in *non-tax-related* revenue as a percentage of trend GDP was partially offset by a marginal decrease in the structural tax pressure. The latter was caused by the net impact of legislation changes and the unfavourable decoupling effect, i.e. the trend decline in the macroeconomic bases for the most important taxes with respect to GDP. Those two elements were, however, largely compensated by favourable residuals, i.e. the change in the structural tax ratio that cannot be traced back to the factors explicitly identified in the legislation changes, decoupling and fiscal drag.

*Legislation* changes reduced the structural government revenue ratio by around 1.1 percentage point in the 1998-2005 period. As both the previous and the present government specifically aimed at reducing the tax pressure on labour in order to increase employment, direct taxes on households and social contributions saw significant tax cuts (around 1 per cent of trend GDP in both cases). Direct taxes on households were negatively affected by the stepwise removal of the complementary crisis contribution and the gradual reform of the personal income tax system (the impact of which will continue to grow until 2007). Cuts in social contributions mainly pertained to employers' contributions and to a lesser extent to employees' contributions. These tax cuts were, however, partly offset by several increases in indirect taxes (mainly on tobacco, mineral oils and financial products), which pushed up the revenue ratio by around 0.7 percentage point between 1997 and 2005.

Table 2

**Belgium – Changes in Structural Fiscal Components\***  
(percent of trend GDP)

| <i>Increasing +, decreasing –</i>                       | 1998        | 1999        | 2000        | 2001        | 2002        | 2003        | 2004        | 2005        | 98-05       |
|---------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| <b>Unadjusted balance<sup>(1)</sup></b>                 | <b>1.3</b>  | <b>0.3</b>  | <b>0.6</b>  | <b>0.6</b>  | <b>-0.6</b> | <b>0.1</b>  | <b>-0.1</b> | <b>0.1</b>  | <b>2.1</b>  |
| Cyclical component                                      | 0.1         | 0.7         | 0.5         | -0.1        | -0.3        | -0.3        | -0.2        | -0.3        | 0.1         |
| Temporary measures                                      | 0.0         | 0.1         | -0.1        | 0.6         | -0.2        | 1.0         | -0.5        | -0.3        | 0.6         |
| <b>Balance</b>                                          | <b>1.2</b>  | <b>-0.5</b> | <b>0.2</b>  | <b>0.1</b>  | <b>-0.2</b> | <b>-0.6</b> | <b>0.6</b>  | <b>0.6</b>  | <b>1.5</b>  |
| Interest payments                                       | -0.4        | -0.4        | -0.1        | -0.2        | -0.7        | -0.5        | -0.5        | -0.4        | -3.3        |
| <i>due to changes in average interest rate</i>          | <i>-0.1</i> | <i>-0.2</i> | <i>0.1</i>  | <i>0.0</i>  | <i>-0.5</i> | <i>-0.2</i> | <i>-0.3</i> | <i>-0.3</i> | <i>-1.6</i> |
| <i>due to changes in debt level</i>                     | <i>-0.3</i> | <i>-0.2</i> | <i>-0.2</i> | <i>-0.2</i> | <i>-0.2</i> | <i>-0.2</i> | <i>-0.2</i> | <i>-0.1</i> | <i>-1.8</i> |
| <b>Primary balance</b>                                  | <b>0.8</b>  | <b>-0.9</b> | <b>0.1</b>  | <b>-0.1</b> | <b>-0.9</b> | <b>-1.1</b> | <b>0.1</b>  | <b>0.2</b>  | <b>-1.9</b> |
| <b>Total revenue</b>                                    | <b>0.4</b>  | <b>-0.3</b> | <b>0.1</b>  | <b>0.0</b>  | <b>0.1</b>  | <b>-0.6</b> | <b>0.2</b>  | <b>0.4</b>  | <b>0.2</b>  |
| <b>Direct taxes payable by corporations</b>             | <b>0.5</b>  | <b>-0.2</b> | <b>-0.1</b> | <b>0.2</b>  | <b>-0.2</b> | <b>-0.3</b> | <b>0.3</b>  | <b>0.3</b>  | <b>0.7</b>  |
| Fiscal drag                                             | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | -0.1        | -0.3        |
| Decoupling of base from GDP                             | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.1         | 0.1         | 0.2         |
| Legislation changes                                     | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         |
| Residual                                                | 0.6         | -0.1        | 0.0         | 0.2         | -0.1        | -0.3        | 0.3         | 0.3         | 0.8         |
| <b>Direct taxes payable by households</b>               | <b>-0.1</b> | <b>-0.4</b> | <b>0.3</b>  | <b>0.0</b>  | <b>0.0</b>  | <b>-0.2</b> | <b>-0.1</b> | <b>0.0</b>  | <b>-0.6</b> |
| Fiscal drag                                             | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.3         |
| Decoupling of base from GDP                             | -0.2        | 0.0         | 0.0         | 0.0         | 0.0         | -0.1        | -0.1        | 0.0         | -0.3        |
| Legislation changes                                     | 0.1         | 0.0         | 0.0         | -0.1        | -0.3        | -0.2        | -0.2        | -0.1        | -0.9        |
| Residual                                                | 0.0         | -0.5        | 0.2         | 0.0         | 0.3         | 0.1         | 0.2         | 0.1         | 0.4         |
| <i>Memo item: included in expenditure<sup>(2)</sup></i> | <i>0.0</i>  | <i>0.0</i>  | <i>0.0</i>  | <i>0.0</i>  | <i>0.1</i>  | <i>0.0</i>  | <i>0.0</i>  | <i>0.0</i>  | <i>0.1</i>  |
| <b>Social contributions</b>                             | <b>0.0</b>  | <b>-0.1</b> | <b>-0.2</b> | <b>0.0</b>  | <b>0.3</b>  | <b>0.0</b>  | <b>-0.1</b> | <b>-0.2</b> | <b>-0.3</b> |
| Fiscal drag                                             | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         |
| Decoupling of base from GDP                             | -0.2        | 0.0         | 0.0         | 0.0         | -0.1        | -0.1        | -0.1        | 0.0         | -0.4        |
| Legislation changes                                     | 0.1         | -0.1        | -0.5        | -0.1        | 0.0         | -0.1        | -0.2        | -0.1        | -1.0        |
| Residual                                                | 0.1         | -0.1        | 0.2         | 0.1         | 0.4         | 0.2         | 0.2         | 0.0         | 1.1         |
| <i>Memo item: included in expenditure<sup>(2)</sup></i> | <i>0.0</i>  | <i>0.0</i>  | <i>0.0</i>  | <i>0.0</i>  | <i>0.0</i>  | <i>0.0</i>  | <i>0.0</i>  | <i>0.0</i>  | <i>0.0</i>  |
| <b>Indirect taxes</b>                                   | <b>-0.1</b> | <b>0.4</b>  | <b>-0.1</b> | <b>-0.5</b> | <b>0.0</b>  | <b>0.0</b>  | <b>0.3</b>  | <b>0.2</b>  | <b>0.2</b>  |
| Fiscal drag                                             | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | -0.1        |
| Decoupling of base from GDP                             | -0.1        | -0.1        | 0.1         | 0.0         | -0.1        | 0.0         | 0.0         | 0.0         | -0.1        |
| Legislation changes                                     | 0.0         | 0.0         | 0.0         | 0.1         | 0.0         | 0.1         | 0.3         | 0.2         | 0.7         |
| Residual                                                | 0.0         | 0.5         | -0.2        | -0.6        | 0.1         | 0.0         | 0.0         | 0.0         | -0.3        |

| <i>Increasing +, decreasing –</i>                             | 1998        | 1999        | 2000        | 2001        | 2002        | 2003        | 2004        | 2005        | 98-05       |
|---------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| <b>Taxes and social contributions overall</b>                 | <b>0.3</b>  | <b>–0.3</b> | <b>0.0</b>  | <b>–0.3</b> | <b>0.2</b>  | <b>–0.5</b> | <b>0.3</b>  | <b>0.3</b>  | <b>0.0</b>  |
| Fiscal drag                                                   | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | –0.1        |
| Decoupling of base from GDP                                   | –0.5        | 0.0         | 0.2         | 0.1         | –0.1        | –0.2        | –0.2        | 0.0         | –0.7        |
| Legislation changes                                           | 0.2         | 0.0         | –0.5        | –0.1        | –0.4        | –0.2        | 0.0         | –0.1        | –1.1        |
| Residual <sup>(3)</sup>                                       | 0.6         | –0.2        | 0.2         | –0.3        | 0.7         | 0.0         | 0.6         | 0.3         | 2.0         |
| <i>Memo item: included in expenditure<sup>(2)</sup></i>       | <i>–0.1</i> | <i>0.1</i>  | <i>0.0</i>  | <i>0.1</i>  | <i>0.1</i>  | <i>0.0</i>  | <i>0.0</i>  | <i>0.0</i>  | <i>0.2</i>  |
| <b>Non-tax-related revenue<sup>(4)</sup></b>                  | <b>0.1</b>  | <b>–0.1</b> | <b>0.2</b>  | <b>0.3</b>  | <b>–0.1</b> | <b>–0.1</b> | <b>–0.1</b> | <b>0.1</b>  | <b>0.3</b>  |
| <i>of which EU<sup>(5)</sup></i>                              |             |             |             |             |             |             |             |             |             |
| <b>Total primary expenditure</b>                              | <b>–0.4</b> | <b>0.6</b>  | <b>0.1</b>  | <b>0.1</b>  | <b>1.0</b>  | <b>0.4</b>  | <b>0.1</b>  | <b>0.2</b>  | <b>2.1</b>  |
| <b>(of which: due to automatic indexation)<sup>(10)</sup></b> | <b>–0.1</b> | <b>0.1</b>  | <b>–0.1</b> | <b>0.1</b>  | <b>0.2</b>  | <b>–0.1</b> | <b>–0.2</b> | <b>0.0</b>  | <b>0.0</b>  |
| Social payments                                               | –0.2        | 0.0         | 0.0         | 0.3         | 0.4         | 0.4         | 0.1         | –0.2        | 0.9         |
| <i>of which old-age pensions</i>                              | <i>–0.1</i> | <i>0.0</i>  | <i>0.0</i>  | <i>0.0</i>  | <i>0.1</i>  | <i>0.0</i>  | <i>0.0</i>  | <i>0.0</i>  | <i>0.0</i>  |
| <i>of which unemployment benefits</i>                         | <i>0.0</i>  | <i>0.0</i>  | <i>–0.1</i> | <i>0.0</i>  | <i>0.1</i>  | <i>0.0</i>  | <i>0.0</i>  | <i>–0.1</i> | <i>–0.1</i> |
| <i>of which social transfers in kind</i>                      | <i>0.0</i>  | <i>0.2</i>  | <i>0.2</i>  | <i>0.2</i>  | <i>0.0</i>  | <i>0.3</i>  | <i>0.3</i>  | <i>–0.1</i> | <i>1.2</i>  |
| Subsidies                                                     | 0.0         | 0.1         | –0.1        | 0.0         | –0.1        | 0.1         | 0.0         | 0.3         | 0.3         |
| <i>of which EU<sup>(6)</sup></i>                              | <i>0.0</i>  | <i>0.0</i>  | <i>0.0</i>  | <i>0.0</i>  | <i>0.0</i>  | <i>0.0</i>  | <i>0.0</i>  | <i>0.0</i>  | <i>0.0</i>  |
| Compensation of employees                                     | –0.1        | 0.2         | 0.0         | 0.1         | 0.4         | 0.0         | –0.2        | 0.0         | 0.3         |
| Intermediate consumption                                      | 0.0         | 0.0         | 0.0         | 0.0         | 0.4         | –0.1        | 0.0         | 0.0         | 0.4         |
| Government investment                                         | –0.1        | 0.3         | 0.0         | –0.2        | –0.1        | 0.0         | 0.1         | 0.0         | 0.1         |
| Other <sup>(7)</sup>                                          | 0.0         | –0.1        | 0.1         | –0.1        | 0.0         | 0.0         | 0.1         | 0.1         | 0.1         |
| <i>of which EU<sup>(8)</sup></i>                              | <i>0.0</i>  | <i>0.0</i>  | <i>0.0</i>  | <i>0.0</i>  | <i>0.0</i>  | <i>0.0</i>  | <i>0.0</i>  | <i>0.0</i>  | <i>0.0</i>  |
| <b>Memorandum items</b>                                       |             |             |             |             |             |             |             |             |             |
| Health care <sup>(9)</sup>                                    | 0.0         | 0.1         | 0.1         | 0.2         | –0.1        | 0.3         | 0.3         | –0.1        | 0.9         |
| Trend growth of real GDP                                      | 2.3         | 2.3         | 2.2         | 2.1         | 2.0         | 2.0         | 1.9         | 2.0         |             |
| Change in GDP deflator                                        | 1.8         | 0.7         | 1.7         | 1.8         | 1.8         | 1.7         | 2.3         | 2.2         |             |
| Change in public employees                                    | 1.6         | 2.4         | 0.5         | 0.4         | 2.0         | 1.7         | 1.1         | –0.1        |             |

\* The fiscal balance is given according to the EDP definition, interest includes settlements under swaps and FRAs.

<sup>(1)</sup> Change in unadjusted balance, cyclical component and temporary measures as percentage of nominal GDP. Due to the different denominator, the change in the ratio of the structural balance to trend nominal GDP may deviate slightly from the change in the ratio to nominal GDP of the unadjusted balance less cyclical component less temporary measures.

<sup>(2)</sup> Payments attributable to the general government sector (estimated).

<sup>(3)</sup> May also include the change in the structural ratio of direct taxes not payable by corporations/households.

<sup>(4)</sup> Other current transfers receivable, sales and total capital revenue.

<sup>(5)</sup> Net receipts from EC budget if country is a net recipient from EC budget. Empty if country is net payer to EC budget.

<sup>(6)</sup> Expenditure paid by EC budget that is spent under category “Subsidies”.

<sup>(7)</sup> Other current transfers payable, other net acquisitions of non-financial assets and capital transfers.

<sup>(8)</sup> If country is a net payer to EC budget: net payments to EC budget less expenditure paid by EC budget that is not spent under category “Other”. If country is a net recipient from EC budget: expenditure paid by EC budget that is spent under category “Other”.

