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**ECONOMIC ASSESSMENT  
OF THE CONVERGENCE PROGRAMME OF POLAND  
(UPDATE OF NOVEMBER 2006)**

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The Stability and Growth Pact requires each EU Member State to present an annual update of its medium-term fiscal programme, called “stability programme” for countries that have adopted the euro as their currency and “convergence programme” for those that have not. The most recent update of Poland’s convergence programme was submitted on 30 November 2006.

The attached technical analysis of the programme, prepared by the staff of, and under the responsibility of, the Directorate-General for Economic and Financial Affairs of the European Commission, was finalised on 29 January 2006. Comments should be sent to Michal Narozny ([Michal.Narozny@ec.europa.eu](mailto:Michal.Narozny@ec.europa.eu)) and Aleksander Rutkowski ([Aleksander.Rutkowski@ec.europa.eu](mailto:Aleksander.Rutkowski@ec.europa.eu)). The main aim of the technical analysis is to assess the realism of the budgetary strategy presented in the programme as well as its compliance with the requirements of the Stability and Growth Pact. However, the analysis also looks at the overall macro-economic performance of the country and highlights relevant policy challenges.

Based on this technical analysis, the European Commission adopted a recommendation for a Council opinion on the programme on 7 February 2007. The ECOFIN Council is expected to adopt its opinion on the programme on 27 February 2007.

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All these documents, as well as the provisions of the Stability and Growth Pact, can be found on the following website:

[http://ec.europa.eu/economy\\_finance/about/activities/sgp/main\\_en.htm](http://ec.europa.eu/economy_finance/about/activities/sgp/main_en.htm)

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## SUMMARY AND CONCLUSIONS<sup>1</sup>

As part of the preventive arm of the Stability and Growth Pact, each Member State that does not use the single currency, such as Poland, has to submit a convergence programme and annual updates thereof. The most recent programme, covering the period 2006-2009, was submitted on 30 November 2006. Under the corrective arm of the Pact, Poland was placed in excessive deficit by the Council in July 2004. The deadline for correcting the excessive deficit is 2007.

Although Poland is a catching-up country with relatively high economic growth, unemployment is high, while participation is low by EU standards, especially of women. Behind the fast rise in exports, there are foreign direct investments benefiting mainly from relatively low labour costs so far, although the technology content has also been upgraded. Poland has traditionally recorded significant public sector deficits above 3% of GDP. The public expenditure pattern is a cause for concern because high social expenditure is likely to have a negative impact on the labour market performance through wrong incentives. As far as long-run sustainability is concerned, Poland is a low-risk country. However, preserving this status will require sticking to the key features of the pension reform such as uniformity of rules for all social groups.

In light of this analysis, Poland is faced with following main challenges. First, in the area of stabilisation, the relatively high structural deficit against the backdrop of favourable growth conditions highlights the urgency of creating fiscal policy leeway for reacting to a future cyclical downturn. There is also some evidence of an electoral cycle and procyclicality of fiscal policy in Poland, which could be tackled by strict fiscal rules (such as a ceiling on expenditure growth). Second, regarding efficiency, which appears to be the main challenge for Poland, social expenditure seems to be a major source of inefficiencies, but the social sphere is also a sensitive area where reforms are difficult. There is a high share of poorly targeted transfers received by those who do not really need them (due to years of malfunctioning of the disability assessment, low retirement age, generous early retirement rules, low contributions unrelated to income for those covered by the disability and pension fund for farmers) resulting in high government deficits, high tax burden and high unemployment. In addition, the challenge is to cut sector-specific subsidies and shift the resources from passive to active labour market policies (human capital enhancing) and horizontal growth-oriented expenditure (on infrastructure and R&D). This may trigger a virtuous circle of job creation with sustained productivity gains combined with durable deficit reduction. Structural reforms (completion of the privatisation process, deregulation, and robust competition policy) and upgrading the business environment (decreasing the bureaucratic burden, raising the efficiency of courts, improved transport infrastructure) also have a role to play.

The macroeconomic scenario underlying the updated convergence programme envisages real GDP growth to have reached 5.4% in 2006 and to broadly stabilise (around 5¼% on average) over the rest of the programme period. Assessed against currently available information, this scenario appears to be based on growth assumptions which are plausible in 2007 and favourable thereafter as the labour market may not improve as rapidly as

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<sup>1</sup>The analysis takes into account (i) the Commission services' autumn 2006 forecast, (ii) the code of conduct ("Specifications on the implementation of the Stability and Growth Pact and guidelines on the format and content of stability and convergence programmes", endorsed by the ECOFIN Council of 11 October 2005) and (iii) the commonly agreed methodology for the estimation of potential output and cyclically-adjusted balances.

foreseen in the programme in particular. The programme's assumptions for inflation appear realistic, tilted to be on the low side towards the end of the programme horizon, notably because of rising wage pressures from the tightening labour market. The Polish economy in the period covered by the current update of the convergence programme can be considered in economic 'good' times.

In the January 2006 convergence programme, the target for the general government balance in 2006 was set at  $-2.6\%$  of GDP, the Commission services' autumn forecast points at  $-2.2\%$  of GDP, while the November 2006 update of the convergence programme estimates the 2006 outturn at  $-1.9\%$  of GDP. The better-than-expected outturn mainly results from an incomplete execution of expenditure plans (especially social transfers and public investment), while revenue increase resulted mainly from stronger-than-expected growth. The mentioned deficit figures exclude the pension reform cost, estimated at around  $2\%$  of GDP in 2006, in line with the transition period for implementing the Eurostat decision of 2 March 2004 on the classification of funded pension schemes<sup>2</sup>, which expires in spring 2007.

The main goal of the budgetary strategy in the November 2006 update is to correct the excessive deficit by 2007 by qualifying for the provision of the reformed Pact which allows a part of the pension reform cost to be deducted. For the following years, the programme plans a gradual reduction of the deficit so that the  $3\%$  of GDP reference value is reached in 2009. The deficit is planned to narrow by 0.4 percentage point of GDP annually (0.3 percentage point if the pension reform costs are included) to  $0.6\%$  of GDP in 2009. Including the pension reform cost, the deficit in the updated programme would improve from  $3.9\%$  of GDP in 2006 to  $2.9\%$  in 2009. The adjustment is planned to be revenue-based in 2007 and strongly expenditure-based in 2008-2009, as a result of measures which are not always fully specified. Compared with the previous programme, the deficit targets have been revised downwards in view of much stronger growth and the better-than-expected outcome in 2006.

The structural balance (i.e. the cyclically-adjusted balance net of one-off and other temporary measures) calculated according to the commonly agreed methodology is planned to improve from around  $-2\%$  of GDP in 2006 to  $-3/4\%$  of GDP in 2009 at the end of the programme period (pension reform costs not included); the improvement is about  $0.5\%$  of GDP annually in 2007-2009 after some smaller improvement in 2006. As in the previous update of the convergence programme, the medium-term objective (MTO) for the budgetary position presented in the programme is a structural deficit of  $1\%$  of GDP, in line with the requirements of the Stability and Growth Pact. The programme does not aim to achieve the MTO within the programme period.

The budgetary outcomes could be worse than targeted in the programme. Especially for the period 2008-2009, the risks mainly stem from the favourable macroeconomic scenario, significant uncertainties about the effective implementation of planned reforms as well as from the lack of information on the measures supporting the envisaged expenditure restraint, which appear to be in an early conceptual phase. Consequently, the action taken so far does not appear adequate and the planned measures should be strengthened to achieve the targets.

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<sup>2</sup> See Eurostat News Releases No 30/2004 of 2 March 2004 and No 117/2004 of 23 September 2004.

In view of this risk assessment, the budgetary stance in the programme seems inconsistent with a durable correction of the excessive deficit by 2007 as recommended by the Council. Therefore, the Council adopted in February 2007 a new recommendation under the excessive deficit procedure urging Poland to ensure the correction by 2007. In addition, the budgetary targets do not provide a sufficient safety margin against breaching the 3% of GDP deficit threshold with normal macroeconomic fluctuations throughout the programme period. In the years following the correction of the excessive deficit, the pace of the structural adjustment towards the MTO implied by the programme should be strengthened taking advantage of good economic times and should be backed up by measures.

The initial budgetary position, although slightly improved compared to 2005, still constitutes a risk to sustainable public finances before the long-term budgetary impact of an ageing population is considered and further budgetary consolidation would contribute to contain risks to the sustainability of public finances. The long-term budgetary impact of ageing in Poland is the lowest in the EU, with age-related expenditure projected to fall, partly as a result of the considerable expenditure-reducing impact of the reform of the pension system – assuming that the pension reforms are fully implemented. Overall, Poland appears to be at low risk with regard to the sustainability of public finances.