<sup>(9)</sup> Social benefits, social transfers in kind and other current transfers that can be allocated into the function of the provision of public health care services.

<sup>(10)</sup> For price effects: see Kremer *et al.* (2006).

Note: Due to rounding there might be deviations between aggregate numbers and the sum of individual numbers.

The trend decoupling of tax bases from GDP also weighed on revenue developments in that period. Detailed calculations show that this was due primarily to a marked divergence between real private-sector tax bases, especially real private-sector labour income, and GDP. The contribution of both public-sector components of tax bases considered in the ESCB cyclical adjustment methodology (public-sector wages and indirect taxes paid by government entities) and pure price effects<sup>9</sup> is relatively small and actually slightly reduces the overall decoupling. For instance, real private-sector labour income, the most important tax base for government revenue, posted an annual trend increase of less than 1.5 per cent between 1997 and 2005 while trend activity grew by some 2.1 per cent a year in the same period.

The *fiscal drag* was relatively neutral throughout the period under consideration as the positive drag in direct taxes on households (due to the progressive nature of the personal income tax system) was roughly offset by the negative effect of the econometrically estimated elasticities for both indirect taxes and corporate taxes being smaller than one.

Finally, *residuals* were, on average, positive in the 1998-2005 period and increased the revenue ratio by around 2 percentage points. Residuals increase direct taxes on corporations and households and social contributions and reduce indirect taxes. Relative to the size of the revenue item the largest residuals can be found in direct taxes on corporations which is not unexpected in view of the generally poor fit of the elasticity (either econometrically estimated or derived from the tax rule) used for this category. Large positive residuals for social contributions could be related to an overestimation of the impact of the frequent legislation changes. Finally, the large negative residual for indirect taxes is mainly derived from the substantial 2001 VAT revenue shortfall, which is partly related to a hike in tax reimbursements (for exports and investments) but still not yet fully explained.

Corrected for cyclical influences and temporary measures, the *primary expenditure* ratio grew by more than 2 percentage points. This is mainly due to the strong increase in social transfers in kind (primarily *healthcare* spending for which a real growth norm of 4.5 per cent – *i.e.* far above the trend activity growth – currently applies) and, to a much lesser extent, to *intermediate consumption, compensation of employees* and *subsidies*.

### 3.3 Finland

There are no temporary measures over the reporting period in Finland; hence structural and cyclically adjusted values are equal.

When analysing changes in structural revenue and expenditure ratios, it should be kept in mind that the early years of the period were very special in the

<sup>9</sup> Price developments lead to a decoupling of government revenue from trend GDP growth if the evolution of the tax base deflators deviates from that of the GDP deflator.

Finnish economy. The economy was still recovering from the huge recession of the early 1990s. While the private sector was rebounding from the previous slump and already growing fast, consolidation needs and spending controls dominated public sector developments. Additionally, the global ICT boom had a huge impact on the economy in 1998-2001.

The general government balance increased by 3.9 percentage points to 2.6 per cent between 1997 and 2005. Overall, cyclical influences were only of minor importance; also, the structural fiscal *balance* saw a 3.8 percentage points improvement, from a deficit of –1.2 per cent of nominal trend GDP in 1997 to a surplus of 2.6 per cent in 2005. The structural improvement was driven mainly by the steady decrease in *interest* payments in relation to nominal trend GDP, amounting to –2.7 percentage points between 1997 and 2005. Two-thirds of the cumulated decrease in the ratio was due to the decrease in the average implicit interest rate. The implicit interest rate on general government debt decreased from 7.9 per cent in 1997 to 3.5 per cent in 2005. The rest of the decrease in the ratio was due to the very moderate increase in the amount of debt.

The structural *primary surplus* ratio increased by 1.0 percentage point, from 3.0 per cent of nominal trend GDP in 1997 to 4.0 per cent in 2005. This improvement was attributable entirely to the considerable decrease in the structural primary expenditure ratio; the –3.2 percentage points decrease in the structural revenue ratio was more than compensated for by the –4.3 percentage points decrease in the structural primary expenditure ratio between 1997 and 2005.

The structural total *revenue* ratio decreased by –3.2 percentage points between 1997 and 2005. The decrease was due to three factors: the tax cuts, the fact that tax bases increased on average slower than nominal trend GDP and the impact of special events. By contrast, fiscal drag clearly contributed to the increase in the revenue ratio and compensated for the decrease in the structural total revenue ratio.

The contribution of *tax cuts* amounted to –3.5 percentage points between 1997 and 2005. Various cuts in household and corporate income taxes and social contribution rates in the years 2000 to 2005 played a decisive role.

The contribution of *fiscal drag* amounted to 1.5 percentage points between 1997 and 2005, reflecting the highly progressive taxation of wages. Since profit-related and consumption-related taxation and social security contributions are strictly proportional, fiscal drag does not exist under these revenue categories.

The contribution of the *decoupling* of tax bases from GDP amounted to –0.4 percentage points between 1997 and 2005. Though limited, the contribution is still visible in all revenue categories except direct taxes paid by corporations. The negative annual contributions concentrated on the early years of the period – especially 1998 – and were particularly high under wage-related revenue categories. They primarily reflected two factors. Firstly, average growth in public sector wages remained below nominal trend GDP growth between 1997 and 2001, while growth in operating surplus and private sector wages exceeded nominal trend GDP growth slightly. Therefore, if public sector wages are excluded, the contribution of the

Table 3

**Finland – Changes in Structural Fiscal Components\***  
(percent of trend GDP)

| <i>Increasing +, decreasing –</i>                       | 1998        | 1999        | 2000        | 2001        | 2002        | 2003        | 2004        | 2005        | 98-05       |
|---------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| <b>Unadjusted balance<sup>(1)</sup></b>                 | <b>2.9</b>  | <b>0.0</b>  | <b>5.3</b>  | <b>–2.0</b> | <b>–0.9</b> | <b>–1.6</b> | <b>–0.2</b> | <b>0.3</b>  | <b>3.9</b>  |
| Cyclical component                                      | 1.1         | 0.0         | –0.1        | –0.1        | –1.0        | 0.2         | 0.1         | –0.2        | 0.0         |
| Temporary measures                                      | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         |
| <b>Balance</b>                                          | <b>1.8</b>  | <b>–0.1</b> | <b>5.6</b>  | <b>–2.0</b> | <b>0.0</b>  | <b>–1.8</b> | <b>–0.3</b> | <b>0.4</b>  | <b>3.8</b>  |
| Interest payments                                       | –0.6        | –0.5        | –0.2        | –0.2        | –0.6        | –0.4        | –0.2        | –0.1        | –2.7        |
| <i>due to changes in average interest rate</i>          | <i>–0.3</i> | <i>–0.3</i> | <i>0.0</i>  | <i>–0.1</i> | <i>–0.5</i> | <i>–0.4</i> | <i>–0.2</i> | <i>0.0</i>  | <i>–1.9</i> |
| <i>due to changes in debt level</i>                     | <i>–0.3</i> | <i>–0.2</i> | <i>–0.1</i> | <i>–0.1</i> | <i>–0.1</i> | <i>0.0</i>  | <i>0.1</i>  | <i>–0.1</i> | <i>–0.8</i> |
| <b>Primary balance</b>                                  | <b>1.2</b>  | <b>–0.6</b> | <b>5.4</b>  | <b>–2.1</b> | <b>–0.5</b> | <b>–2.2</b> | <b>–0.5</b> | <b>0.3</b>  | <b>1.0</b>  |
| <b>Total revenue</b>                                    | <b>–1.1</b> | <b>–1.1</b> | <b>2.9</b>  | <b>–3.0</b> | <b>0.2</b>  | <b>–1.3</b> | <b>0.3</b>  | <b>–0.1</b> | <b>–3.2</b> |
| <b>Direct taxes payable by corporations</b>             | <b>0.8</b>  | <b>0.1</b>  | <b>1.5</b>  | <b>–1.6</b> | <b>0.0</b>  | <b>–0.7</b> | <b>0.1</b>  | <b>–0.1</b> | <b>0.1</b>  |
| Fiscal drag                                             | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         |
| Decoupling of base from GDP                             | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         |
| Legislation changes                                     | 0.0         | 0.0         | 0.2         | 0.0         | 0.0         | 0.0         | 0.0         | –0.4        | –0.2        |
| Residual                                                | 0.8         | 0.0         | 1.3         | –1.6        | 0.0         | –0.7        | 0.1         | 0.3         | 0.3         |
| <b>Direct taxes payable by households</b>               | <b>–0.6</b> | <b>–0.3</b> | <b>1.3</b>  | <b>–0.7</b> | <b>0.1</b>  | <b>–0.5</b> | <b>–0.2</b> | <b>0.0</b>  | <b>–1.0</b> |
| Fiscal drag                                             | 0.2         | 0.1         | 0.2         | 0.2         | 0.2         | 0.1         | 0.2         | 0.2         | 1.5         |
| Decoupling of base from GDP                             | –0.4        | –0.1        | 0.0         | –0.2        | 0.1         | 0.1         | 0.1         | 0.1         | –0.3        |
| Legislation changes                                     | 0.0         | –0.3        | 0.0         | –0.7        | –0.4        | –0.4        | –0.5        | –0.2        | –2.5        |
| Residual                                                | –0.3        | –0.1        | 1.1         | 0.0         | 0.2         | –0.4        | 0.0         | –0.2        | 0.3         |
| <i>Memo item: included in expenditure<sup>(2)</sup></i> | <i>–0.2</i> | <i>–0.1</i> | <i>–0.2</i> | <i>–0.2</i> | <i>–0.1</i> | <i>0.1</i>  | <i>0.1</i>  | <i>0.0</i>  | <i>–0.7</i> |
| <b>Social contributions</b>                             | <b>–0.5</b> | <b>–0.1</b> | <b>–0.6</b> | <b>–0.1</b> | <b>–0.1</b> | <b>–0.2</b> | <b>0.0</b>  | <b>0.1</b>  | <b>–1.4</b> |
| Fiscal drag                                             | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         |
| Decoupling of base from GDP                             | –0.4        | –0.1        | 0.0         | –0.2        | 0.1         | 0.1         | 0.1         | 0.1         | –0.3        |
| Legislation changes                                     | 0.1         | 0.2         | –0.4        | –0.4        | –0.5        | –0.1        | 0.0         | 0.3         | –0.8        |
| Residual                                                | –0.1        | –0.1        | –0.3        | 0.5         | 0.3         | –0.2        | –0.1        | –0.3        | –0.4        |
| <i>Memo item: included in expenditure<sup>(2)</sup></i> | <i>–0.2</i> | <i>–0.1</i> | <i>–0.2</i> | <i>–0.2</i> | <i>–0.1</i> | <i>0.1</i>  | <i>0.0</i>  | <i>0.0</i>  | <i>–0.7</i> |
| <b>Indirect taxes</b>                                   | <b>–0.4</b> | <b>0.0</b>  | <b>–0.2</b> | <b>–0.6</b> | <b>0.2</b>  | <b>0.2</b>  | <b>–0.1</b> | <b>0.2</b>  | <b>–0.8</b> |
| Fiscal drag                                             | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         |
| Decoupling of base from GDP                             | –0.3        | 0.0         | 0.2         | –0.1        | 0.1         | 0.0         | 0.1         | 0.2         | 0.2         |
| Legislation changes                                     | 0.1         | 0.1         | 0.0         | 0.0         | 0.0         | 0.0         | –0.1        | –0.1        | 0.0         |
| Residual                                                | –0.1        | –0.1        | –0.4        | –0.5        | 0.0         | 0.2         | 0.0         | 0.1         | –0.9        |

| <i>Increasing +, decreasing –</i>                       | 1998        | 1999        | 2000        | 2001        | 2002        | 2003        | 2004        | 2005        | 98-05       |
|---------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| <b>Taxes and social contributions overall</b>           | <b>–0.7</b> | <b>–0.4</b> | <b>1.9</b>  | <b>–3.0</b> | <b>0.2</b>  | <b>–1.3</b> | <b>–0.2</b> | <b>0.2</b>  | <b>–3.2</b> |
| Fiscal drag                                             | 0.2         | 0.1         | 0.2         | 0.2         | 0.2         | 0.1         | 0.2         | 0.2         | 1.5         |
| Decoupling of base from GDP                             | –1.1        | –0.1        | 0.2         | –0.5        | 0.3         | 0.3         | 0.2         | 0.4         | –0.4        |
| Legislation changes                                     | 0.1         | –0.1        | –0.2        | –1.1        | –0.8        | –0.5        | –0.6        | –0.3        | –3.5        |
| Residual <sup>(3)</sup>                                 | 0.2         | –0.3        | 1.8         | –1.6        | 0.6         | –1.2        | 0.0         | –0.2        | –0.7        |
| <i>Memo item: included in expenditure<sup>(2)</sup></i> | <i>–0.5</i> | <i>–0.2</i> | <i>–0.4</i> | <i>–0.4</i> | <i>–0.1</i> | <i>0.2</i>  | <i>0.1</i>  | <i>–0.1</i> | <i>–1.4</i> |
| <b>Non-tax-related revenue<sup>(4)</sup></b>            | <b>–0.4</b> | <b>–0.7</b> | <b>1.0</b>  | <b>0.0</b>  | <b>–0.1</b> | <b>0.0</b>  | <b>0.5</b>  | <b>–0.3</b> | <b>–0.1</b> |
| <i>of which EU<sup>(5)</sup></i>                        |             |             |             |             |             |             |             |             | <i>0.0</i>  |
| <b>Total primary expenditure</b>                        | <b>–2.3</b> | <b>–0.5</b> | <b>–2.5</b> | <b>–0.9</b> | <b>0.7</b>  | <b>0.9</b>  | <b>0.7</b>  | <b>–0.4</b> | <b>–4.3</b> |
| Social payments                                         | –1.1        | –0.4        | –1.3        | –0.5        | 0.3         | 0.4         | 0.2         | –0.3        | –2.8        |
| <i>of which old-age pensions</i>                        | <i>–0.4</i> | <i>–0.2</i> | <i>–0.4</i> | <i>–0.2</i> | <i>0.3</i>  | <i>0.2</i>  | <i>0.1</i>  | <i>–0.1</i> | <i>–0.8</i> |
| <i>of which unemployment benefits</i>                   | <i>–0.4</i> | <i>–0.1</i> | <i>–0.4</i> | <i>–0.3</i> | <i>0.0</i>  | <i>0.0</i>  | <i>0.0</i>  | <i>–0.1</i> | <i>–1.3</i> |
| <i>of which social transfers in kind</i>                | <i>0.2</i>  | <i>0.0</i>  | <i>0.0</i>  | <i>0.1</i>  | <i>0.1</i>  | <i>0.2</i>  | <i>0.1</i>  | <i>0.0</i>  | <i>0.7</i>  |
| Subsidies                                               | –0.2        | –0.1        | 0.0         | –0.1        | –0.1        | 0.0         | 0.0         | –0.1        | –0.6        |
| <i>of which EU<sup>(6)</sup></i>                        | <i>0.0</i>  | <i>0.0</i>  | <i>0.1</i>  | <i>0.0</i>  | <i>0.0</i>  | <i>0.0</i>  | <i>0.0</i>  | <i>–0.1</i> | <i>–0.1</i> |
| Compensation of employees                               | –0.6        | –0.3        | –0.3        | –0.2        | 0.1         | 0.3         | 0.1         | 0.0         | –0.9        |
| Intermediate consumption                                | –0.4        | 0.0         | –0.2        | –0.1        | 0.4         | 0.3         | 0.4         | 0.1         | 0.4         |
| Government investment                                   | –0.2        | –0.1        | –0.2        | 0.0         | 0.1         | 0.1         | 0.1         | –0.2        | –0.3        |
| Other <sup>(7)</sup>                                    | 0.1         | 0.4         | –0.5        | 0.0         | –0.1        | –0.1        | 0.0         | 0.0         | –0.2        |
| <i>of which EU<sup>(8)</sup></i>                        | <i>0.1</i>  | <i>0.0</i>  | <i>–0.1</i> | <i>0.0</i>  | <i>0.0</i>  | <i>0.2</i>  | <i>–0.1</i> | <i>0.1</i>  | <i>0.1</i>  |
| <b>Memorandum items</b>                                 |             |             |             |             |             |             |             |             |             |
| Health care <sup>(9)</sup>                              | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         |
| Trend growth of real GDP                                | 3.8         | 3.9         | 3.7         | 3.4         | 3.1         | 2.9         | 2.7         | 2.6         |             |
| Change in GDP deflator                                  | 3.4         | 0.9         | 2.6         | 3.0         | 1.3         | –0.4        | 0.6         | 1.5         |             |
| Change in public employees                              | –0.3        | 0.5         | 1.1         | 1.4         | 2.2         | 0.9         | 0.7         | 0.7         |             |