Poland's national reform programme, submitted on 31 October 2006, identifies as key challenges/priorities: consolidation and better management of public finances; developing entrepreneurship and innovation; infrastructure development; ensuring a competitive environment in network sectors; creating and sustaining jobs and reducing unemployment; and improving the adaptability of workers and enterprises by investing in human capital. The Commission's assessment of this programme (adopted as part of its December 2006 annual Progress Report<sup>3</sup>) showed that Poland is making limited progress in the implementation of its national reform programme. There are signs that Poland is beginning to move ahead strongly in the micro-economic area, even though implementation of many measures is still in the early stages. Implementation of the macro-economic and employment reforms is so far insufficient. Against the background of strengths and weaknesses identified, Poland was recommended to take action in the areas of: fiscal consolidation; competition; R&D and innovation; public employment services; tax burden on labour and benefit systems; and education and training. The national reform programme and the convergence programme are to some extent integrated. Both programmes envisage some harmonisation of the farmers' social security system with the general national system, the gradual harmonisation of the disability benefits with the reformed pension system and the implementation of the basket of guaranteed medical services. However, the effects of the reforms are not explicitly estimated and it is difficult to identify their role in budgetary projections.

The overall conclusion is that the updated convergence programme envisages the correction of the excessive deficit by 2007, but the action taken so far does not appear adequate and the planned measures appear insufficient to achieve that result. While in subsequent years the programme envisages to make appropriate progress towards the MTO in a context of strong growth prospects, there are important risks to the achievement of the budgetary targets and the durability of the adjustment.

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<sup>3</sup> Communication from the Commission to the Spring European Council, "Implementing the renewed Lisbon strategy for growth and jobs - A year of delivery", 12.12.2006, COM(2006)816.

### Comparison of key macroeconomic and budgetary projections<sup>1</sup>

		2005	2006	2007	2008	2009
Real GDP (% change)	<b>CP Nov 2006</b>	<b>3.5</b>	<b>5.4</b>	<b>5.1</b>	<b>5.1</b>	<b>5.6</b>
	COM Nov 2006	3.2	5.2	4.7	4.8	n.a.
	<i>CP Jan 2006</i>	3.3	4.3	4.6	5.0	n.a.
HICP inflation (%)	<b>CP Nov 2006</b>	<b>2.2</b>	<b>1.4</b>	<b>2.1</b>	<b>2.5</b>	<b>2.5</b>
	COM Nov 2006	2.2	1.4	2.5	2.8	n.a.
	<i>CP Jan 2006</i>	2.2	1.5	2.2	2.5	n.a.
Output gap (% of potential GDP)	<b>CP Nov 2006<sup>2</sup></b>	<b>-0.4</b>	<b>0.5</b>	<b>0.5</b>	<b>0.3</b>	<b>0.4</b>
	COM Nov 2006 <sup>6</sup>	-0.3	0.4	0.3	0.1	n.a.
	<i>CP Jan 2006<sup>2</sup></i>	0.1	0.3	0.3	0.6	n.a.
General government balance (% of GDP)	<b>CP Nov 2006</b>	<b>-2.5</b>	<b>-1.9</b>	<b>-1.4</b>	<b>-1.0</b>	<b>-0.6</b>
	COM Nov 2006	-2.5	-2.2	-2.0	-1.8	n.a.
	<i>CP Jan 2006</i>	-2.9	-2.6	-2.2	-1.9	n.a.
Primary balance (% of GDP)	<b>CP Nov 2006</b>	<b>0.1</b>	<b>0.5</b>	<b>1.0</b>	<b>1.4</b>	<b>1.7</b>
	COM Nov 2006	0.1	0.2	0.4	0.6	n.a.
	<i>CP Jan 2006</i>	-0.3	-0.2	0.3	0.6	n.a.
Cyclically-adjusted balance (% of GDP)	<b>CP Nov 2006<sup>2</sup></b>	<b>-2.4</b>	<b>-2.1</b>	<b>-1.6</b>	<b>-1.1</b>	<b>-0.7</b>
	COM Nov 2006	-2.3	-2.3	-2.1	-1.8	n.a.
	<i>CP Jan 2006<sup>2</sup></i>	-2.9	-2.7	-2.3	-2.1	n.a.
Structural balance <sup>3</sup> (% of GDP)	<b>CP Nov 2006<sup>4</sup></b>	<b>-2.4</b>	<b>-2.1</b>	<b>-1.6</b>	<b>-1.1</b>	<b>-0.7</b>
	COM Nov 2006 <sup>5</sup>	-2.3	-2.3	-2.1	-1.8	n.a.
	<i>CP Jan 2006</i>	-2.1	-2.7	-2.4	-2.1	n.a.
Government gross debt (% of GDP)	<b>CP Nov 2006</b>	<b>41.9</b>	<b>42.0</b>	<b>42.1</b>	<b>41.4</b>	<b>40.6</b>
	COM Nov 2006	42.0	42.4	43.1	42.7	n.a.
	<i>CP Jan 2006</i>	42.5	45.0	45.3	45.4	n.a.

**Notes:**

<sup>1</sup>The budgetary projections exclude the impact of the Eurostat decision of 2 March 2004 on the classification of funded pension schemes, which needs to be implemented by the time of the spring 2007 notification. Including this impact, the general government balance according to the updated programme would be -4.3% of GDP in 2005, -3.9% in 2006, -3.4% in 2007, -3.1% in 2008 and -2.9% in 2009, while government gross debt would be 47.3% of GDP in 2005, 48.9% in 2006, 50.0% in 2007, 50.3% in 2008 and 50.2% in 2009.

<sup>2</sup>Commission services calculations on the basis of the information in the programme.

<sup>3</sup>Cyclically-adjusted balance (as in the previous rows) excluding one-off and other temporary measures.

<sup>4</sup>There are no one-off and other temporary measures in the programme.

<sup>5</sup>There are no one-off and other temporary measures in the Commission services' autumn 2006 forecast.

<sup>6</sup>Based on estimated potential growth of 4.1%, 4.4%, 4.8% and 5.0% respectively in the period 2005-2008.

**Source:**

*Convergence programme (CP); Commission services' autumn 2006 economic forecasts (COM); Commission services' calculations*



## 1. INTRODUCTION

Poland submitted its convergence programme on 30 November 2006<sup>4</sup>. The programme covers the period 2006 to 2009. The document was adopted by the government on 29 November 2006 and is to be discussed in the Parliament. It incorporates the 2007 budget, as adopted by the government in September 2006. The programme broadly follows the model structure and data provision requirements for stability and convergence programmes specified in the new code of conduct. The programme provides all compulsory and most optional data prescribed by the new code of conduct<sup>5</sup>. Annex 3 provides a detailed overview of all aspects of compliance with the code of conduct.

## 2. ECONOMIC TRENDS AND POLICY CHALLENGES

This section is in five parts. The first provides a brief overview of the macroeconomic performance in terms of growth and other major macro-variables. The second part presents the results of a growth accounting exercise and tries to identify the main reasons for low or high average annual economic growth vis-à-vis the EU10 aggregate. The third looks at the volatility of growth and other key macroeconomic variables and the stabilising or destabilising role of macro-policies. The fourth part focuses on trends in public finances. The fifth part then identifies major economic challenges with implications for public finances.

### 2.1. Economic performance

Over the past 10 years, real GDP growth in Poland has averaged about 4%. Poland has made progress in closing the income gap and its GDP per capita (in purchasing power standard) relative to the EU-25 average increased from 38% in 1993 to almost 50% in 2005. Nevertheless, the difference with EU income levels remains wide and Poland's growth performance has lagged behind that of other new Member States with similar income per capita levels at the beginning of the 1990s. As a result, in 2005 Poland had the second lowest GDP per capita among all EU Member States.

Poland has experienced a sustained, though not uninterrupted, long-term disinflation trend since the late 1990s, with a reduction of HICP inflation from 15% in 1998 to a low of close to 0.7% in 2003. Inflation picked up in 2004, but fell again in 2005. Behind this success is a credible implementation of the monetary policy framework, which helped to bring down inflationary expectations.

Labour productivity growth in Poland has been strong and reflects the catching-up process, but at the same time the unemployment rate (17.7% in 2005) is the highest in the EU and the employment rate (about 53% in 2005) the lowest. While in the long run there is not normally a genuine trade-off between productivity and employment growth, there can be one in the short run – and this seems to be the case in Poland.<sup>6</sup> More importantly, Poland is lagging behind in large-scale privatisations (e.g. in energy sector, chemical industry, mining and shipyards) and this, rather than the employment protection

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<sup>4</sup> The English version was submitted on 21 December 2006.

<sup>5</sup> The data on employment in hours worked and labour productivity measured as GDP per hours worked have not been provided. Contributions to the potential growth are also missing.

<sup>6</sup> See Chapter 5 in "Country Study: Growth and Competitiveness in the Polish Economy: The Road to Real Convergence", *European Economy, Occasional Papers*, No. 27

regulations, has been an element in preventing a significant part of the Polish economy from becoming more dynamic, thus hampering the creation of new jobs in expanding sectors. A second reason for the poor labour market performance is the large unskilled rural population and the poorly targeted welfare system for farmers. Furthermore, the current structure of unemployment benefits delays restructuring and provides low incentives for job mobility.

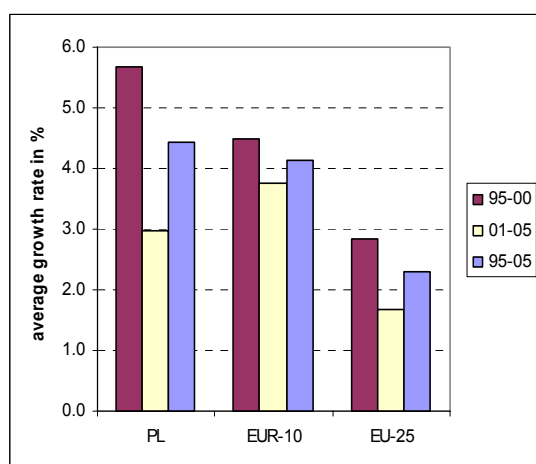
Poland has been running high government deficits for the recent decade: the average deficit ratio reached 3.5%<sup>7</sup> of GDP in 1996-2005. The debt ratio increased to 41.9% of GDP in 2005. Behind the persistently large government deficits is a high level of mandatory government expenditure, i.e. generous social security commitments which are “fixed” (i.e. remain legally or politically binding for several years). High deficits may lead to a crowding out of private investment. This can be taking place as a result of the entrepreneurs’ expectations that, in the framework of large share of fixed (mandatory) expenditure, current high deficits will have to be soon financed with tax increases which will reduce the return on investment (directly e.g. through corporate income tax increases or indirectly through lower consumption as a result of higher indirect and personal income taxes).<sup>8</sup>

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<sup>7</sup> Pension reform cost not included. The Eurostat decision of 2 March 2004 on the sectoral classification of pension schemes established that defined contributions funded schemes cannot be considered as part of general government. Eurostat acknowledged that some Member States needed a transitional period to implement the decision, which expires on 1 April 2007. Poland currently avails itself of this possibility. At the expiry of the transition period, the higher figures for the Polish deficit and debt will have to be used (incorporating the costs of the pension reform which reaches 2% of GDP currently).

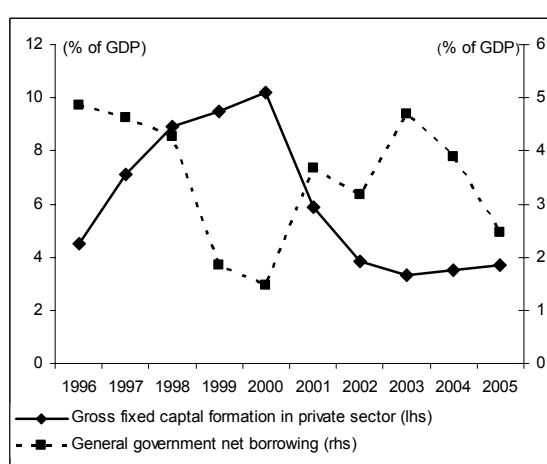
<sup>8</sup> The “non-Keynesian” effects of fiscal policy are supposed to be stronger in the new Member States than in developed economies, as a consequence of a possibly considerable improvement in investors’ confidence after large fiscal imbalances were eliminated in the transition economies (Rzonca, A. and P. Cizkowicz (2005), “Non-Keynesian Effects of Fiscal Contraction in New Member States”, *European Central Bank Working Paper Series*, Vol. 519; Dabrowski, M. (2005), “A Strategy for EMU Enlargement”, *CASE Studies & Analyses*, No. 290, Center for Social and Economic Research, CASE). Ricardian equivalence between financing of public spending through borrowing and through taxes appears to be relatively strong in Poland because tax payers faced short cycles of high government borrowing followed by high taxation. In these circumstances, government borrowing and taxation should be correlated positively rather than negatively, which is the case in Poland, as in several other new member States, while the correlation is mostly negative in the old Member States. The simultaneous correlation coefficient between general government borrowing (in % of GDP) and the tax burden (also in % of GDP) is +0.33 for 1995-2004. If the tax burden in the subsequent year is considered, the coefficient reaches +0.47.

**Figure 1: Average GDP growth: Poland vs. EUR-25 and EUR-10**



Source: Commission services

**Figure 2: General government deficits and private investment in Poland**



Source: Commission services

Three features of Poland's export performance stand out. First, Poland's export performance has fluctuated substantially between 1995 and 2004, reflecting external shocks and changes in competitiveness. Second, the EU-15 is the main destination market of Poland, a reflection of its high degree of trade integration with the EU. And, third, Poland's good export performance is reflected in an increase in its export market shares both in the EU and in the recently-acceded Member States (RAMS) over the past decade, although its gains in the EU market have been smaller than those of several competitors.

Significant changes in product specialisation since the start of transition, the nominal depreciation of the zloty over the period 2001-04, and a drop in relative unit labour costs have all contributed to the boom in exports, the latter especially since 2001. In particular, wage moderation and high productivity growth in the manufacturing sector played a key role in restoring Poland's cost competitiveness following a protracted period of real effective appreciation between 1995 and 2001. Moreover, FDI has been instrumental in the technological upgrading of Polish exports. However, Poland's competitiveness remains vulnerable to an appreciation of the zloty, which may put pressure on profit margins if strong export growth is to be maintained. In the case of Poland, the average annual rate of real appreciation between 1995 and 2004 (2.7% for the CPI-based Real Effective Exchange Rate, REER) exceeds the estimates of the Balassa-Samuelson effect (between 1.2 and 1.5% per year).<sup>9</sup> This suggests that the real appreciation cannot be exclusively attributed to the catching-up process. During the same period, the average annual Unit Labour Costs (ULC)-based REER – which is often considered to be a more appropriate measure of competitiveness – appreciated by 1.7%, which suggests also some deterioration in Poland's competitiveness. The sizable appreciation of the real effective exchange rate in the first three quarters of 2005 (14% in ULC-based REER terms compared to the same period of 2004) points to a further loss in cost competitiveness. Besides, Poland's gains in market shares have been smaller than those of some of its major competitors (Table 1).

<sup>9</sup> Kovacs, M. A. (2002), "On the Estimated Size of the Balassa-Samuelson Effect in Five Central and Eastern European Countries", *National Bank of Hungary Working Paper*, No. 5

**Table 1: Change in market share (in percentage points),  
1995-2005**

<i>Importers</i>	<i>EU-15</i>	<i>US</i>	<i>Asia</i>	<i>RoW**</i>
<b>Exporters</b>				
<b>Czech Republic</b>	0.91	0.08	0.05	0.07
<b>Hungary</b>	0.87	0.08	0.08	0.10
<b>Poland</b>	0.46	0.03	0.00	0.08
<b>Slovakia</b>	0.41	0.04	0.02	0.02
<b>China*</b>	5.99	7.85	7.58	1.99
<b>Rep. of Korea</b>	-0.04	-0.60	3.95	0.32
<b>Indonesia</b>	-0.51	-0.28	0.22	0.08
<b>India</b>	-0.12	0.36	1.14	0.27
<b>Malaysia</b>	-0.62	-0.33	0.00	0.13
<b>Brazil</b>	-0.45	0.29	0.37	0.24
<b>Romania</b>	0.38	0.04	-0.04	0.00
<b>Turkey</b>	0.63	0.07	-0.07	0.20
<b>South Africa</b>	-0.05	0.05	0.30	0.04

\* Including Hong Kong. \*\*Rest of the World

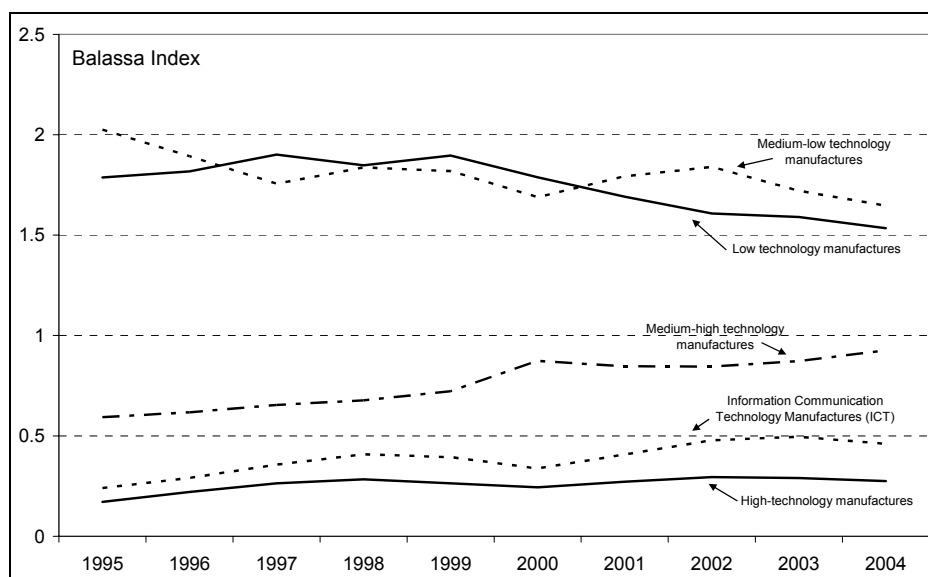
*Source: IMF DOT Statistics*

The Balassa indexes<sup>10</sup> calculated for groups of industries at different levels of technological specialisation demonstrates a slow but steady improvement in the comparative advantages of the medium-high technology sectors compared to the lower-technology ones of Poland thanks to a modernisation of the composition of its exports to OECD countries. The Balassa index in Polish low and medium-low technology groups declined from, respectively, 1.8 and 2.0 in the mid-1990s to 1.5 and 1.6 in 2004. In parallel, there was a strong growth in the medium-high technology industries from 0.6 to 0.9. The improvement in the high technology group was slower in the analysed period: from below 0.2 to almost 0.3, with some small setback in the most recent years. However, within the high-technology industries, the ICT manufactures achieved a higher growth in foreign markets shares relative to other products: their Balassa index increased from 0.25 in mid-1990s to 0.45 in 2004.