\* The fiscal balance is given according to the EDP definition, interest includes settlements under swaps and FRAs.

<sup>(1)</sup> Change in unadjusted balance, cyclical component and temporary measures as percentage of nominal GDP. Due to the different denominator, the change in the ratio of the structural balance to trend nominal GDP may deviate slightly from the change in the ratio to nominal GDP of the unadjusted balance less cyclical component less temporary measures.

<sup>(2)</sup> Payments attributable to the general government sector (estimated).

<sup>(3)</sup> May also include the change in the structural ratio of direct taxes not payable by corporations/households.

<sup>(4)</sup> Other current transfers receivable, sales and total capital revenue.

<sup>(5)</sup> Net receipts from EC budget if country is a net recipient from EC budget. Empty if country is net payer to EC budget.

<sup>(6)</sup> Expenditure paid by EC budget that is spent under category “Subsidies”.

<sup>(7)</sup> Other current transfers payable, other net acquisitions of non-financial assets and capital transfers.

<sup>(8)</sup> If country is a net payer to EC budget: net payments to EC budget less expenditure paid by EC budget that is not spent under category “Other”. If country is a net recipient from EC budget: expenditure paid by EC budget that is spent under category “Other”.

<sup>(9)</sup> Social benefits, social transfers in kind and other current transfers that can be allocated into the function of the provision of public health care services.

Note: Due to rounding there might be deviations between aggregate numbers and the sum of individual numbers.

decoupling in wage-related revenue categories is slightly positive. Secondly, the large negative overall contribution in 1998 mainly reflects the unequal composition of nominal GDP growth in the earlier years of the 1990s resulting from the strong growth of (low tax yielding) nominal operating surplus and the comparatively weaker growth of (high tax yielding) nominal compensation of employees (both private and public). This development was partially compensated for by reverse developments in subsequent years.

The *residual* contributed  $-0.7$  percentage point to the decrease in the structural total revenue ratio. Annual residuals under direct taxes payable by corporations and households add up to close to zero between 1997 and 2005. This is plausible because over a longer period of time the impacts of unsystematic developments should cancel out each other. By contrast, the residuals under social contributions and indirect taxes add up to  $-0.4$  per cent and  $-0.9$  per cent of nominal trend GDP respectively. The reasons for these large cumulative residuals are unclear and require further analysis.

The annual contributions of residuals to the changes in the structural total revenue ratio were fairly limited apart from an anomalous impact in the years 2000 to 2003. This is attributable to the exceptionally large 1998-2000 revenue gains from taxes on stock option income and capital gains during the ICT boom phase and the following stock price bubble. Consequently, corporations and households paid more direct taxes in the year 2000 than explainable by the increase in their respective tax bases. However, it should be kept in mind that large changes in residuals under the profit-related taxes also reflect the fact that operating surplus is a bad proxy for the tax base and the complex system of, for example, the deduction of the previous losses from current and future profits makes the annual change in operating surplus an even worse proxy for the annual change in profit-related tax revenue.

Owing to the lagged collection of taxes on stock option income, capital gains and unforeseen corporate profits of 1998-2000, the exceptional revenue from direct taxes payable by corporations and households gradually faded away in 2001-03. In addition, a one-off extraordinary booking, shifting EUR 500 million (0.35 per cent of nominal trend GDP) worth of revenue from 2001 to 2002, increases the negative residual of direct taxes payable by corporations in 2001 and decreases that in 2002.

The structural *primary expenditure* ratio decreased by  $-4.3$  percentage points between 1997 and 2005. The decrease occurred almost entirely in 1998-2001 and resulted from the combination of a limited increase in structural primary expenditure and a rapid increase in nominal trend GDP. Later, as a result of accelerating structural primary expenditure growth and decelerating trend GDP growth, the structural primary expenditure ratio clearly increased. However, the considerable decrease in interest payments constrained the increase in the structural total expenditure ratio.

The average annual increase in nominal trend GDP amounted to 6.3 per cent in 1998-2001. In 1998, 2000 and 2001, when the decrease in the total expenditure ratio was especially rapid, nominal trend GDP grew at an average rate of nearly 7



per cent. At the same time, the structural primary expenditure growth was subdued; in 1998-2000 it increased on average by only 2.5 per cent annually in nominal terms and in real terms it remained unchanged. In 2001 structural primary expenditure growth almost doubled, but it was still outweighed by the rapid increase in nominal trend GDP, and the structural primary expenditure ratio kept declining. The picture changed completely in 2002-2004 when structural primary expenditure growth accelerated further to an annual average of 5.1 per cent whereas nominal trend GDP growth halved to an annual average of 3.4 per cent.

Structural primary spending growth was mainly nurtured by growth in *social payments, compensation of employees, intermediate consumption* and *government investment* accelerating from 2001 onwards, after a period with only moderate increases or decreases. For example, unemployment-related expenditure decreased year after year in 1998-2001 as a result of the shrinking number of unemployed. However, it clearly increased in 2002-2004 as more money was allocated to active labour market measures and unemployment benefits were raised. On the other hand, the growth of social transfers in kind<sup>10</sup> was clearly higher than that of nominal trend GDP throughout the period. Finally, the ratio of subsidies decreased steadily year after year reflecting the fact that, apart from the level shift in 2000, their annual growth was on average close to zero.

### 3.4 Germany

Between 1997 and 2005, the general government budget balance ratio deteriorated by 0.7 percentage point. Taking into account the positive cyclical impact of 0.3 percentage point and the zero impact of temporary measures, the structural *balance* ratio fell by 0.9 percentage point, reaching -2.9 per cent in 2005. Owing to the significant drop in the average interest on government debt, the *interest* expenditure ratio declined by 0.5 percentage point despite a distinct rise in the debt ratio. The structural *primary balance* as a percentage of trend GDP decreased by 1.5 percentage points to -0.1 per cent. Overall, the unfavourable development of public finances was due mainly to weak revenue-side developments, while primary expenditure, in particular in 2003 and 2004, contributed noticeably to consolidation.

The structural *revenue* ratio fell by 2.9 percentage points to 43.4 per cent in 2005 in the 1998-2005 period. Given progressive taxation, the observation period saw a *fiscal drag* of 0.8 percentage point overall. It was much weaker than in earlier years in the light of low nominal growth rates. The positive influence of fiscal drag was more than offset by the fact that, adjusted for cyclical influences, compensation of employees – the macroeconomic base of wage taxes and social contributions – grew much more weakly than nominal GDP in the years 1998-2005. Consequently,

<sup>10</sup> To some extent, social transfers in kind resemble healthcare expenditure. Here, healthcare expenditure consists of social benefits, social transfers in kind and other current transfers that can be allocated to the function of the provision of public healthcare services.

wage taxes and social contributions grew more slowly than GDP in structural terms, so that the structural revenue ratio declined. Overall, the impact of the *decoupling* of macro bases from GDP amounted to –1.5 percentage points.

Tax measures and *legislation* changes concerning social security funds had, on balance, no influence on the revenue ratio. On the one hand, there was a distinct reduction in the direct tax burden; here the various steps of the income tax reform, which took effect in 2001, 2004 and 2005, played a particular role. That contrasted, however, with a perceptible rise in indirect taxes. This was, in particular, the result of the sharp hike in energy taxation in order to contribute to the financing of the pension insurance in the context of the “ecological tax reform”.

Social contributions and indirect taxes developed considerably less favourably than one would expect given the changes in macroeconomic bases, the usual sensitivities and the changes in legislation, exerting a significantly negative influence on government revenue. Overall, this effect, which is captured in the *residual*, led to a decrease in the structural revenue ratio of 1.8 percentage points between 1997 and 2005. For turnover tax, this is likely to be due in part to tax evasion and usage of tax loopholes. Moreover, the composition of private consumption seems to have been shifted to a structure yielding less tax revenue. The negative residual for excise taxes is mostly concentrated in 2004 and 2005 when strong demand reactions to high energy prices and the increase in the rate of tobacco tax led to falling demand for mineral oil products and taxed cigarettes, which is only partly reflected in the underlying macroeconomic base (real private consumption). As regards social contributions, the negative residual may partly be attributable to the fact that a considerable number of insured persons left the statutory health insurance scheme to join private health insurance plans, making use of the clause which allows employees to opt out of the statutory health insurance scheme once they earn a certain gross salary. Since the drop-outs are mostly younger, higher-earning persons with relatively low expenditure risk, the structural financial situation of the statutory health insurance schemes deteriorated markedly. For direct taxes the overall residual is slightly positive. Here, a moderately positive value for wage taxes, which probably arose because the negative impact of the tax reductions was somewhat smaller than estimated, is offset by a negative residual in “profit-related taxes” (corporation tax, non-assessed tax on earnings, local business tax, interest withholding tax and assessed income tax).<sup>11</sup> For profit-related taxes there were also relatively strong swings between 1997 and 2005. This is due to the fact that the employed macroeconomic base, entrepreneurial and investment income, is linked only relatively loosely to the development of the true tax base over the period (e.g. deduction of depreciations is not taken into account). Moreover, lag structures linking revenue to the base are unstable over time.

<sup>11</sup> According to the ESA categorisation, the local business tax is an indirect tax. However, the tax base is closely linked to entrepreneurial and investment income. The negative residual for indirect taxes and its fluctuations are partly attributable to the residual for the local business tax.

The ratio of *non-tax-related* revenue to adjusted GDP went down by 0.5 percentage point during the reporting period. About 0.3 percentage point of this fall can be attributed to changes in government revenue from sales. Since these are attributable to a significant degree to the (statistical) outsourcing of fee budgets (for example in the area of sewage and refuse disposal), they are likely to be reflected in a decline in expenditure of a similar size. In addition, the decrease in Bundesbank profits in the years 2003-2005 is a sizable contributing factor.

The *primary expenditure* ratio, adjusted for cyclical influences and temporary measures, went down by 1.4 percentage points to 43.5 per cent between 1997 and 2005, with 2004 being the decisive year. Nominal primary expenditure grew at an annual average of around 1.6 per cent. Though this is very moderate by historical standards, the growth in nominal trend GDP, which basically defines the scope for a deficit-neutral increase in expenditure, was not much higher at an average of about 2 per cent. In 2004, however, the structural primary expenditure ratio fell distinctly, reflecting the restrictive spending stance.

The fall in the adjusted primary expenditure ratio is due to several, and in some cases opposing, developments. In particular, the distinct reduction in staff in the public sector (representing nearly 10 per cent cumulatively) and a wage increase in the public sector which failed to match private sector pay hikes led to no more than moderate growth in *compensation of employees*. Furthermore, a distinct decline in *government investment* over time also has become apparent, reflecting recently mounting strains on municipal budgets. Together with the decline in *subsidies* and the moderate increase in intermediate consumption, these factors contributed a total of about 2 percentage points to consolidation between 1997 and 2005. Since these expenditure categories can be influenced, for the most part, in a discretionary manner and mostly without major legislation changes by the subsectors of government, the decrease reflects the restrictive expenditure policy over the period.

The aforementioned positive influence on deficits was offset to a significant extent by the increase in *social payments* (0.4 percentage point) and *capital transfers* (0.3 percentage point; included under "Other" in the table). A crucial factor was the strong rise in expenditure on old-age provision (0.6 percentage point) owing to an increase in old-age pensions as a consequence of a noticeable rise in the number of retirees and pensioners and the fact that the pension burden for former civil servants of the former Postal Services (Post Office, Telekom and Postbank) was largely assumed by the Federal Government. The increase in capital transfers is attributable mainly to the grant to private home buyers/builders (*Eigenheimzulage*), which rose until 2003 owing to the additional generations of recipients entering the system.<sup>12</sup> In contrast to the other years, in 2004 all expenditure categories contributed to consolidation. In particular, social payments fell distinctly. First, expenditure on retirement pensions grew only moderately because the rise in the number of pension payments and the increase of individual pensions was moderate. Second,

<sup>12</sup> For new cases the grant was reduced in 2004 and fully abolished in 2006. These measures will be reflected in a significant expenditure reduction in the following years.

Table 4

**Germany – Changes in Structural Fiscal Components\***  
(percent of trend GDP)

| <i>Increasing +, decreasing –</i>                       | 1998        | 1999        | 2000        | 2001        | 2002        | 2003        | 2004        | 2005        | 98-05       |
|---------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| <b>Unadjusted balance<sup>(1)</sup></b>                 | <b>0.5</b>  | <b>0.7</b>  | <b>2.8</b>  | <b>–4.1</b> | <b>–0.9</b> | <b>–0.3</b> | <b>0.3</b>  | <b>0.3</b>  | <b>–0.7</b> |
| Cyclical component                                      | 0.3         | 0.3         | 0.6         | 0.1         | –0.4        | –0.5        | 0.0         | 0.0         | 0.3         |
| Temporary measures                                      | 0.0         | 0.0         | 2.4         | –2.5        | 0.1         | 0.0         | 0.0         | 0.0         | 0.0         |
| <b>Balance</b>                                          | <b>0.2</b>  | <b>0.4</b>  | <b>–0.2</b> | <b>–1.8</b> | <b>–0.5</b> | <b>0.2</b>  | <b>0.3</b>  | <b>0.4</b>  | <b>–0.9</b> |
| Interest payments                                       | 0.0         | –0.2        | 0.1         | –0.1        | –0.2        | 0.0         | –0.1        | 0.0         | –0.5        |
| <i>due to changes in average interest rate</i>          | <i>–0.1</i> | <i>–0.3</i> | <i>0.0</i>  | <i>0.0</i>  | <i>–0.1</i> | <i>–0.1</i> | <i>–0.2</i> | <i>–0.1</i> | <i>–0.9</i> |
| <i>due to changes in debt level</i>                     | <i>0.1</i>  | <i>0.1</i>  | <i>0.0</i>  | <i>–0.1</i> | <i>0.0</i>  | <i>0.1</i>  | <i>0.1</i>  | <i>0.1</i>  | <i>0.4</i>  |
| <b>Primary balance</b>                                  | <b>0.2</b>  | <b>0.2</b>  | <b>–0.1</b> | <b>–1.9</b> | <b>–0.7</b> | <b>0.2</b>  | <b>0.2</b>  | <b>0.4</b>  | <b>–1.5</b> |
| <b>Total revenue</b>                                    | <b>0.1</b>  | <b>0.6</b>  | <b>0.4</b>  | <b>–2.0</b> | <b>–0.9</b> | <b>–0.3</b> | <b>–1.1</b> | <b>0.3</b>  | <b>–2.9</b> |
| <b>Direct taxes payable by corporations</b>             | <b>0.1</b>  | <b>0.2</b>  | <b>0.2</b>  | <b>–1.1</b> | <b>0.0</b>  | <b>0.2</b>  | <b>0.2</b>  | <b>0.1</b>  | <b>–0.2</b> |
| Fiscal drag                                             | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         |
| Decoupling of base from GDP                             | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         |
| Legislation changes                                     | 0.0         | 0.1         | 0.0         | –0.5        | 0.2         | 0.0         | 0.1         | 0.2         | 0.1         |
| Residual                                                | 0.0         | 0.1         | 0.2         | –0.6        | –0.2        | 0.1         | 0.1         | –0.1        | –0.4        |
| <b>Direct taxes payable by households</b>               | <b>0.2</b>  | <b>0.2</b>  | <b>0.4</b>  | <b>–0.3</b> | <b>–0.3</b> | <b>–0.3</b> | <b>–0.6</b> | <b>–0.1</b> | <b>–0.9</b> |
| Fiscal drag                                             | 0.1         | 0.1         | 0.1         | 0.2         | 0.1         | 0.1         | 0.1         | 0.1         | 1.0         |
| Decoupling of base from GDP                             | –0.1        | –0.1        | 0.0         | –0.1        | –0.1        | 0.0         | –0.1        | 0.0         | –0.4        |
| Legislation changes                                     | –0.2        | 0.0         | –0.2        | –0.6        | 0.1         | 0.0         | –0.6        | –0.4        | –2.0        |
| Residual                                                | 0.4         | 0.2         | 0.4         | 0.2         | –0.5        | –0.3        | 0.0         | 0.3         | 0.5         |
| <i>Memo item: included in expenditure<sup>(2)</sup></i> | <i>0.0</i>  | <i>0.0</i>  | <i>0.0</i>  | <i>0.0</i>  | <i>0.0</i>  | <i>0.0</i>  | <i>0.0</i>  | <i>0.0</i>  | <i>0.0</i>  |
| <b>Social contributions</b>                             | <b>–0.2</b> | <b>–0.3</b> | <b>–0.2</b> | <b>–0.3</b> | <b>–0.2</b> | <b>–0.1</b> | <b>–0.3</b> | <b>0.0</b>  | <b>–1.6</b> |
| Fiscal drag                                             | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         |
| Decoupling of base from GDP                             | –0.3        | –0.3        | 0.1         | –0.1        | –0.2        | –0.1        | –0.2        | –0.1        | –1.1        |
| Legislation changes                                     | 0.2         | 0.1         | –0.2        | –0.1        | 0.1         | 0.2         | 0.0         | 0.0         | 0.1         |
| Residual                                                | –0.1        | –0.1        | 0.0         | 0.0         | –0.1        | –0.2        | –0.1        | 0.1         | –0.6        |
| <i>Memo item: included in expenditure<sup>(2)</sup></i> | <i>–0.1</i> | <i>0.0</i>  | <i>–0.1</i> | <i>–0.1</i> | <i>0.0</i>  | <i>0.0</i>  | <i>–0.1</i> | <i>0.0</i>  | <i>–0.4</i> |
| <b>Indirect taxes</b>                                   | <b>0.2</b>  | <b>0.5</b>  | <b>0.1</b>  | <b>–0.3</b> | <b>–0.2</b> | <b>0.0</b>  | <b>–0.2</b> | <b>0.1</b>  | <b>0.2</b>  |
| Fiscal drag                                             | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | –0.3        |
| Decoupling of base from GDP                             | –0.1        | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | –0.1        |
| Legislation changes                                     | 0.5         | 0.4         | 0.2         | 0.1         | 0.3         | 0.2         | 0.0         | 0.1         | 1.9         |
| Residual                                                | –0.3        | 0.1         | –0.1        | –0.4        | –0.4        | –0.1        | –0.1        | 0.0         | –1.3        |

| <i>Increasing +, decreasing –</i>                       | 1998        | 1999        | 2000        | 2001        | 2002        | 2003        | 2004        | 2005        | 98-05       |
|---------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| <b>Taxes and social contributions overall</b>           | <b>0.1</b>  | <b>0.6</b>  | <b>0.5</b>  | <b>–2.0</b> | <b>–0.7</b> | <b>–0.2</b> | <b>–0.9</b> | <b>0.1</b>  | <b>–2.5</b> |
| Fiscal drag                                             | 0.1         | 0.1         | 0.1         | 0.1         | 0.1         | 0.1         | 0.1         | 0.1         | 0.8         |
| Decoupling of base from GDP                             | –0.4        | –0.3        | 0.2         | –0.2        | –0.3        | –0.1        | –0.2        | –0.1        | –1.5        |
| Legislation changes                                     | 0.5         | 0.6         | –0.2        | –1.1        | 0.7         | 0.4         | –0.6        | –0.2        | 0.1         |
| Residual <sup>(3)</sup>                                 | 0.1         | 0.3         | 0.4         | –0.9        | –1.2        | –0.6        | –0.2        | 0.3         | –1.8        |
| <i>Memo item: included in expenditure<sup>(2)</sup></i> | <i>–0.1</i> | <i>0.0</i>  | <i>–0.1</i> | <i>–0.1</i> | <i>0.0</i>  | <i>–0.1</i> | <i>–0.2</i> | <i>0.0</i>  | <i>–0.5</i> |
| <b>Non-tax-related revenue<sup>(4)</sup></b>            | <b>–0.1</b> | <b>–0.1</b> | <b>–0.1</b> | <b>0.1</b>  | <b>–0.1</b> | <b>–0.1</b> | <b>–0.2</b> | <b>0.2</b>  | <b>–0.5</b> |
| <i>of which EU<sup>(5)</sup></i>                        |             |             |             |             |             |             |             |             |             |
| <b>Total primary expenditure</b>                        | <b>–0.1</b> | <b>0.4</b>  | <b>0.5</b>  | <b>–0.1</b> | <b>–0.2</b> | <b>–0.5</b> | <b>–1.3</b> | <b>–0.1</b> | <b>–1.4</b> |
| Social payments                                         | –0.1        | 0.1         | 0.5         | 0.2         | 0.2         | –0.1        | –0.7        | 0.3         | 0.4         |
| <i>of which old-age pensions</i>                        | <i>0.2</i>  | <i>0.2</i>  | <i>0.2</i>  | <i>0.0</i>  | <i>0.0</i>  | <i>0.0</i>  | <i>–0.2</i> | <i>0.2</i>  | <i>0.6</i>  |
| <i>of which unemployment benefits</i>                   | <i>–0.1</i> | <i>–0.1</i> | <i>0.1</i>  | <i>0.0</i>  | <i>0.0</i>  | <i>–0.2</i> | <i>–0.2</i> | <i>0.0</i>  | <i>–0.4</i> |
| <i>of which social transfers in kind</i>                | <i>0.0</i>  | <i>0.0</i>  | <i>0.2</i>  | <i>0.1</i>  | <i>0.0</i>  | <i>0.0</i>  | <i>–0.3</i> | <i>0.1</i>  | <i>0.1</i>  |
| Subsidies                                               | 0.0         | 0.0         | –0.1        | –0.1        | –0.1        | –0.1        | –0.1        | –0.1        | –0.6        |
| <i>of which EU<sup>(6)</sup></i>                        | <i>0.0</i>  | <i>0.0</i>  | <i>0.0</i>  | <i>0.0</i>  | <i>0.0</i>  | <i>0.0</i>  | <i>0.0</i>  | <i>0.0</i>  | <i>0.0</i>  |
| Compensation of employees                               | –0.2        | –0.1        | 0.0         | –0.2        | –0.1        | –0.2        | –0.2        | –0.2        | –1.0        |
| Intermediate consumption                                | 0.0         | 0.2         | –0.1        | 0.0         | 0.1         | –0.1        | –0.1        | 0.2         | 0.2         |
| Government investment                                   | 0.0         | 0.1         | –0.1        | 0.0         | –0.1        | –0.2        | –0.1        | –0.1        | –0.5        |
| Other <sup>(7)</sup>                                    | 0.2         | 0.1         | 0.2         | 0.1         | –0.1        | 0.1         | –0.2        | –0.1        | 0.2         |
| <i>of which EU<sup>(8)</sup></i>                        | <i>0.0</i>  | <i>–0.1</i> | <i>0.1</i>  | <i>–0.2</i> | <i>0.0</i>  | <i>0.1</i>  | <i>–0.1</i> | <i>0.1</i>  | <i>–0.1</i> |
| <b>Memorandum items</b>                                 |             |             |             |             |             |             |             |             |             |
| Health care <sup>(9)</sup>                              | 0.0         | 0.0         | 0.1         | 0.1         | 0.0         | 0.0         | –0.3        | 0.1         | –0.1        |
| Trend growth of real GDP                                | 1.7         | 1.6         | 1.5         | 1.3         | 1.2         | 1.1         | 1.1         | 1.1         |             |
| Change in GDP deflator                                  | 0.6         | 0.3         | –0.7        | 1.2         | 1.5         | 1.0         | 0.8         | 0.5         |             |
| Change in public employees                              | –1.8        | –1.5        | –1.0        | –2.1        | –0.9        | –0.8        | –1.2        | –0.9        |             |

\* The fiscal balance is given according to the EDP definition, interest includes settlements under swaps and FRAs.

(1) Change in unadjusted balance, cyclical component and temporary measures as percentage of nominal GDP. Due to the different denominator, the change in the ratio of the structural balance to trend nominal GDP may deviate slightly from the change in the ratio to nominal GDP of the unadjusted balance less cyclical component less temporary measures.

(2) Payments attributable to the general government sector (estimated).

(3) May also include the change in the structural ratio of direct taxes not payable by corporations/households.

(4) Other current transfers receivable, sales and total capital revenue.

(5) Net receipts from EC budget if country is a net recipient from EC budget. Empty if country is net payer to EC budget.

(6) Expenditure paid by EC budget that is spent under category “Subsidies”.

(7) Other current transfers payable, other net acquisitions of non-financial assets and capital transfers.

(8) If country is a net payer to EC budget: net payments to EC budget less expenditure paid by EC budget that is not spent under category “Other”. If country is a net recipient from EC budget: expenditure paid by EC budget that is spent under category “Other”.

(9) Social benefits, social transfers in kind and other current transfers that can be allocated into the function of the provision of public health care services.

Note: Due to rounding there might be deviations between aggregate numbers and the sum of individual numbers.

discretionary spending cuts in healthcare in 2004 (see memorandum item in the table) contributed considerably to consolidation in this year.

### 3.5 Italy

Between 1997 and 2005 the general government *balance* ratio in Italy worsened by 1.4 percentage points of GDP (see table below). The information conveyed by the unadjusted balance is partly modified if we exclude the effects of the improvement in cyclical conditions registered over the period and those, significantly larger, of the decline in the recourse to temporary measures. The structural deficit ratio increases by only 0.9 percentage points, from 3.4 per cent of trend GDP in 1997 to 4.3 per cent. The increase was limited by the large drop in *interest* payments (4.6 per cent of trend GDP), which largely reflected the reduction in average rates.

The high structural *primary surplus* achieved in 1997, which allowed Italy to participate in the European Monetary Union, almost vanished, worsening by 5.8 percentage points to 0.3 per cent of trend GDP. The fall in the structural primary balance was concentrated in 1998 and in the years 2001-03; over the entire period, almost two-thirds of the worsening can be attributed to weak revenue developments and one third to expenditure increases.