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<sup>10</sup> The ratio of a country's share in global exports of a given sector and the country's share in global exports of the economy as a whole. A ratio above 1 indicates a revealed comparative advantage of a sector:  $B = \frac{X_{cj} / X_{ct}}{X_{gj} / X_{gt}}$  where  $X$  stands for the value of exports in a given period,  $c$  indicates the country,  $g$  the world as a whole,  $j$  the sector and  $t$  the economy as a whole (all sectors).

**Figure 3: Evolution of the Balassa index for different technology-content groups of manufacturing products**



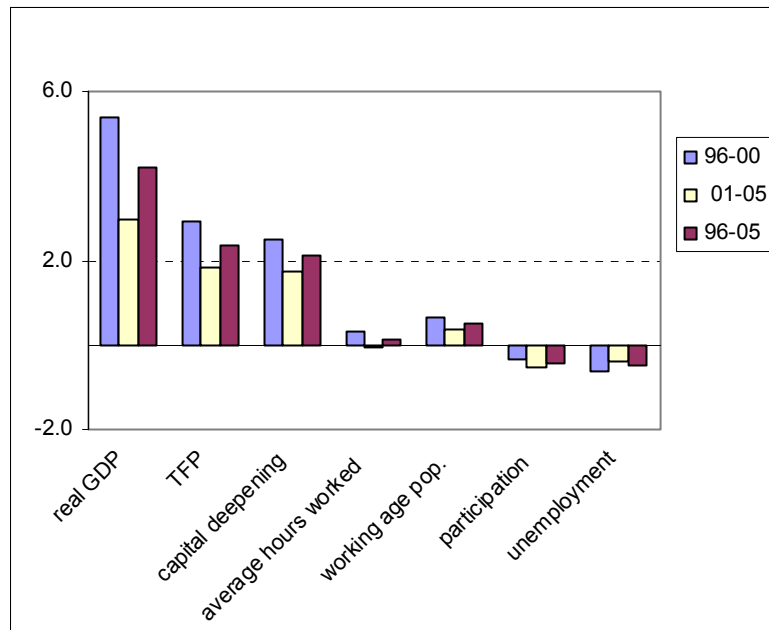
*Source: The OECD STAN Bilateral Trade Database*

Some aspects of Poland's product and geographical specialisation are a potential source of weakness. Its still considerable reliance on comparative advantages in traditional industries and in some medium-technology industries may hold back export growth because of increasing competitive pressure from low-labour-cost emerging economies. Poland's underperformance in more high-skill and technology-intensive sectors compared to Hungary and the Czech Republic is a matter of concern given the growth potential of these industries.

## **2.2. Anatomy of medium-term growth**

In 2001-2005, Poland's real GDP growth almost halved compared to 1996-2000. Different components are responsible for this disappointing performance. Total factor productivity growth in the latter period reached only  $\frac{2}{3}$  of the corresponding ratio in the former period, possibly pointing to the end of easy-to-eliminate inefficiencies (inherited from the command economy when there was an excess of basic physical capital) and too low spending on R&D. In 2001-2005, the capital-labour ratio rise was less than  $\frac{3}{4}$  of the rise in 1996-2000 reflecting low investment rates. Labour market developments were negative (except for slightly declining unemployment): the positive contribution from the increase in working age population declined somewhat and the contribution of the number of hours worked even turned negative. Contribution for participation became even more negative. Therefore, the overall contribution of labour-related components, which was neutral in 1996-2000, turned negative in the second subperiod.

**Figure 4: Real GDP growth and its components**



Note:

Assuming a Cobb-Douglas-production function  $Y = A(L \cdot H)^\alpha K^{1-\alpha}$  where  $Y$  denotes the level of  $GDP$ ,  $L$  employment,  $H$  the average hours worked per person employed,  $K$  the capital stock and  $\alpha$  the labour share in income, real GDP can be written as  $Y = \frac{Y}{H \cdot L} H \cdot L = A \cdot \left( \frac{K}{H \cdot L} \right)^{1-\alpha} H \cdot WP \cdot PART \cdot (1 - ur)$  where  $WP$  stands for working age population,  $PART$  denotes the participation ratio as a share of  $WP$  and  $ur$  the rate of unemployment. In terms of growth rates  $g$  this is:

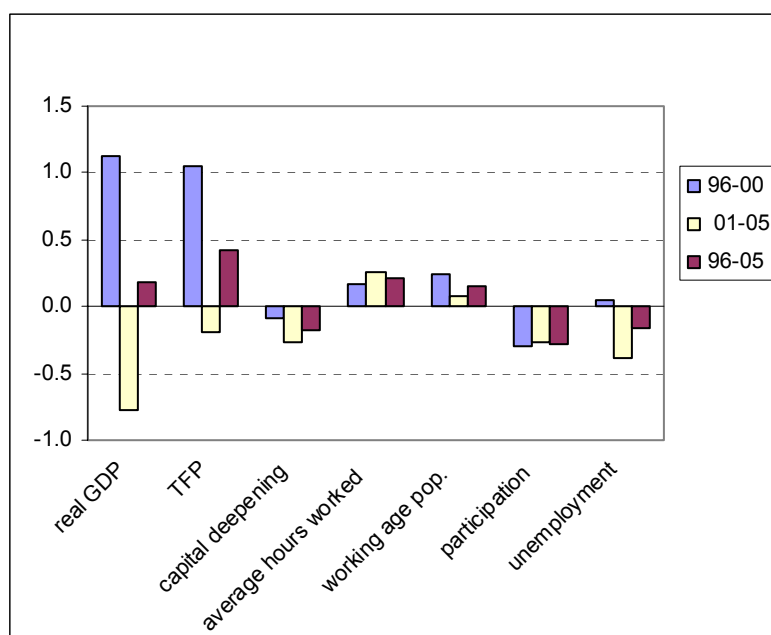
$$g_Y = g_A + (1 - \alpha)(g_K - g_L - g_H) + g_H + g_{WP} + g_{PART} - g_{ur} \cdot \frac{ur}{1 - ur}$$

The expression  $(g_K - g_L - g_H)$  is referred to as capital deepening, i.e. the increase in the capital labour ratio.

Source: Commission services

The discrepancy in Poland's growth in the second half of the 1990s compared to the five recent years becomes even more evident if other countries of the region are brought into the picture. In the former period, Poland grew by more than 1 percentage point faster than the EU-10, whereas in the latter period, its GDP growth was by 0.7 percentage point lower than in the reference group. Much faster growth in Poland in 1996-2000 compared to the reference countries can be mainly attributed to much better factor productivity growth (by 1 percentage point). In 2001-2005, factor productivity growth was only slightly (-0.1 percentage point difference) worse in Poland compared to the EU-10. The contributions of capital deepening and labour participation, which were always lower in Poland, deteriorated slightly between the periods. In particular, in terms of unemployment, the EU-10 were performing much better in the recent years which contributed to Poland's growth being lower by 0.4 percentage point. Among all the components, the differential in the average number of hours worked was the only one which has improved in Poland in the recent years.

**Figure 5: Real GDP growth and its components: Difference vis-à-vis the EU10 average**



Note: See note of Figure 4

*Source: Commission services*

Labour did not contribute to growth in Poland during the period 1996-2005. One can blame mainly the very high unemployment and the low participation rate. These weaknesses seem to result from inefficient labour market institutions, such as too passive labour market policies (plain transfers to the unemployed and early retired), poorly targeted disability transfers, wrongly constructed agricultural pension and disability scheme, underdevelopment of market-oriented (re-)training and educational facilities, inadequate housing and infrastructure (which reduce spatial mobility) and low retirement age, especially for women. The average exit age for the total labour force was merely 57.7 years in Poland in 2004, which was at the bottom for EU countries. The corresponding age for women only was 55.8 years, a record low in the EU. Only 5% of the adult population aged 25 to 64 participated in education and training in Poland in 2005 (compared to 11% in the whole EU). Taking the EU-10 as a benchmark, Poland also performed worse in terms of its capital deepening and productivity growth in 2001-2005. This is likely to result from the escalation of problems which impede investment and hamper more vigorous modernisation of the economy. Too low investment ratios result from imbalances in public finances, the mentioned possible crowding out, inadequate infrastructure, rigid labour market and restrictive product market regulations, underdeveloped institutional framework (e.g. slow judicial system, too high bureaucratic burden and corruption) and poor absorption of EU funds. Therefore, FDI becomes particularly important because of its direct impact on aggregate productivity in the host country and on the composition of the domestic industrial sector away from low- to high-technology products. Despite being the biggest host of FDI among the RAMS and the rapid growth of capital inflows in recent years, the stock of inward FDI in Poland remains relatively modest compared to other Member States given the size of the country. In 2004, Poland had a 1.5% share of the total EU-25 inward FDI stock, which

was equivalent to that of considerably smaller Member States like Portugal, Hungary, the Czech Republic and Finland.<sup>11</sup> Indirect spillovers from the presence of multinational firms relate to domestic enterprises stepping up their performance through technology transfer, imitation effects and greater competition, triggering innovation and greater efficiency. However, these effects have been less visible in Poland than in neighbouring countries, partly because of the low technological content of FDI compared to other host markets or foreign firms' protection of their technological advantage, but mostly owing to Poland's difficulty to absorb the new technologies and withstand the increased competition attributable to the relative backwardness of the Polish domestic production sector.

### 2.3 Macro-policies against the backdrop of the economic cycle

Between 1995 and 2005, real GDP growth fluctuated within a wide range, from 1.1% to 7.1%. The highest growth rates were reached in 1995-1997, followed by a long period of mediocre growth. Growth picked up again in the recent years (4.2% on average in 2003-2005). Successful disinflation occurred during the whole scrutinised period, with a temporary interruption in 2000 (following strong monetary loosening in 1999 in the aftermath of the Russia-crisis) and in 2004 (due to the one-off accession effects). In 1998-2005, one can observe an inverted U-curve in unemployment, with a steep rise until a record high of almost 20% in 2002 followed by a gradual but accelerating decrease.

<b>Box 1. Monetary policy and exchange rate regime of Poland</b>	
<i>Exchange rate targeting – fixed exchange rate (January 1990 – October 1991)</i>	The fixed exchange rate of PLN (against US dollar) constituted one of the anchors of the IMF stabilization program, together with containing money wages, the real money supply and real interest rates. In May 1991, the exchange rate was re-fixed against a basket of five currencies.
<i>Exchange rate targeting – crawling peg regime (October 1991 – April 2000)</i>	Poland moved to a crawling peg regime (against the same basket of currencies) in October 1991. During the subsequent period, there were two discretionary devaluations in 1992-93. The crawling rate was gradually reduced (from 1.5% to 0.3% per month in October 1991 and March 1999 respectively), while the band significantly widened (from $\pm 0.5\%$ to $\pm 12.5\%$ in October 1991 and October 1998 respectively).
<i>Inflation targeting (since January 1999)</i>	Inflation targeting was introduced in 1999 as an underlying concept of monetary policy in Poland, with the aim of moving towards a floating exchange rate regime (April 2000). After the successful disinflation (until 2002), the objective of the strategy is to stabilise inflation at a low level. The most recent update of the regime dates from January 2004, when the National Bank of Poland (NBP) set a 2.5% target for the CPI with a 'permissible' volatility of $\pm 1$ percentage point.

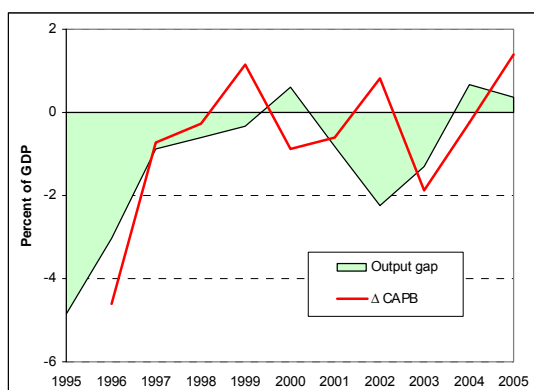
After the transition shock (which entailed a large negative output gap), Poland recorded two short periods where the output gap was slightly positive (in 2000 and in 2004-2005).

<sup>11</sup> Commission services calculations based on UN data, see UNCTAD (2005). This represents a considerable increase when compared to Poland's relative weight in the beginning of the liberalisation process. In 1990, Poland's share of total EU-25 FDI stock was only 0.01% in 1990.



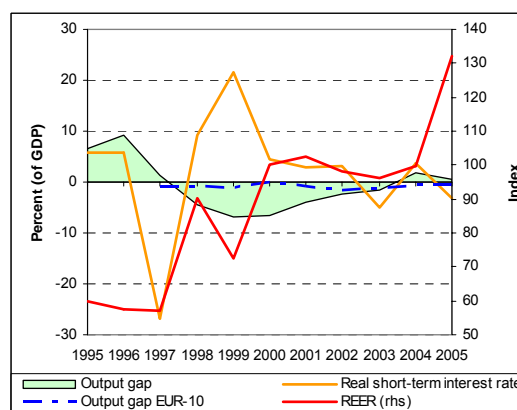
There was a major downturn in 2001-2003, with the output gap below  $-2\%$  of GDP in 2002. Polish business cycles were correlated with those in the whole of the EU-10. Whereas the monetary stance was rather anti-cyclical in Poland (except for 2001, which was a year of strong monetary tightening while the output gap deteriorated), the fiscal policy stance seemed to have acted pro-cyclically in some periods, especially in 2000, when a positive output gap coincided with a deterioration of the cyclically-adjusted primary balance (CAPB) by  $0.9\%$  of GDP, and in 2002, when a deep negative output gap coincided with an improvement in the CAPB by  $0.8\%$  of GDP. In the first case, early 2000 was a period when the Warsaw Stock Exchange index reached its highest levels (recorded again only in late 2003 when the ongoing expansion started). The short-lived asset price boom might have been wrongly perceived as structural and motivated higher public spending. In the second case, in 2002, government revenue increased relative to GDP as a result of a more tax-rich composition of aggregate demand (the contribution of net exports declined substantially and was partly compensated by domestic consumption).

**Figure 6: Output gap and fiscal stance**



*Source: Commission services*

**Figure 7: Output gap and monetary stance**



*Source: Commission services*

### 2.3. Public finances

The Polish general government balance reached its worst levels in 1996 and 2003: a deficit of more than  $4.6\%$  of GDP, pension reform costs not included. The best outturns were achieved in 2000 and 2005, when the deficits reached  $-2.3\%$  and  $-2.5\%$  of GDP respectively. In the analysed period, the general government debt ratio declined to a low in 2000-2001 when it was about  $36\%$  of GDP. Then, it rose to almost  $44\%$  of GDP in 2003. In the most recent years, it declined somewhat and increased again to  $42\%$  of GDP in 2005.

The problems of persistent high government deficits and growing debt result from high public expenditure relative to the income per capita and especially the high share of mandatory expenditure and its inefficient composition. In 2003-2004,<sup>12</sup> average total expenditure in Poland was by  $0.6\%$  of GDP higher than the average for the other EU-10 countries. On the basis of the functional classification of government expenditures (COFOG classification), Poland spent more than  $42\%$  of total expenditure on social

<sup>12</sup> These are the only years for which Eurostat has government expenditure data according to the COFOG classification for all the EUR-10 countries.

protection, compared to less than 33% in the EU-10. This entailed lower expenditure on other important public functions in Poland compared to the EU-10: by 5.5 percentage points on economic affairs, by more than 1 percentage point on health and by almost 1 percentage point less on public order and safety. High expenditure on social protection in Poland stems mainly from generous indexation rules, poor targeting of disability benefits, the special farmers' pension and disability system and the existence of several early retirement schemes. According to the economic classification, the share of social benefits in total expenditure has been declining since its maximum level in 2000 but the rate of decrease is small (around 0.4% percentage point annually). This seems to be one of the factors behind a disappointing development in public gross fixed capital formation in Poland whose share in government expenditure declined slightly in the recent years from 7.8% in 2001 to 7.2% of total expenditure in 2005 (compared to an increase from 7.5% to 7.8% in the EU-10), despite serious needs for upgrading infrastructure. The Hausner plan adopted in 2003 was the most important attempt at reforming, among other types of public spending, the benefit system. While the measures actually adopted helped to achieve better budgetary outcomes in the most recent years, the fiscal reform plan has been substantially watered down. Moreover, Poland has a high level of state aid relative to GDP (almost 1.5% of GDP, compared to less than 1.1% in the EU-10 and below 0.6% in the EU-15 in 2004), and horizontal aid, which is considered less competition-distorting than sectoral and ad-hoc transfers, accounts only for a minor share of total state aid.