The structural *revenue* ratio fell by 3.5 percentage points in the years 1998-2005, to 43.5 per cent. The decline in the overall taxes and social security contributions ratio (2.8 percentage points) essentially reflected legislation changes (–3.5 percentage points), partly offset by the positive effects of the fiscal drag (0.8 percentage points) and of decoupling tax bases from GDP (0.2 percentage points). The decline in non-tax-related revenue (0.7 percentage points) was largely due to the fall in interest receivable (0.3) and in sales (0.2 percentage points).

Direct taxes on corporations and on households and social security contributions declined, by 1.7, 0.8 and 2.3 percentage points respectively, while indirect taxes rose by 2.0 percentage points. With the exception of direct taxes on households, which remained virtually unaffected, these developments largely reflect the 1998 tax reform which introduced a new regional tax on productive activities (IRAP). While in official estimates released when the reform was introduced, IRAP was expected to have a neutral effect on total revenue; in the legislation effects shown in Table 2 we include a negative impact close to –0.5 per cent of trend GDP. In our assessment, the reform implied reductions in social security contributions (–2.1 percentage points of trend GDP) and direct taxes on corporations (–1.1 percentage points), only partly offset by the increase in indirect taxes (2.7 percentage points) where the new tax was classified. Excluding the impact of the IRAP reform, over the period 1998-2005 social security contributions remained approximately stable while the other three components registered broadly similar reductions (ranging between 0.6 and 0.8 percentage points of trend GDP).

Concerning *legislation*, the permanent changes implemented over the period 1998-2005 are estimated to have reduced revenue in 2005 by approximately 3.5 per cent of trend GDP. The largest effect of legislation concerned direct taxes on households (–2.1 per cent of trend GDP), which more than offset the impact of fiscal drag (0.9 per cent of trend GDP) and direct taxes on corporations (–2.0 per cent of trend GDP). Tax reductions were sizable in 1998, reflecting the possibly unintended effect of the IRAP reform, in 1999-2001, as the favourable cyclical conditions and economic prospects in 1999 and in 2000 led the Government to use what was called the “growth dividend”, and in 2003-04, as the marked slowdown in 2001-02 prompted actions aimed at helping the recovery. It should be emphasized that our assessment of the effects of legislation has to be considered as only broadly indicative. Indeed, the effects of a number of measures could not be assessed, lacking adequate information. Moreover, in many cases we could not perform an independent assessment but had to rely on government estimates.

Concerning the *residual* component, results for individual years can be partly explained by specific factors. The negative overall value in 1998 (0.3 per cent of GDP) partly reflects the reform of the taxation on financial assets, whose complexity has made it difficult to evaluate the impact on revenue. The reform was partly responsible for the fall in revenue from the withholding tax on interest revenue, from 1.8 per cent of GDP in 1997 to 0.9 per cent in 1998, largely reflected in the residual for the direct taxes on households. The latter is partly offset by the positive residual for direct taxes on corporations, which suggests that the indirect (positive) effects of the IRAP reform on these taxes may have been larger than the official estimates (included here). The positive residuals in 2000 are connected with the large amount of revenue from capital gains collected in that year (0.7 per cent of trend GDP); in the following year these extraordinary revenues largely vanished, resulting in a negative residual. The period 2001-03 was also affected, to an extent difficult to gauge precisely, by tax incentives for investment (Tremonti law). The negative residual in the direct taxes paid by corporation in 2002 seem to suggest that our estimates (0.2 per cent of GDP in 2002 and 0.1 per cent in the previous and subsequent years) may underestimate the actual loss of receipts related to the incentives. The recourse in the years 2001-05 to temporary withholding taxes on extraordinary operations (essentially, revaluation of assets and sales of companies) at reduced rates also affected ordinary revenue, albeit to an extent which is difficult to measure. These extraordinary taxes, included in the temporary measures, cumulatively generated revenue amounting to 2 percentage points of trend GDP.

The effects of *decoupling* tax bases from GDP were particularly sizable and negative in 1998. In the following years they were initially positive and afterwards showed small fluctuations around zero. Over the period 1998-2005 this factor had a positive impact on the dynamics of the revenue ratio, equal to 0.2 percentage points.

The structural *primary expenditure* ratio rose by 2.0 percentage points between 1997 and 2005; more than half of the increase occurred in 2001. Positive contributions came mostly from social transfers in kind (0.8 percentage points), a part of health care included in social payments, intermediate consumption

Table 5

**Italy – Changes in Structural Fiscal Components\***  
(percent of trend GDP)

| <i>Increasing +, decreasing –</i>                       | 1998        | 1999        | 2000        | 2001        | 2002        | 2003        | 2004        | 2005        | 98-05       |
|---------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| <b>Unadjusted balance<sup>(1)</sup></b>                 | <b>–0.1</b> | <b>1.1</b>  | <b>0.9</b>  | <b>–2.2</b> | <b>0.2</b>  | <b>–0.6</b> | <b>0.1</b>  | <b>–0.7</b> | <b>–1.4</b> |
| Cyclical component                                      | 0.6         | 0.4         | 0.0         | 0.2         | –0.2        | –0.2        | –0.3        | –0.2        | 0.3         |
| Temporary measures                                      | –0.2        | –1.0        | 1.1         | –0.6        | 1.1         | 0.2         | –0.4        | –1.0        | –0.8        |
| <b>Balance</b>                                          | <b>–0.5</b> | <b>1.6</b>  | <b>–0.3</b> | <b>–2.0</b> | <b>–0.6</b> | <b>–0.5</b> | <b>0.7</b>  | <b>0.5</b>  | <b>–0.9</b> |
| Interest payments                                       | –1.1        | –1.5        | –0.1        | 0.0         | –0.7        | –0.6        | –0.4        | –0.2        | –4.6        |
| <i>due to changes in average interest rate</i>          | <i>–1.2</i> | <i>–1.2</i> | <i>0.0</i>  | <i>0.1</i>  | <i>–0.7</i> | <i>–0.3</i> | <i>–0.3</i> | <i>–0.3</i> | <i>–3.9</i> |
| <i>due to changes in debt level</i>                     | <i>0.1</i>  | <i>–0.3</i> | <i>–0.1</i> | <i>–0.1</i> | <i>0.0</i>  | <i>–0.3</i> | <i>0.0</i>  | <i>0.1</i>  | <i>–0.7</i> |
| <b>Primary balance</b>                                  | <b>–1.6</b> | <b>0.1</b>  | <b>–0.4</b> | <b>–2.0</b> | <b>–1.3</b> | <b>–1.1</b> | <b>0.3</b>  | <b>0.3</b>  | <b>–5.5</b> |
| <b>Total revenue</b>                                    | <b>–1.4</b> | <b>0.3</b>  | <b>–0.1</b> | <b>–0.7</b> | <b>–1.1</b> | <b>–1.0</b> | <b>0.2</b>  | <b>0.3</b>  | <b>–3.5</b> |
| <b>Direct taxes payable by corporations</b>             | <b>–0.8</b> | <b>0.1</b>  | <b>–0.3</b> | <b>0.1</b>  | <b>–0.6</b> | <b>–0.3</b> | <b>–0.2</b> | <b>0.3</b>  | <b>–1.7</b> |
| Fiscal drag                                             | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         |
| Decoupling of base from GDP                             | 0.1         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.1         |
| Legislation changes                                     | –1.1        | 0.1         | –0.2        | –0.2        | –0.2        | –0.2        | –0.3        | 0.1         | –2.0        |
| Residual                                                | 0.3         | –0.1        | –0.1        | 0.3         | –0.4        | –0.1        | 0.0         | 0.2         | 0.1         |
| <b>Direct taxes payable by households</b>               | <b>–0.9</b> | <b>0.5</b>  | <b>0.3</b>  | <b>–0.4</b> | <b>–0.1</b> | <b>–0.1</b> | <b>0.0</b>  | <b>0.0</b>  | <b>–0.8</b> |
| Fiscal drag                                             | 0.1         | 0.1         | 0.2         | 0.2         | 0.2         | 0.2         | 0.2         | 0.1         | 1.2         |
| Decoupling of base from GDP                             | –0.2        | 0.0         | 0.1         | 0.0         | 0.0         | 0.0         | 0.0         | 0.1         | 0.0         |
| Legislation changes                                     | 0.0         | –0.2        | –0.6        | –0.4        | –0.1        | –0.4        | –0.1        | –0.3        | –2.1        |
| Residual                                                | –0.8        | 0.5         | 0.7         | –0.2        | –0.2        | 0.1         | –0.1        | 0.1         | 0.1         |
| <i>Memo item: included in expenditure<sup>(2)</sup></i> | <i>–0.1</i> | <i>0.0</i>  | <i>0.0</i>  | <i>0.0</i>  | <i>0.0</i>  | <i>0.0</i>  | <i>0.0</i>  | <i>0.0</i>  | <i>0.0</i>  |
| <b>Social contributions</b>                             | <b>–2.6</b> | <b>–0.1</b> | <b>0.2</b>  | <b>–0.2</b> | <b>0.1</b>  | <b>0.1</b>  | <b>0.2</b>  | <b>0.1</b>  | <b>–2.3</b> |
| Fiscal drag                                             | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         |
| Decoupling of base from GDP                             | –0.3        | 0.0         | 0.1         | 0.0         | 0.0         | 0.0         | 0.0         | 0.1         | 0.0         |
| Legislation changes                                     | –2.1        | –0.2        | –0.2        | –0.1        | 0.0         | 0.0         | 0.1         | 0.0         | –2.4        |
| Residual                                                | –0.3        | 0.0         | 0.2         | –0.1        | 0.0         | 0.1         | 0.1         | 0.0         | 0.1         |
| <i>Memo item: included in expenditure<sup>(2)</sup></i> | <i>–0.5</i> | <i>0.0</i>  | <i>0.0</i>  | <i>0.0</i>  | <i>0.0</i>  | <i>0.1</i>  | <i>0.0</i>  | <i>0.0</i>  | <i>–0.4</i> |
| <b>Indirect taxes</b>                                   | <b>3.0</b>  | <b>–0.3</b> | <b>0.1</b>  | <b>–0.4</b> | <b>–0.2</b> | <b>–0.4</b> | <b>0.1</b>  | <b>0.1</b>  | <b>2.0</b>  |
| Fiscal drag                                             | –0.1        | 0.0         | 0.0         | –0.1        | –0.1        | –0.1        | –0.1        | 0.0         | –0.4        |
| Decoupling of base from GDP                             | 0.0         | 0.1         | 0.1         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.1         |
| Legislation changes                                     | 2.7         | –0.3        | 0.0         | –0.1        | 0.1         | 0.1         | 0.1         | 0.3         | 2.9         |
| Residual                                                | 0.4         | –0.1        | 0.1         | –0.2        | –0.2        | –0.4        | 0.1         | –0.2        | –0.5        |



| <i>Increasing +, decreasing –</i>                       | 1998        | 1999        | 2000        | 2001        | 2002        | 2003        | 2004        | 2005        | 98-05               |
|---------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|---------------------|
| <b>Taxes and social contributions overall</b>           | <b>–1.2</b> | <b>0.1</b>  | <b>0.2</b>  | <b>–0.8</b> | <b>–0.9</b> | <b>–0.7</b> | <b>0.0</b>  | <b>0.5</b>  | <b>–2.8</b>         |
| Fiscal drag                                             | 0.0         | 0.1         | 0.1         | 0.1         | 0.1         | 0.1         | 0.1         | 0.1         | 0.8                 |
| Decoupling of base from GDP                             | –0.4        | 0.2         | 0.3         | 0.1         | 0.0         | 0.0         | 0.0         | 0.1         | 0.2                 |
| Legislation changes                                     | –0.5        | –0.6        | –1.0        | –0.7        | –0.2        | –0.5        | –0.2        | 0.2         | –3.5                |
| Residual <sup>(3)</sup>                                 | –0.3        | 0.4         | 0.9         | –0.3        | –0.8        | –0.3        | 0.2         | 0.1         | –0.2                |
| <i>Memo item: included in expenditure<sup>(2)</sup></i> | <i>0.2</i>  | <i>0.0</i>  | <i>–0.1</i> | <i>0.0</i>  | <i>0.0</i>  | <i>0.0</i>  | <i>0.2</i>  | <i>–0.1</i> | <i>0.3</i>          |
| <b>Non-tax-related revenue<sup>(4)</sup></b>            | <b>–0.2</b> | <b>0.2</b>  | <b>–0.4</b> | <b>0.1</b>  | <b>–0.1</b> | <b>–0.4</b> | <b>0.1</b>  | <b>–0.2</b> | <b>–0.7</b>         |
| <i>of which EU<sup>(5)</sup></i>                        |             |             |             |             |             |             |             |             |                     |
| <b>Total primary expenditure</b>                        | <b>0.2</b>  | <b>0.2</b>  | <b>0.3</b>  | <b>1.2</b>  | <b>0.2</b>  | <b>0.0</b>  | <b>–0.2</b> | <b>0.0</b>  | <b>2.0</b>          |
| Social payments                                         | –0.1        | 0.0         | 0.1         | 0.2         | 0.3         | 0.1         | 0.2         | 0.0         | 0.7                 |
| <i>of which old-age pensions</i>                        | <i>0.3</i>  | <i>–0.1</i> | <i>0.0</i>  | <i>0.1</i>  | <i>0.1</i>  | <i>0.0</i>  | <i>0.0</i>  | <i>–0.1</i> | <i>0.3</i>          |
| <i>of which unemployment benefits</i>                   | <i>–0.1</i> | <i>0.0</i>  | <i>–0.1</i> | <i>0.0</i>  | <i>0.0</i>  | <i>0.0</i>  | <i>0.0</i>  | <i>0.0</i>  | <i>–0.1</i>         |
| <i>of which social transfers in kind</i>                | <i>0.0</i>  | <i>0.1</i>  | <i>0.3</i>  | <i>0.2</i>  | <i>0.0</i>  | <i>0.0</i>  | <i>0.1</i>  | <i>0.0</i>  | <i>0.8</i>          |
| Subsidies                                               | 0.0         | –0.1        | 0.0         | 0.0         | –0.1        | –0.1        | –0.1        | –0.1        | –0.4                |
| <i>of which EU<sup>(6)</sup></i>                        | <i>–0.1</i> | <i>0.0</i>  | <i>0.0</i>  | <i>0.0</i>  | <i>0.0</i>  | <i>0.0</i>  | <i>0.0</i>  | <i>0.0</i>  | <i>–0.1</i>         |
| Compensation of employees                               | –0.9        | 0.0         | 0.1         | 0.1         | 0.0         | 0.1         | –0.1        | 0.1         | –0.6                |
| Intermediate consumption                                | 0.1         | 0.1         | 0.1         | 0.1         | 0.0         | 0.1         | 0.1         | 0.0         | 0.6                 |
| Government investment                                   | 0.2         | 0.1         | 0.1         | 0.1         | 0.0         | 0.0         | 0.1         | –0.2        | 0.4                 |
| Other <sup>(7)</sup>                                    | 1.0         | 0.1         | –0.2        | 0.6         | 0.1         | –0.1        | –0.4        | 0.2         | 1.2                 |
| <i>of which EU<sup>(8)</sup></i>                        | <i>0.3</i>  | <i>–0.1</i> | <i>0.0</i>  | <i>0.0</i>  | <i>0.0</i>  | <i>0.1</i>  | <i>0.0</i>  | <i>0.0</i>  | <i>0.3</i>          |
| <b>Memorandum items</b>                                 |             |             |             |             |             |             |             |             |                     |
| Health care <sup>(9)</sup>                              | 0.0         | 0.2         | 0.4         | 0.2         | 0.0         | –0.1        | 0.3         | 0.1         | 1.2                 |
| Trend growth of real GDP                                | 1.6         | 1.6         | 1.6         | 1.4         | 1.3         | 1.1         | 1.1         | 1.1         | 1.3 <sup>(10)</sup> |
| Change in GDP deflator                                  | 2.6         | 1.3         | 2.0         | 3.0         | 3.4         | 3.1         | 2.9         | 2.1         | 2.5 <sup>(10)</sup> |
| Change in public employees                              | –0.7        | 0.1         | 1.2         | 1.3         | 0.7         | 0.7         | –0.1        | –0.2        | 0.4                 |

\* The fiscal balance is given according to the EDP definition, interest includes settlements under swaps and FRAs.