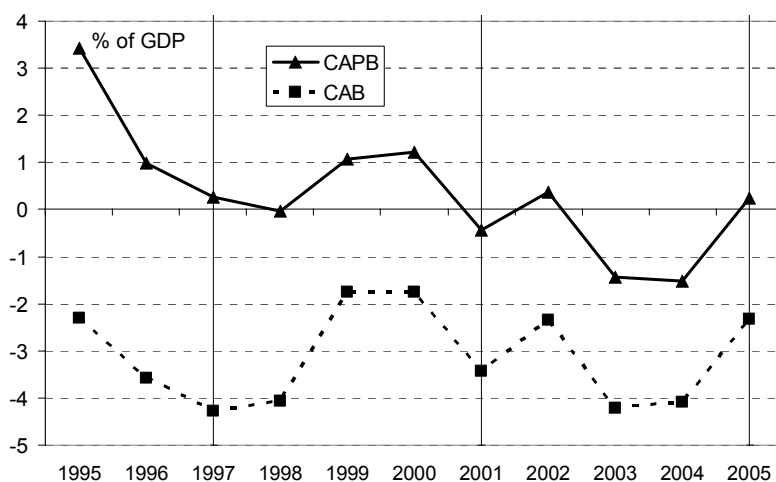
The Polish state budget appears to be 'expenditure-led', i.e. tax revenues are adjusted to the planned levels of government expenditures and subject to political cycles.<sup>13</sup> These phenomena are attributable to lack of experience and information that voters in 'new democracies' may have as compared to more mature democracies.<sup>14</sup> The cyclically-adjusted deficit, that reveals the impact of structural factors and discretionary policy decisions, has been subject to 4-year election cycles in Poland (Figure 8): the highest deficits appeared in parliamentary election years (1997 and 2001) or when they were expected (2003-2004), independent of the 'colour' of the incumbent government. In the latest cycle, the deterioration of the cyclically-adjusted balance occurred in 2003-2004 ahead of the election year 2005. This can be attributed to strong expectations of early elections and, indeed, the government formed after the 2001 elections stopped functioning by mid-2004. The subsequent technocratic' government partly implemented the Hausner plan and introduced some statistical revisions, which explains the budgetary improvement in 2005.

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<sup>13</sup> Green, C.J., M.J. Holmes and T. Kowalski (2001), "Poland: A Successful Transition to Budget Sustainability?", *Emerging Markets Review*, Vol. 2, pp. 160-182.

<sup>14</sup> Brender, A. and A. Drazen (2003), "Where Does the Political Budget Cycle Really Come From?", *CEPR Discussion Papers*, No. 4049.

**Figure 8: Cyclically adjusted balance and elections in Poland**



Note: CAB – cyclically adjusted balance, CAPB – cyclically adjusted primary balance. Vertical lines mark the years with parliamentary elections. Pension reform cost not included.

*Source: Commission services*

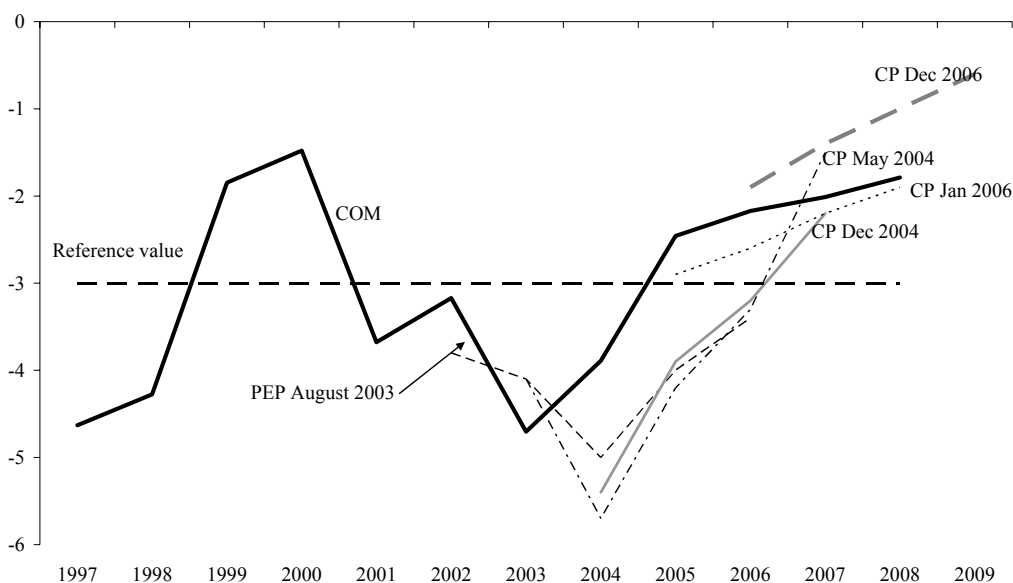
Fiscal adjustments in Poland seem to have a suboptimal composition: they result to a large extent from a decline in interest expenditure or revenue increases rather than cuts in current expenditure. The decrease in government interest expenditure (by 0.6% of GDP on average annually), thanks to successful disinflation, was one of major factors behind the improvement in the general government balance in 1996-1999 as the revenue ratio was also declining at that time. Reduction of public investment (from 3.9% of GDP in 1997-1998 to 2.4% of GDP in 2000) was another cause of a temporary improvement in the budget balance. After 2000, when further reduction of interest expenditure was much smaller under a relatively low and stable inflation, the situation of public finances deteriorated because expenditure was growing faster than revenues (spending rose by more than 0.2% of GDP on average in 2000-2005). The most recent improvements in the fiscal balance resulted, in 2004, from the implementation of some measures in the Hausner Plan and in 2005, from a rise in revenues (faster than rebounding expenditure) together with lower than expected public investment (slow absorption of the EU funds). As suggested by economic literature,<sup>15</sup> expenditure-based adjustments with a focus on current primary expenditure would be more durable and more beneficial for economic growth.

The track-record of fiscal policy planning and outturns is positive, with deficit outcomes better than planned (in the August 2003 pre-accession programme, the May 2004 or the December 2004 convergence programme) by approximately 1.5% of GDP in 2004 and 2005 thanks to corporate income tax and personal income tax reforms adopted in 2003

<sup>15</sup> A. Alesina and R. Perotti (1997), “Fiscal Adjustments in OECD Countries: Composition and Macroeconomic Effects”, *International Monetary Fund Staff Papers*, Vol. 44, Iss. 2, pp. 210-48; A. Alesina and S. Ardagna (1998), “Tales of fiscal adjustment”, *Economic Policy*, Vol 13, Iss. 27, pp. 487-545; J. von Hagen, A.H. Hallett and R. Strauch (2001), “Budgetary Consolidation in EMU” Economic Paper No. 148, European Commission, Directorate-General for Economic and Financial Affairs.

(in force since 2004), and one-off demand boost as a result of EU accession, slow absorption of EU funds implying lower-than-expected public investment, some changes in the accrual methodology.

**Figure 9: General government balance projections in successive convergence programmes (% of GDP)<sup>1</sup>**



Note:

<sup>1</sup> Excluding the impact of the 2004 Eurostat decision on the classification of funded pension schemes, which needs to be implemented by spring 2007.

Source: Commission services national convergence programmes

## 2.4. Medium and long-term policy challenges for public finances

Poland is a catching-up country, which is closing the gap with the EU25 in terms of living standards. Despite labour shortages in some sectors, unemployment is high, while participation is low by EU standards, especially of women. Behind the fast rise in exports, there are foreign direct investments benefiting mainly from low labour costs so far, although the technology content has also been upgraded. Public finances have traditionally been in a bad shape in Poland, recording deficits significantly above 3% of GDP. The public expenditure pattern is worrying because high social expenditure is likely to have a negative impact on the labour market performance through wrong incentives. As far as long-run sustainability is concerned, Poland is a low-risk country. However, preserving this status will require sticking to the fundamental concepts of the pension reform such as uniformity of rules for all social groups.

*Stabilisation:* The relatively high structural deficit against the backdrop of favourable growth conditions highlights the urgency of creating fiscal policy leeway for reacting to a future cyclical downturn. There is also some evidence of an electoral cycle and procyclicality of fiscal policy in Poland, which could be tackled by strict fiscal rules (such as a ceiling on expenditure growth).

*Efficiency:* Efficiency appears to be the main challenge for Poland. Social expenditure seems to be a major source of inefficiencies, but the social sphere is also a sensitive area

where reforms are difficult. There is a high share of poorly targeted transfers received by those who do not really need them (due to years of malfunctioning of the disability assessment, low retirement age, generous early retirement rules, low contributions unrelated to income for those covered by the disability and pension fund for farmers) resulting in high government deficits, high tax burden and high unemployment. The challenge is to cut excessive social expenditure and sector-specific subsidies and shift the resources from passive to active labour market policies (human capital enhancing) and horizontal growth-oriented expenditure (on infrastructure and R&D), policy-makers have a critical opportunity now not only to trigger a virtuous circle of job creation (stronger incentives to re-enter the labour market) and sustained productivity gains (less risk of crowding out private investment) but also enhanced macroeconomic stabilisation (durable deficit reduction). Structural reforms (completion of the privatisation process, deregulation, and robust competition policy) and upgrading the business environment (decreasing the bureaucratic burden, raising the efficiency of courts, improved transport infrastructure) also have a role to play.

**Table 2: Key economic indicators**

	Poland						EU-10					
	Averages			2003	2004	2005	Averages			2003	2004	2005
	'96-'05	'96-'00	'01-'05				'96-'05	'96-'00	'01-'05			
<b>Economic activity</b>												
Real GDP (% change)	4.2	5.4	3.0	3.8	5.3	3.5	4.0	4.3	3.7	4.0	5.1	4.6
Contributions to real GDP growth:												
<i>Domestic demand</i>	4.4	6.8	2.0	2.8	6.1	1.9	4.3	5.3	3.4	4.1	5.6	3.0
<i>Net exports</i>	-0.2	-1.4	1.0	1.1	-0.8	1.4	-0.3	-1.0	0.4	0.0	-0.5	1.6
<b>Prices, costs and labour market</b>												
HICP inflation (% change)	n.a.	n.a.	2.7	0.7	3.6	2.2	n.a.	n.a.	3.3	1.9	4.1	2.5
Labour productivity (% change)	4.7	5.8	3.6	5.1	3.9	0.9	4.2	4.6	3.7	4.3	4.5	2.9
Real unit labour costs (% change)	-1.6	-0.4	-2.8	-3.5	-5.7	-3.2	-0.8	-0.6	-1.0	-0.7	-2.5	-1.8
Employment (% change)	-0.4	-0.3	-0.6	-1.2	1.3	2.3	-0.1	-0.3	0.0	-0.2	0.6	1.7
Unemployment rate (% of labour force)	15.8	12.7	18.9	19.6	19.0	17.7	12.8	11.3	14.2	14.3	14.2	13.4
<b>Competitiveness and external position</b>												
Real effective exchange rate (% change) (1)	1.1	3.4	-1.2	-14.8	-5.2	11.9	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Export performance (% change) (2)	3.5	3.2	3.9	9.3	5.4	0.5	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Current account balance (% of GDP)	-3.3	-3.8	-2.8	-2.1	-4.3	-2.3	-4.7	-4.8	-4.5	-4.3	-5.7	-4.2
<b>Public finances</b>												
General government balance (% of GDP)	-3.5	-3.4	-3.6	-4.7	-3.9	-2.5	n.a.	n.a.	-4.2	-5.1	-3.7	-3.3
General government debt (% of GDP)	40.4	40.1	40.7	43.9	41.8	42.0	38.0	35.8	40.1	39.9	43.4	41.3
Structural budget balance (% of GDP) (3)	n.a.	n.a.	n.a.	-4.2	-4.1	-2.3	n.a.	n.a.	n.a.	-4.5	-3.4	-3.0
<b>Financial indicators (4)</b>												
Long term real interest rate (%) (5)	n.a.	n.a.	4.5	5.4	2.8	2.3	n.a.	n.a.	n.a.	3.5	2.2	2.2
Household debt (% of GDP) (6)	n.a.	5.6	n.a.	13.4	14.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Corporate sector debt (% of GDP) (7)	n.a.	23.5	n.a.	32.9	28.7	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

**Notes:**

More detailed tables summarising the economic performance of the country are included in Annex 4.

(1) Unit labour costs relative to rest of a group of industrialised countries (USD): EU24 (=EU25 excl. LU), BG, RO, TR, CH, NR, US, CA, JP, AU, MX and NZ.

(2) Market performance of exports of goods and services on export weighted imports of goods and services of 35 industrial markets.

(3) Cyclically-adjusted budget balance net of one-off and other temporary measures.

(4) Data available up to 2004.

(5) Using GDP deflator.

(6) Households' and non-profit institutions serving households' debt, defined as loans and securities other than shares.

(7) Non-financial corporate sector debt, defined as loans and securities other than shares.

**Source:**

Commission services

### **3. MACROECONOMIC OUTLOOK**

This section is in seven parts, six of which refer to various dimensions of the macroeconomic scenario, notably: the external assumptions, overall economic growth, the labour market, costs and prices, sectoral balances and potential output growth. The final part summarises the assessment and includes (i) an overall judgement on the plausibility of the macroeconomic scenario and (ii) an indication of whether economic conditions over the programme period can be characterised as economic ‘good’ or ‘bad’ times.

#### **3.1. External assumptions**

The key external assumptions spelled out in the programme and underlying the programme’s macroeconomic scenario, including the development of oil prices, GDP growth in the EU-25 and growth of the main foreign markets, are broadly in line with the ones of the Commission services’ forecast (until 2008). There are some differences, however, in the short- and long-term interest rates, PLN/EUR exchange rate and nominal effective exchange rate, as inter alia the Commission services forecast assumptions were set in the middle of October 2006. The exchange rate assumptions are in line with the inflation projections in the programme.

#### **3.2. Economic activity**

The macroeconomic scenario presented in the programme estimates real GDP to grow by 5.4% in 2006. Real GDP growth is predicted to stabilise in 2007 and 2008 at 5.1% and increase in 2009, reaching 5.6%. Real GDP growth projections in the programme in 2006-2008 are higher than in the Commission services’ autumn 2006 forecast by 0.2%, 0.4% and 0.3%, respectively. The GDP growth forecast for 2009 is by 0.7% higher than average potential growth in 2006-2008 as calculated in the autumn 2006 forecast.

The composition of growth presented in the programme is different from the one incorporated in the Commission services’ autumn 2006 forecast. The programme foresees a higher contribution of domestic demand (by up to 0.9 percentage point until 2008), especially towards the end of the covered period, and slightly bigger negative contribution of net exports to GDP growth (by up to -0.3 percentage point until 2008). Stronger private consumption growth, together with a much faster growth of compensation of employees (2.7 percentage point higher on average) implies a more tax-rich GDP growth in the programme macroeconomic scenario than in the Commission services’ autumn forecast. Apart from high and stable growth of compensation, the stronger private consumption growth in the programme is the result of planned reductions in social contributions and taxes in 2008 and 2009.

In 2006, the National Bank of Poland (NBP) reference rate was cut in two steps during February-March (by a total of 50 basis points) to 4 percent, an all-time low in nominal terms, while the real effective exchange rate of zloty broadly stabilised. As a result, the monetary conditions have somewhat eased in 2006.

**Table 3: Comparison of macroeconomic developments and forecasts**

	2006		2007		2008		2009
	COM	CP	COM	CP	COM	CP	CP
Real GDP (% change)	5.2	5.4	4.7	5.1	4.8	5.1	5.6
Private consumption (% change)	4.6	4.8	3.9	4.0	3.6	4.6	5.6
Gross fixed capital formation (% change)	10.4	12.0	10.8	12.0	10.8	12.0	11.0
Exports of goods and services (% change)	16.7	16.1	11.1	8.1	9.5	7.2	6.9
Imports of goods and services (% change)	16.6	15.4	12.0	9.6	10.5	9.0	8.1
<i>Contributions:</i>							
- Final domestic demand	5.2	5.5	5.1	5.8	5.1	6.0	6.3
- Change in inventories	0.0	-0.3	0.1	0.2	0.3	0.0	0.0
- External balance on g&s	0.0	0.0	-0.5	-0.7	-0.6	-0.9	-0.7
Output gap <sup>1</sup>	0.4	0.0	0.3	0.0	0.1	-0.1	0.3
Employment (% change)	3.3	3.9	1.2	1.4	0.7	1.8	2.0
Unemployment rate (%)	13.9	14.1	12.2	12.3	11.6	10.5	8.8
Labour productivity growth (%)	1.9	1.5	3.5	3.6	4.1	3.2	3.5
HICP inflation (%)	1.4	1.4	2.5	2.1	2.8	2.5	2.5
GDP deflator (% change)	1.0	0.5	1.9	1.7	2.5	2.2	2.4
Comp. of employees (% change)	4.0	7.1	5.0	6.9	5.0	7.7	7.6
Real unit labour costs (% change)	1.1	0.0	-0.4	0.0	-1.5	0.0	0.0
External balance (% of GDP)	-1.8	-1.6	-1.4	-1.8	-1.2	-2.2	-2.7
<b>Note:</b>							
<sup>1</sup> In percent of potential GDP, with potential GDP growth as reported in Table 5 below.							
<i>Source:</i>							
<i>Commission services' autumn 2006 economic forecasts (COM); Convergence programme(CP)</i>							

Cyclical conditions implied by the programme (as measured by the output gap recalculated by Commission services with the commonly agreed methodology) are estimated to be favourable over the programme horizon.<sup>16</sup> The gap between the actual and potential output is, however, wider (by less than ¼ percentage point) in the programme than in the Commission services' autumn forecast, because of stronger GDP growth and despite stronger potential output growth. While the perception of cyclical conditions seems to have been consistently favourable, the size of the positive output gap has been revised downwards across successive commission forecasts (see Table 4).