<sup>(1)</sup> Change in unadjusted balance, cyclical component and temporary measures as percentage of nominal GDP. Due to the different denominator, the change in the ratio of the structural balance to trend nominal GDP may deviate slightly from the change in the ratio to nominal GDP of the unadjusted balance less cyclical component less temporary measures.

<sup>(2)</sup> Payments attributable to the general government sector (estimated).

<sup>(3)</sup> May also include the change in the structural ratio of direct taxes not payable by corporations/households.

<sup>(4)</sup> Other current transfers receivable, sales and total capital revenue.

<sup>(5)</sup> Net receipts from EC budget if country is a net recipient from EC budget. Empty if country is net payer to EC budget.

<sup>(6)</sup> Expenditure paid by EC budget that is spent under category “Subsidies”.

<sup>(7)</sup> Other current transfers payable, other net acquisitions of non-financial assets and capital transfers.

<sup>(8)</sup> If country is a net payer to EC budget: net payments to EC budget less expenditure paid by EC budget that is not spent under category “Other”. If country is a net recipient from EC budget: expenditure paid by EC budget that is spent under category “Other”.

<sup>(9)</sup> Social benefits, social transfers in kind and other current transfers that can be allocated into the function of the provision of public health care services.

<sup>(10)</sup> Period average.

Note: Due to rounding there might be deviations between aggregate numbers and the sum of individual numbers.

(0.6 points) and investment (0.4 points). The limited increase in expenditure on public pensions (0.3 points) reflected the effects of legislation aiming at curbing disbursements. Net of the effects of the IRAP reform, also compensation of employees and the expenditure included in the category “other” increased (by respectively, 0.1 and 0.5 percentage points). Overall, health care rose by 1.2 percentage points.

The IRAP reform led to a reduction in social security contribution rates for public employees which was matched by the recording of payments for the new tax: the reform explains 0.7 percentage points of GDP of the reduction in *compensation of employees* and of the increase in the category “other” registered in 1998. The increase in the cost of public employees, net of the impact of the reform, reflects the rise in their number over the period 1998-2005 (2.9 percentage points). Between 1992 and 2005 public employment in Italy has remained broadly stable. In a first sub-period (1993-1998), broadly corresponding to the years of the Italian budgetary consolidation aimed at ensuring Italy’s participation in the Monetary Union from the outset, the number of public employees declined by 3.5 per cent. The reduction was more than offset by the increase registered in the following five years (3.9 per cent). In 2004-05 public employment cumulatively declined by 0.3 per cent.

Among the large components of expenditure, only subsidies declined in the period 1998-2005, by 0.3 percentage points of trend GDP.

### 3.6 The Netherlands

Between 1997 and 2005 the general government balance improved by 0.8 percentage point. Over the whole period, the cycle contributed mildly negatively to the change in the balance. In addition to the sale of UMTS-licences in 2000 (yielding 0.6 per cent of GDP), there was minor recourse to temporary measures in 2004, amounting to 0.2 per cent of GDP. Adjusted for these effects, the structural *balance* ratio improved by 1.0 percentage points to +0.8 per cent. These overall figures mark significantly different developments before and after 2001. Up to 2000, the structural general government balance improved, caused by falling *interest* payments. This, in turn, was caused by both lower average interest rates and a falling debt ratio. The structural primary surplus worsened slightly. The increase in the structural revenue ratio fell short of the increase in the structural primary expenditure ratio. 2001 marked a turnaround for the Dutch economy, and consequently, for public finances. Economic growth slumped and remained below its potential afterwards. This had a major impact on public finances, which was gradually unveiled only later. *Interest* payments continued to decline, albeit at a more moderate pace as the debt ratio started to increase again. Refinancing conditions remained favourable, though. The structural *primary balance* decreased markedly in 2001 and 2002, when both revenue decreased and expenditure increased. In 2003, consolidation measures started to take effect. The downward trend in the revenue ratio was reversed, while the expenditure ratio began to decrease. As a result, the structural primary balance started to improve again.

The structural *revenue* ratio declined by 3.0 percentage points between 1997 and 2002. Afterwards it increased by 2.4 percentage points. *Fiscal drag* contributed negatively in all years. This was mainly caused by social contributions, which are levied only over the two lowest tax brackets. This has a degressive effect which was particularly sizeable because of high nominal wage increases. For the other revenue categories, fiscal drag was only minor. As employment growth was strong and wages increased considerably in the years 1998-2003, the positive contribution of the *decoupling* of the base from GDP was substantial for direct taxes payable by households and especially social contributions. Decoupling contributed negatively to indirect tax receipts, reflecting relatively sluggish private consumption growth.

With a new cabinet taking office in 1998, *legislation changes* contributed relatively little to the observed revenue changes up to 2000. On balance, the tax burden was relieved somewhat. The tax reform of 2001 had a major negative impact on revenues. On balance, it is estimated to have lowered tax revenues by 1.8 per cent of GDP in 2001. The reform implied a shift from direct to indirect tax revenues. Income tax rates were lowered, the income tax base was broadened by eliminating various tax deductions, and social contribution rates were decreased. At the same time, the VAT rate was increased from 17.5 to 19 per cent, and energy taxes were increased. After 2002, the tax and social contribution burden was increased again in an effort to redress public finance problems. In particular, social contributions and energy taxes were raised.

The overall *residual* component is explained mainly by direct taxes on corporations, with particularly substantial residual contribution in the years 2002 and 2003. The likely cause is the complicated relation between profits and corporate taxation. When calculating the cyclically adjusted corporate tax revenues, an elasticity with respect to gross operating surplus of 1 is assumed. This is a far cry from the compensation schemes available for corporations, enabling them to carry back and forward losses for many years when determining taxable profits. Furthermore, it seems likely that the downturn on the stock markets and the related substantial write-offs on corporate balance sheets impaired corporate tax revenues – effects which are not fully captured in the tax base and elasticities used here. Another factor in the residual development of corporate taxes is natural gas revenue, which partly accrues to the government in the form of corporate tax on Gasunie's profits. In 2001, this factor accounted for an increase in corporate taxes of 0.1 per cent of GDP under the influence of rising (oil and) gas prices, but in 2003 it fell again by the same amount. A special factor in 2005 was the advanced payment of taxes following an increase in the statutory interest rate on overpaid taxes. This effect is estimated at  $\frac{1}{4}$  per cent of GDP and self-reverses in 2006, when the overpaid taxes are reimbursed.

For other revenue categories, some sizeable residuals appeared in individual years. For direct taxes payable by households, additional variations in tax receipts come from the deduction of mortgage interest payments and pension premiums. Mortgage interest payments were increasing annually by 0.05 per cent of GDP on average in the years 1998-2005. Pension premiums were lowered in the years

Table 6

**The Netherlands – Changes in Structural Fiscal Components\***  
(percent of trend GDP)

| <i>Increasing +, decreasing –</i>                       | 1998        | 1999        | 2000        | 2001        | 2002        | 2003        | 2004        | 2005        | 98-05       |
|---------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| <b>Unadjusted balance<sup>(1)</sup></b>                 | <b>0.3</b>  | <b>1.4</b>  | <b>1.5</b>  | <b>–2.4</b> | <b>–1.7</b> | <b>–1.2</b> | <b>1.1</b>  | <b>1.8</b>  | <b>0.8</b>  |
| Cyclical component                                      | 0.9         | 0.3         | 0.6         | 1.0         | –0.2        | –1.4        | –1.2        | –0.3        | –0.3        |
| Temporary measures                                      | 0.0         | 0.0         | 0.6         | –0.9        | 0.3         | 0.0         | 0.2         | –0.2        | 0.0         |
| <b>Balance</b>                                          | <b>–0.6</b> | <b>1.0</b>  | <b>0.3</b>  | <b>–2.5</b> | <b>–1.7</b> | <b>0.3</b>  | <b>2.0</b>  | <b>2.3</b>  | <b>1.0</b>  |
| Interest payments                                       | –0.3        | –0.3        | –0.6        | –0.5        | –0.4        | –0.2        | –0.1        | –0.2        | –2.5        |
| <i>due to changes in average interest rate</i>          | <i>0.0</i>  | <i>–0.1</i> | <i>–0.2</i> | <i>–0.2</i> | <i>–0.3</i> | <i>–0.2</i> | <i>–0.1</i> | <i>–0.2</i> | <i>–1.4</i> |
| <i>due to changes in debt level</i>                     | <i>–0.2</i> | <i>–0.2</i> | <i>–0.4</i> | <i>–0.3</i> | <i>–0.1</i> | <i>0.0</i>  | <i>0.1</i>  | <i>0.0</i>  | <i>–1.1</i> |
| <b>Primary balance</b>                                  | <b>–0.8</b> | <b>0.8</b>  | <b>–0.3</b> | <b>–3.0</b> | <b>–2.2</b> | <b>0.1</b>  | <b>1.9</b>  | <b>2.1</b>  | <b>–1.5</b> |
| <b>Total revenue</b>                                    | <b>–0.7</b> | <b>1.4</b>  | <b>–0.2</b> | <b>–1.9</b> | <b>–1.7</b> | <b>0.0</b>  | <b>1.3</b>  | <b>1.1</b>  | <b>–0.7</b> |
| <b>Direct taxes payable by corporations</b>             | <b>0.0</b>  | <b>0.0</b>  | <b>0.0</b>  | <b>–0.1</b> | <b>–0.6</b> | <b>–0.5</b> | <b>0.2</b>  | <b>0.3</b>  | <b>–0.7</b> |
| Fiscal drag                                             | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         |
| Decoupling of base from GDP                             | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | –0.2        |
| Legislation changes                                     | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.2         | –0.1        | 0.1         |
| Residual                                                | 0.0         | 0.0         | 0.0         | –0.1        | –0.6        | –0.5        | 0.0         | 0.4         | –0.6        |
| <b>Direct taxes payable by households</b>               | <b>–0.3</b> | <b>0.1</b>  | <b>0.0</b>  | <b>–0.5</b> | <b>0.5</b>  | <b>0.0</b>  | <b>–0.1</b> | <b>0.8</b>  | <b>0.3</b>  |
| Fiscal drag                                             | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.2         |
| Decoupling of base from GDP                             | 0.1         | 0.1         | 0.1         | 0.1         | 0.0         | 0.0         | 0.0         | –0.1        | 0.3         |
| Legislation changes                                     | –0.2        | –0.1        | –0.2        | –0.6        | 0.3         | –0.2        | 0.0         | 0.6         | –0.5        |
| Residual                                                | –0.2        | 0.0         | 0.1         | 0.0         | 0.1         | 0.1         | –0.1        | 0.3         | 0.3         |
| <i>Memo item: included in expenditure<sup>(2)</sup></i> | <i>0.1</i>  | <i>0.0</i>  | <i>0.0</i>  | <i>0.0</i>  | <i>0.0</i>  | <i>0.0</i>  | <i>0.0</i>  | <i>0.0</i>  | <i>0.2</i>  |
| <b>Social contributions</b>                             | <b>–0.2</b> | <b>0.8</b>  | <b>–0.1</b> | <b>–2.4</b> | <b>–0.7</b> | <b>0.7</b>  | <b>0.8</b>  | <b>–0.7</b> | <b>–1.8</b> |
| Fiscal drag                                             | –0.2        | –0.2        | –0.3        | –0.3        | –0.2        | –0.2        | –0.1        | –0.1        | –1.5        |
| Decoupling of base from GDP                             | 0.3         | 0.3         | 0.1         | 0.2         | 0.1         | 0.0         | –0.1        | –0.2        | 0.7         |
| Legislation changes                                     | –0.1        | 0.2         | 0.0         | –1.8        | –0.1        | 0.8         | 0.3         | 0.0         | –0.8        |
| Residual                                                | –0.2        | 0.6         | 0.1         | –0.4        | –0.4        | 0.1         | 0.6         | –0.5        | –0.2        |
| <i>Memo item: included in expenditure<sup>(2)</sup></i> | <i>0.1</i>  | <i>0.0</i>  | <i>0.0</i>  | <i>0.0</i>  | <i>0.0</i>  | <i>0.0</i>  | <i>0.0</i>  | <i>–0.1</i> | <i>–0.1</i> |
| <b>Indirect taxes</b>                                   | <b>0.0</b>  | <b>0.5</b>  | <b>–0.1</b> | <b>0.4</b>  | <b>–0.4</b> | <b>0.1</b>  | <b>0.4</b>  | <b>0.2</b>  | <b>1.1</b>  |
| Fiscal drag                                             | 0.0         | 0.0         | –0.1        | –0.1        | –0.1        | 0.0         | 0.0         | 0.0         | –0.4        |
| Decoupling of base from GDP                             | 0.0         | 0.0         | –0.1        | –0.1        | –0.1        | –0.1        | 0.0         | –0.1        | –0.4        |
| Legislation changes                                     | 0.0         | 0.1         | 0.0         | 0.6         | –0.2        | 0.3         | 0.2         | 0.2         | 1.1         |
| Residual                                                | 0.0         | 0.4         | 0.0         | 0.0         | 0.0         | –0.1        | 0.3         | 0.1         | 0.8         |

| <i>Increasing +, decreasing –</i>                       | 1998        | 1999        | 2000        | 2001        | 2002        | 2003        | 2004        | 2005        | 98-05       |
|---------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| <b>Taxes and social contributions overall</b>           | <b>–0.5</b> | <b>1.5</b>  | <b>–0.4</b> | <b>–2.6</b> | <b>–1.3</b> | <b>0.2</b>  | <b>1.3</b>  | <b>0.6</b>  | <b>–1.1</b> |
| Fiscal drag                                             | –0.2        | –0.2        | –0.3        | –0.4        | –0.2        | –0.2        | –0.1        | –0.1        | –1.6        |
| Decoupling of base from GDP                             | 0.4         | 0.4         | 0.1         | 0.1         | –0.1        | –0.1        | –0.1        | –0.3        | 0.4         |
| Legislation changes                                     | –0.3        | 0.2         | –0.2        | –1.8        | –0.1        | 0.8         | 0.6         | 0.7         | –0.1        |
| Residual <sup>(3)</sup>                                 | –0.3        | 1.1         | 0.1         | –0.5        | –0.9        | –0.4        | 0.9         | 0.4         | 0.3         |
| <i>Memo item: included in expenditure<sup>(2)</sup></i> | <i>0.1</i>  | <i>0.1</i>  | <i>0.0</i>  | <i>0.0</i>  | <i>0.1</i>  | <i>0.0</i>  | <i>–0.1</i> | <i>–0.2</i> | <i>0.1</i>  |
| <b>Non-tax-related revenue<sup>(4)</sup></b>            | <b>–0.3</b> | <b>–0.1</b> | <b>0.2</b>  | <b>0.7</b>  | <b>–0.4</b> | <b>–0.2</b> | <b>0.0</b>  | <b>0.4</b>  | <b>0.3</b>  |
| <i>of which EU<sup>(5)</sup></i>                        |             |             |             |             |             |             |             |             |             |
| <b>Total primary expenditure</b>                        | <b>0.1</b>  | <b>0.7</b>  | <b>0.1</b>  | <b>1.2</b>  | <b>0.5</b>  | <b>–0.1</b> | <b>–0.6</b> | <b>–1.0</b> | <b>0.8</b>  |
| Social payments                                         | –0.2        | –0.2        | –0.1        | 0.0         | 0.2         | 0.1         | –0.1        | –0.4        | –0.7        |
| <i>of which old-age pensions</i>                        | <i>0.0</i>  | <i>0.0</i>  | <i>–0.1</i> | <i>–0.1</i> | <i>0.0</i>  | <i>0.0</i>  | <i>0.0</i>  | <i>–0.1</i> | <i>–0.2</i> |
| <i>of which unemployment benefits</i>                   | <i>0.0</i>  | <i>–0.1</i> | <i>–0.1</i> | <i>0.0</i>  | <i>–0.1</i> | <i>–0.1</i> | <i>–0.1</i> | <i>–0.1</i> | <i>–0.4</i> |
| <i>of which social transfers in kind</i>                | <i>–0.1</i> | <i>0.0</i>  | <i>–0.1</i> | <i>–0.5</i> | <i>0.0</i>  | <i>0.0</i>  | <i>0.0</i>  | <i>0.0</i>  | <i>–0.6</i> |
| Subsidies                                               | –0.2        | 0.1         | –0.1        | 0.0         | 0.0         | –0.1        | 0.0         | 0.0         | –0.3        |
| <i>of which EU<sup>(6)</sup></i>                        | <i>–0.1</i> | <i>0.0</i>  | <i>0.0</i>  | <i>–0.1</i> | <i>0.0</i>  | <i>0.0</i>  | <i>0.0</i>  | <i>0.0</i>  | <i>–0.2</i> |
| Compensation of employees                               | 0.0         | 0.2         | –0.1        | –0.1        | 0.1         | 0.1         | 0.0         | –0.2        | –0.1        |
| Intermediate consumption                                | 0.1         | 0.3         | 0.0         | 0.8         | 0.1         | 0.0         | –0.1        | –0.2        | 0.9         |
| Government investment                                   | 0.1         | 0.1         | 0.1         | 0.3         | 0.2         | –0.2        | –0.3        | –0.1        | 0.2         |
| Other <sup>(7)</sup>                                    | 0.3         | 0.2         | 0.3         | 0.2         | –0.1        | 0.1         | –0.1        | –0.1        | 0.7         |
| <i>of which EU<sup>(8)</sup></i>                        | <i>0.2</i>  | <i>–0.1</i> | <i>0.0</i>  | <i>–0.1</i> | <i>–0.2</i> | <i>0.0</i>  | <i>0.1</i>  | <i>0.2</i>  | <i>0.2</i>  |
| <b>Memorandum items</b>                                 |             |             |             |             |             |             |             |             |             |
| Health care <sup>(9)</sup>                              | 0.0         | 0.1         | 0.1         | 0.2         | 0.5         | 0.3         | 0.1         | 0.0         | 1.2         |
| Trend growth of real GDP                                | 3.0         | 2.8         | 2.5         | 2.1         | 1.8         | 1.6         | 1.6         | 1.7         |             |
| Change in GDP deflator                                  | 1.7         | 1.5         | 3.9         | 5.2         | 3.8         | 2.5         | 0.9         | 1.6         |             |
| Change in public employees                              | 3.1         | 0.9         | 0.8         | 1.8         | 2.1         | 0.4         | –0.7        | –1.3        |             |

\* The fiscal balance is given according to the EDP definition, interest includes settlements under swaps and FRAs.

<sup>(1)</sup> Change in unadjusted balance, cyclical component and temporary measures as percentage of nominal GDP. Due to the different denominator, the change in the ratio of the structural balance to trend nominal GDP may deviate slightly from the change in the ratio to nominal GDP of the unadjusted balance less cyclical component less temporary measures.

<sup>(2)</sup> Payments attributable to the general government sector (estimated).

<sup>(3)</sup> May also include the change in the structural ratio of direct taxes not payable by corporations/households.

<sup>(4)</sup> Other current transfers receivable, sales and total capital revenue.

<sup>(5)</sup> Net receipts from EC budget if country is a net recipient from EC budget. Empty if country is net payer to EC budget.

<sup>(6)</sup> Expenditure paid by EC budget that is spent under category “Subsidies”.

<sup>(7)</sup> Other current transfers payable, other net acquisitions of non-financial assets and capital transfers.

<sup>(8)</sup> If country is a net payer to EC budget: net payments to EC budget less expenditure paid by EC budget that is not spent under category “Other”. If country is a net recipient from EC budget: expenditure paid by EC budget that is spent under category “Other”.

<sup>(9)</sup> Social benefits, social transfers in kind and other current transfers that can be allocated into the function of the provision of public health care services.

Note: Due to rounding there might be deviations between aggregate numbers and the sum of individual numbers.

1999-2001, as the stock market boomed. As from 2002, premiums were increased again. For social contributions, the high residuals in some years may reflect inaccurate estimations of the elasticities and, especially in the years 2001-02, of the effect of legislation changes. Further analysis would be required to explain the origin of these residuals. The *residuals* for indirect taxes may point to composition effects in private consumption. The boom in private consumption up to and including 2000 and the bust afterwards were mainly concentrated in durable consumption (home furnishing, white and brown goods, computer equipment). These goods are all subject to the regular VAT of 17.5/19 per cent. Daily requirements like food, on the other hand, are subject to the lower tariff of 6 per cent. This composition effect in private consumption is not captured by the framework, and may partly explain the observed pattern of residuals.

*Primary expenditure* increased up to 2002. Afterwards, a downward trend started. *Social payments* decreased up to 2001, supported by decreasing unemployment and rising participation rates. This was partly offset by increasing *compensation of employees* both due to rising public sector employment and public sector wages. Starting in 2000, healthcare expenditure growth accelerated, reflecting increasing wages and employment, and an effort to reduce waiting lists. In 2003, consolidation measures turned the upward trend of primary expenditure around. Public wages and social benefit increases were contained from this year onwards, and measures were taken to curb healthcare expenditure.

### 3.7 Portugal

Between 1997 and 2005, the general government balance as a percentage of GDP deteriorated by 3.3 percentage points.<sup>13</sup> Adjusted for the effects of the economic cycle and for temporary measures, which both contributed to this result, the structural *balance* as a percentage of trend GDP still declined by 2.3 percentage points, reaching -5.2 per cent in 2005. This outcome resulted from a sizeable increase in the expenditure ratio (3.6 percentage points), which more than compensated for the rise in the revenue ratio (1.3 percentage points). As interest expenditure as a percentage of trend GDP decreased by 1.2 percentage points, mainly owing to the decline in the average interest rate on public debt, the hike in the primary expenditure ratio was very significant (4.8 percentage points). As a consequence, there was considerable deterioration in the structural primary balance ratio (3.5 percentage points), predominantly concentrated in the years 1997 to 2001.

The rise in the structural revenue ratio in the 1998-2005 period resulted from strong increases in tax receipts and social contributions that more than outweighed the decline in non-tax related revenue. However, if the effects of tax receipts and social contributions also recorded on the expenditure side are netted out, the rise appears less pronounced. Indeed, the evolution of social contributions in this period

<sup>13</sup> This section is based on the national accounts data available at the end of October 2006.

stems predominantly from an increase in the social contributions of civil servants, which are recorded on the expenditure side under the item compensation of employees, and in imputed social contributions that are included in social payments and compensation of employees. Adjusted for these two items, which are treated as a residual in the current application of the methodology for Portugal, the overall tax and social contributions ratios only increased by 1.4 percentage points between 1997 and 2005.

In this period, fiscal drag represented 0.5 percentage point and stemmed from the positive effect of progressive taxation in direct taxes paid by households. It is worth mentioning that, although the elasticity of indirect taxes to its macroeconomic base used in the calculation of the cyclical component is slightly above 1, due to shifts in private consumption toward a bigger share of goods and services taxed at the standard VAT rate in periods of strong growth (and the opposite during recessions), a zero fiscal drag was assumed. Indeed, the changes in the consumption pattern are essentially of a cyclical nature, not contributing to the improvement/deterioration of the structural indirect tax receipts ratio.

The effects of the decoupling of the tax bases from GDP were not particularly significant in the Portuguese case, with the exception of direct taxes paid by corporations. However, the decomposition of corporate income tax receipts is not straightforward given the difficulties associated with the choice of a proper macroeconomic base, the lagged effects resulting from the deduction of losses and the uncertainty of the estimates of the effects of changes in tax legislation. Indeed, the practical implementation of this framework to the Portuguese data showed that the estimated elasticity (6 with respect to real private GDP) is too high. As a provisional solution, the corporate income tax receipts elasticity used in the presented calculations is lowered to 4 but a deeper analysis of the question will be carried out later. Based on these assumptions, the effect of the decoupling of the tax base from GDP in corporate income tax receipts amounts to 0.8 percentage point in the period under analysis, although it is partly offset by a residual with an opposite sign.

On taxes and social contributions overall, the effects of changes in legislation were not very significant between 1998 and 2005, and represented as a whole an increase of only 0.1 percentage point. Nevertheless, the analysis by category of tax shows that the rises in indirect taxation, essentially VAT and tax on oil products, more than compensated the declines in direct taxation paid by both households and corporations.

Finally, the residual component appears to have had a positive effect on the change in the structural tax revenue ratio over the period 1998-2005 as a whole. However, if the part of social contributions that is also included in expenditure is subtracted, the residual becomes almost zero. Regarding direct taxes payable by households, the negative residual in most of the years considered in the analysis can be explained by errors in the measurement of tax legislation changes and, in some years, by net reimbursements differing from what would be expected from the legislative changes and their reflection in the update of the withholding tables. In the

Table 7

**Portugal – Changes in Structural Fiscal Components\***  
(percent of trend GDP)

| <i>Increasing +, decreasing –</i>                       | 1998        | 1999        | 2000        | 2001        | 2002        | 2003        | 2004        | 2005        | 98-05       |
|---------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| <b>Unadjusted balance<sup>(1)</sup></b>                 | <b>0.0</b>  | <b>0.0</b>  | <b>–0.2</b> | <b>–1.4</b> | <b>1.4</b>  | <b>–0.1</b> | <b>–0.3</b> | <b>–2.9</b> | <b>–3.3</b> |
| Cyclical component                                      | 0.3         | 0.5         | 0.6         | –0.2        | –0.4        | –1.0        | –0.1        | –0.2        | –0.6        |
| Temporary measures                                      | –0.4        | 0.0         | 0.3         | –0.3        | 1.3         | 1.0         | –0.2        | –2.1        | –0.4        |
| <b>Balance</b>                                          | <b>0.0</b>  | <b>–0.6</b> | <b>–1.2</b> | <b>–0.8</b> | <b>0.6</b>  | <b>0.1</b>  | <b>0.1</b>  | <b>–0.5</b> | <b>–2.3</b> |
| Interest payments                                       | –0.7        | –0.2        | 0.0         | 0.0         | –0.2        | –0.2        | –0.1        | 0.0         | –1.2        |
| <i>due to changes in average interest rate</i>          | <i>–0.4</i> | <i>–0.1</i> | <i>0.0</i>  | <i>–0.1</i> | <i>–0.3</i> | <i>–0.3</i> | <i>–0.1</i> | <i>–0.1</i> | <i>–1.4</i> |
| <i>due to changes in debt level</i>                     | <i>–0.2</i> | <i>–0.1</i> | <i>0.0</i>  | <i>0.1</i>  | <i>0.1</i>  | <i>0.1</i>  | <i>0.1</i>  | <i>0.2</i>  | <i>0.2</i>  |
| <b>Primary balance</b>                                  | <b>–0.6</b> | <b>–0.8</b> | <b>–1.1</b> | <b>–0.8</b> | <b>0.4</b>  | <b>–0.1</b> | <b>0.0</b>  | <b>–0.5</b> | <b>–3.5</b> |
| <b>Total revenue</b>                                    | <b>0.0</b>  | <b>0.7</b>  | <b>–0.7</b> | <b>–0.1</b> | <b>0.7</b>  | <b>0.2</b>  | <b>0.7</b>  | <b>–0.1</b> | <b>1.3</b>  |
| <b>Direct taxes payable by corporations</b>             | <b>–0.2</b> | <b>0.3</b>  | <b>0.0</b>  | <b>–0.4</b> | <b>–0.1</b> | <b>–0.6</b> | <b>0.6</b>  | <b>0.1</b>  | <b>–0.2</b> |
| Fiscal drag                                             | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         |
| Decoupling of base from GDP                             | 0.2         | 0.2         | 0.2         | 0.1         | 0.1         | 0.0         | 0.0         | 0.0         | 0.8         |
| Legislation changes                                     | –0.2        | 0.0         | 0.2         | –0.2        | 0.0         | –0.1        | 0.1         | –0.4        | –0.7        |
| Residual                                                | –0.2        | 0.1         | –0.3        | –0.2        | –0.1        | –0.5        | 0.4         | 0.5         | –0.3        |
| <b>Direct taxes payable by households</b>               | <b>–0.2</b> | <b>0.0</b>  | <b>0.3</b>  | <b>0.0</b>  | <b>–0.3</b> | <b>0.1</b>  | <b>–0.1</b> | <b>0.1</b>  | <b>–0.1</b> |
| Fiscal drag                                             | 0.1         | 0.1         | 0.1         | 0.0         | 0.1         | 0.1         | 0.1         | 0.1         | 0.5         |
| Decoupling of base from GDP                             | 0.0         | 0.0         | 0.1         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.1         |
| Legislation changes                                     | 0.0         | 0.0         | 0.0         | –0.3        | –0.1        | 0.1         | 0.0         | –0.1        | –0.4        |
| Residual                                                | –0.3        | –0.1        | 0.2         | 0.3         | –0.3        | –0.1        | –0.2        | 0.1         | –0.4        |
| <i>Memo item: included in expenditure<sup>(2)</sup></i> | <i>0.1</i>  | <i>0.1</i>  | <i>0.1</i>  | <i>0.0</i>  | <i>0.1</i>  | <i>0.0</i>  | <i>0.0</i>  | <i>0.0</i>  | <i>0.4</i>  |
| <b>Social contributions</b>                             | <b>0.1</b>  | <b>0.1</b>  | <b>0.5</b>  | <b>0.2</b>  | <b>0.2</b>  | <b>0.3</b>  | <b>0.4</b>  | <b>0.1</b>  | <b>1.8</b>  |
| Fiscal drag                                             | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         |
| Decoupling of base from GDP                             | 0.0         | 0.0         | –0.1        | –0.1        | –0.1        | 0.0         | 0.0         | 0.0         | –0.2        |
| Legislation changes                                     | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         |
| Residual                                                | 0.2         | 0.1         | 0.5         | 0.3         | 0.2         | 0.3         | 0.4         | 0.0         | 2.0         |
| <i>Memo item: included in expenditure<sup>(2)</sup></i> | <i>0.1</i>  | <i>0.0</i>  | <i>0.3</i>  | <i>0.0</i>  | <i>0.2</i>  | <i>0.3</i>  | <i>0.3</i>  | <i>0.0</i>  | <i>1.3</i>  |
| <b>Indirect taxes</b>                                   | <b>0.4</b>  | <b>0.1</b>  | <b>–0.5</b> | <b>0.1</b>  | <b>0.3</b>  | <b>0.1</b>  | <b>–0.1</b> | <b>0.7</b>  | <b>1.2</b>  |
| Fiscal drag                                             | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         |
| Decoupling of base from GDP                             | –0.2        | –0.1        | 0.1         | 0.0         | –0.1        | 0.0         | 0.1         | 0.0         | –0.2        |
| Legislation changes                                     | 0.0         | 0.0         | –0.6        | 0.3         | 0.6         | 0.5         | 0.1         | 0.3         | 1.2         |
| Residual                                                | 0.6         | 0.2         | 0.0         | –0.2        | –0.3        | –0.4        | –0.2        | 0.4         | 0.1         |



| <i>Increasing +, decreasing –</i>                       | 1998        | 1999        | 2000        | 2001        | 2002       | 2003        | 2004        | 2005        | 98-05       |
|---------------------------------------------------------|-------------|-------------|-------------|-------------|------------|-------------|-------------|-------------|-------------|
| <b>Taxes and social contributions overall</b>           | <b>0.1</b>  | <b>0.5</b>  | <b>0.4</b>  | <b>–0.1</b> | <b>0.1</b> | <b>–0.1</b> | <b>0.8</b>  | <b>0.9</b>  | <b>2.7</b>  |
| Fiscal drag                                             | 0.1         | 0.1         | 0.1         | 0.0         | 0.1        | 0.1         | 0.1         | 0.1         | 0.5         |
| Decoupling of base from GDP                             | 0.0         | 0.1         | 0.3         | 0.0         | –0.1       | 0.1         | 0.1         | 0.1         | 0.5         |
| Legislation changes                                     | –0.2        | 0.0         | –0.4        | –0.2        | 0.5        | 0.5         | 0.2         | –0.3        | 0.1         |
| Residual <sup>(3)</sup>                                 | 0.2         | 0.4         | 0.4         | 0.1         | –0.4       | –0.7        | 0.4         | 1.0         | 1.5         |
| <i>Memo item: included in expenditure<sup>(2)</sup></i> | <i>0.2</i>  | <i>0.1</i>  | <i>0.5</i>  | <i>0.0</i>  | <i>0.3</i> | <i>0.3</i>  | <i>0.3</i>  | <i>0.1</i>  | <i>1.8</i>  |
| <b>Non-tax-related revenue<sup>(4)</sup></b>            | <b>–0.2</b> | <b>0.1</b>  | <b>–1.1</b> | <b>0.0</b>  | <b>0.6</b> | <b>0.3</b>  | <b>–0.1</b> | <b>–1.0</b> | <b>–1.3</b> |
| <i>of which EU<sup>(5)</sup></i>                        | <i>0.0</i>  | <i>–0.1</i> | <i>–0.9</i> | <i>–0.4</i> | <i>0.5</i> | <i>0.7</i>  | <i>–0.1</i> | <i>–0.7</i> | <i>–1.0</i> |
| <b>Total primary expenditure</b>                        | <b>0.6</b>  | <b>1.4</b>  | <b>0.4</b>  | <b>0.8</b>  | <b>0.3</b> | <b>0.3</b>  | <b>0.7</b>  | <b>0.4</b>  | <b>4.8</b>  |
| Social payments                                         | 0.4         | 0.4         | 0.7         | 0.4         | 0.5        | 1.8         | 0.4         | 0.8         | 5.4         |
| <i>of which old-age pensions</i>                        | <i>0.1</i>  | <i>0.2</i>  | <i>0.4</i>  | <i>0.3</i>  | <i>0.3</i> | <i>0.5</i>  | <i>0.5</i>  | <i>0.5</i>  | <i>2.6</i>  |
| <i>of which unemployment benefits</i>                   | <i>0.0</i>  | <i>0.1</i>  | <i>0.1</i>  | <i>0.0</i>  | <i>0.1</i> | <i>0.0</i>  | <i>0.0</i>  | <i>0.0</i>  | <i>0.3</i>  |
| <i>of which social transfers in kind</i>                | <i>0.0</i>  | <i>0.1</i>  | <i>0.0</i>  | <i>0.1</i>  | <i>0.1</i> | <i>1.1</i>  | <i>0.0</i>  | <i>0.4</i>  | <i>1.8</i>  |
| Subsidies                                               | 0.2         | 0.2         | –0.5        | 0.3         | 0.0        | 0.3         | –0.3        | 0.1         | 0.3         |
| <i>of which EU<sup>(6)</sup></i>                        | <i>0.2</i>  | <i>0.0</i>  | <i>–0.4</i> | <i>0.2</i>  | <i>0.1</i> | <i>–0.1</i> | <i>0.0</i>  | <i>0.0</i>  | <i>0.1</i>  |
| Compensation of employees                               | 0.3         | 0.6         | 0.7         | 0.1         | 0.3        | –0.9        | 0.1         | 0.1         | 1.3         |
| Intermediate consumption                                | –0.1        | 0.3         | 0.3         | 0.0         | –0.2       | –0.5        | 0.2         | 0.0         | 0.1         |
| Government investment                                   | –0.3        | 0.3         | –0.3        | 0.1         | –0.4       | –0.5        | 0.0         | –0.3        | –1.4        |
| Other <sup>(7)</sup>                                    | 0.2         | –0.4        | –0.5        | –0.2        | 0.0        | 0.1         | 0.3         | –0.4        | –0.9        |
| <i>of which EU<sup>(8)</sup></i>                        | <i>0.0</i>  | <i>–0.2</i> | <i>–0.5</i> | <i>–0.4</i> | <i>0.4</i> | <i>0.6</i>  | <i>–0.2</i> | <i>–0.2</i> | <i>–0.5</i> |
| <b>Memorandum items</b>                                 |             |             |             |             |            |             |             |             |             |
| Health care <sup>(9)</sup>                              | -           | -           | -           | -           | -          | -           | -           | -           |             |
| Trend growth of real GDP                                | 3.0         | 2.8         | 2.5         | 2.1         | 1.6        | 1.3         | 1.1         | 1.1         |             |
| Change in GDP deflator                                  | 3.8         | 3.3         | 3.0         | 3.7         | 3.9        | 3.1         | 2.5         | 2.4         |             |
| Change in public employees                              | 3.4         | 4.9         | 2.2         | 2.5         | 2.0        | –5.9        | 0.8         | 1.2         |             |

\* The fiscal balance is given according to the EDP definition, interest includes settlements under swaps and FRAs.

<sup>(1)</sup> Change in unadjusted balance, cyclical component and temporary measures as percentage of nominal GDP. Due to the different denominator, the change in the ratio of the structural balance to trend nominal GDP may deviate slightly from the change in the ratio to nominal GDP of the unadjusted balance less cyclical component less temporary measures.

<sup>(2)</sup> Payments attributable to the general government sector (estimated).

<sup>(3)</sup> May also include the change in the structural ratio of direct taxes not payable by corporations/households.

<sup>(4)</sup> Other current transfers receivable, sales and total capital revenue.

<sup>(5)</sup> Net receipts from EC budget if country is a net recipient from EC budget. Empty if country is net payer to EC budget.

<sup>(6)</sup> Expenditure paid by EC budget that is spent under category “Subsidies”.

<sup>(7)</sup> Other current transfers payable, other net acquisitions of non-financial assets and capital transfers.

<sup>(8)</sup> If country is a net payer to EC budget: net payments to EC budget less expenditure paid by EC budget that is not spent under category “Other”. If country is a net recipient from EC budget: expenditure paid by EC budget that is spent under category “Other”.

<sup>(9)</sup> Social benefits, social transfers in kind and other current transfers that can be allocated into the function of the provision of public health care services.

Note: Due to rounding there might be deviations between aggregate numbers and the sum of individual numbers.

case of social contributions, the overall positive contribution of its residual to consolidation might be partly explained by efficiency gains in tax collection. Lastly, it should be mentioned that the positive residual of indirect taxes between 1997 and 1999 basically relied on the structural increase of the average implicit VAT rate. This can be explained by a more significant shift in the composition of private consumption towards more goods and services taxed at the standard rate and less at the reduced rates than assumed implicitly in the calculation of the cyclical component, the modernisation of the distribution circuits and some efficiency gains in tax collection. In 2001, with the beginning of the cyclical downturn, this behaviour is partially reversed, more than offsetting the previous favourable evolution, which may partly indicate an underestimation of the cyclical component elasticity. A final remark should be added concerning the very significant residual of overall taxes and social contributions in 2005 (1.0 percentage point). Indeed, from the end of 2004, there was a considerable effort to improve the procedures in tax collection by the tax administration, leading to a substantial rise in tax and social contribution receipts in 2005.

The ratio of *non-tax-related* revenue to trend GDP declined by 1.3 percentage points between 1997 and 2005, which can be explained to a large extent by the decrease in net receipts from the EU budget.

The increase in the *primary expenditure* ratio by 4.8 percentage points stems predominantly from the evolution of the *social payments* and *compensation of employees* ratios, which rose by 5.4 and 1.3 percentage points respectively, outweighing the decline in the *public investment* ratio (–1.4 percentage points). The behaviour of social payments is largely related to the increase in pension expenditure, both in the private sector and the civil servants pension system. It resulted from an expansion in the number of pensioners, related to the ageing of population in the case of the private sector and a rise in the average pension since the systems have not reached maturity yet. Part of the rise in compensation of employees is due to the above-mentioned increase in social contributions to the civil servants pension system. Furthermore, it is a consequence of the rise in the number of civil servants, the effect of automatic promotions and extraordinary revisions in some specific carriers over the 1998–2001 period. From mid-2002 to 2005 the fiscal authorities implemented some measures to limit the growth in the civil servants wage bill. They consisted, essentially, of controlling the number of civil servants, eliminating extraordinary revisions in carriers, almost freezing the update of the public employees wage scale in 2003 and 2004 and freezing automatic promotions from the middle of 2005 until the end of 2007. Finally, it should be noted that the transformation of some public hospitals into public corporations in 2003 led to a shift in expenditure categories. More specifically, in that year a distinct increase in social transfers in kind was roughly offset by a decline in compensation of employees and intermediate consumption. If these hospitals had remained within the general government sector, social transfers in kind would have grown less strongly and compensation of employees and intermediate consumption would have recorded higher overall changes in their ratios to GDP.

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