<sup>16</sup> The calculation of potential growth (and therefore of the output gap) needs to be interpreted with caution, in particular for countries going through a rapid catching-up process.



**Table 4: Output gap estimates in successive Commission services' forecasts and convergence programmes**

	2006		2007		2008	
	COM	CP <sup>1</sup>	COM	CP <sup>1</sup>	COM	CP <sup>1</sup>
CP Nov 2006	-	0.5	-	0.5	-	0.3
Autumn 2006	0.4	-	0.3	-	0.1	-
Spring 2006	0.8	-	1.1	-	n.a.	-
CP Jan 2006	-	0.3	-	0.3	-	0.6
Autumn 2005	0.4	-	0.6	-	n.a.	-
Spring 2005	1.5	-	n.a.	-	n.a.	-
CP Dec. 2004	-	n.a.	-	n.a.	-	n.a.

Note:

<sup>1</sup> Commission services' calculations according to the commonly agreed method based on the figures of the programme

Source: Commission services' forecasts and national Convergence programme

### 3.3. Potential growth and its determinants

Commission services calculations according to the commonly agreed methodology, based on the information provided in the programme, point at potential GDP growth of 4.6% in 2006 to 5.6% 2009. Higher potential growth in the programme compared to the Commission services' autumn 2006 forecast results from bigger contribution of labour (by up to 0.3 percentage point) and capital accumulation (by 0.1 percentage point). This trend is expected to continue in 2009. The average potential output growth in the programme at 5.1% is coming close to the historical high average in 1996-2000 of 5.4%, but is much higher than 3% recorded on average in 2001-2005. After the period of economic restructuring in 1996-2005 when the contribution of labour to the potential output growth was negative at -0.3 percentage point on average, the potential output growth implied by the programme is built upon a positive labour contribution up to 1.5 percentage point in 2009, which reflects a significant improvement in the labour market (see next section). The contribution of capital to the potential output growth is on average close to the past average over 1996 – 2005 of 2.1 percentage point, but it is expected to grow by 0.7 percentage point by 2009, which is a sign of increased investment.

**Table 5: Sources of potential output growth**

	2006		2007		2008		2009
	COM	CP <sup>2</sup>	COM	CP <sup>2</sup>	COM	CP <sup>2</sup>	CP <sup>2</sup>
Potential GDP growth (%) <sup>1</sup>	4.4	4.6	4.8	5.0	5.0	5.3	5.6
Contributions:							
- Labour	0.9	1.0	1.1	1.3	1.1	1.4	1.5
- Capital accumulation	1.6	1.6	1.8	1.9	2.0	2.1	2.3
- TFP	1.9	1.9	1.9	1.8	1.8	1.7	1.7

Notes:

<sup>1</sup>Based on the production function method for calculating potential output growth.

<sup>2</sup>Commission services' calculations on the basis of the information in the convergence programme (CP).

Source: Commission services' autumn 2006 economic forecasts (COM); Commission services' calculations

### **3.4. Labour market developments**

The updated programme predicts positive labour market developments against the backdrop of a robust growth performance. Compared to the Commission services' autumn 2006 forecast, labour market developments are markedly more favourable in the programme update in 2008. This is based on planned labour taxation reform, which should have also very beneficial effects in 2009. The planned reduction of the tax wedge is a most desirable step towards increasing the flexibility of the labour market but given the cost of such a reform and no intended compensating expenditure reductions, implementation of the reform seems dubious and thus the extent of the foreseen improvement in the labour market is questionable. Employment is expected to increase during the entire programme period, at an average rate of 2.3%. The projected average labour content of GDP growth is above historical values, and in particular in 2008, higher than the projections in the Commission services' autumn 2006 forecasts. Favourable cyclical conditions, strong investments and labour taxation reform are given as arguments in the programme update for this and for the expected decline in the rate of unemployment, which is projected to fall by 5.3 percentage point by the end of the programme period (from 14.1% in 2006 to 8.8% in 2009). The fall in the unemployment rate foreseen by the programme is faster than in the Commission services' autumn 2006 forecasts, which estimates the unemployment rate in 2008 to be still at 11.6% on a no-policy-change assumption.

### **3.5. Costs and price developments**

The convergence programme forecasts an increase in HICP inflation from 1.4% in 2006 to 2.1% in 2007, followed by stabilisation in 2008-2009 at 2.5% (the Polish central bank's medium term inflation target). Relatively low inflation is projected against a sharp fall in unemployment indicating an improvement in structural labour market conditions and strong wage growth. However, wages growing faster than labour productivity are expected to be offset by falling import prices due to increased competition and a slight appreciation of the Polish zloty, and a moderating influence of the EU single market on food prices. Monetary policy is expected to tame the inflationary expectations and keep the inflation around 2.5%. While broadly in line with this picture, the Commission services' forecasts project somewhat higher inflation in 2008, reflecting a more severe impact of labour market tightening than assumed in the update.

### **3.6. Sectoral balances**

The outlook for sectoral balances in the convergence programme update is broadly in line with the Commission services' autumn 2006 forecast. The external balance is projected to widen to 2.7% of GDP in 2009, which seems to be a safe level as almost the whole current account deficit will be financed from the inflow of foreign direct investments (FDI) and a growing inflow of transfers from the EU is expected.

### **3.7. Assessment**

The assessment of the macroeconomic outlook covers two questions: first, whether the macroeconomic scenario is plausible, and, second, whether the economy should be considered to be in economic 'good' or 'bad' times.

### 3.7.1. *Plausibility of the macroeconomic scenario*

The growth assumptions underlying the programme can be considered as plausible in 2007 in the light of the latest information available and favourable in 2008-2009 when faster real GDP growth than in the Commission services' autumn 2006 forecast relies on stronger private consumption growth, as a result of substantial improvement in the labour market. Labour market developments are built upon labour taxation reform planned for 2008-2009. There is a risk, however, that this reform may not be implemented fully as planned because of its cost, estimated to reach about 15 bln PLN (ca. 1.3% of GDP). This would put a heavy burden on the budget as no offsetting expenditure reforms are planned. As a result, the labour market conditions may not improve as much as assumed in the programme and thus the private consumption growth may be lower than forecasted, hampering the pace of GDP growth.

### 3.7.2. *Economic good vs. bad times*

The Polish economy in the period covered by the current update of the convergence programme can be considered to be in economic 'good' times. Although the slightly positive output gap, as implied by the Commission services' autumn 2006 forecast, is slowly closing towards the end of the programme period, the overall macroeconomic situation is improving substantially. Over the programme horizon, the unemployment rate is expected to keep falling fast, employment is likely to grow steadily, and investment growth is projected to keep its high momentum.

## 4. GENERAL GOVERNMENT BALANCE

This section consists of four parts. The first part discusses budgetary implementation in the year 2006 and the second presents the budgetary strategy in the new update, including the programme's medium-term objective (MTO) for the budgetary position. The third analyses the risks attached to the budgetary targets in the programme. The final part contains the assessment of the fiscal stance and of the country's position in relation to the budgetary objectives of the Stability and Growth Pact.

### 4.1. **Budgetary implementation in 2006**

In the January 2006 convergence programme, the target for the general government balance in 2006 was set at -2.6% of GDP (pension reform cost not included). The Commission services' autumn forecast points at -2.2% of GDP, while the November 2006 update of the convergence programme estimates the 2006 outturn at -1.9% of GDP. The improvement mainly results from an incomplete execution of expenditure plans and better than expected tax-rich growth. The estimated outturn for 2006 in the November 2006 update is plausible considering the most recent information of budgetary developments on a cash basis.

According to the November 2006 update of the convergence programme, total general government expenditure turns out to be 1% of GDP lower than planned in the previous update thanks to much higher than expected GDP growth. In particular, social transfers were lower than expected which should not be a surprise in view of the rapid decline in the unemployment ratio in 2006 (by 3.6 p.p. according to the current update). Furthermore, the current estimate of public investment is by 0.2% of GDP lower than previously planned. However, there was no expenditure restraint as the November 2006

programme shows an increase in the expenditure ratio between 2005 and 2006 compared to a decline targeted in the previous update. For the revenue ratio, the current update and to a significant increase in the ratio between 2005 and 2006, compared to an expected stabilisation budgeted in the previous update.

The general government revenue ratio is expected to be by 0.3% of GDP lower according to the November 2006 update of the convergence programme compared to the prediction in the January 2006 update. The estimated tax ratio is lower than expected in the previous update (by 0.4% of GDP), mainly due to direct taxes. Revenue from property, attributable mainly to higher dividends from state-owned enterprises, turns out to be by 0.2% of GDP higher.

**Table 6: Evolution of budgetary targets in successive programmes<sup>1</sup>**

		2005	2006	2007	2008	2009
General government balance (% of GDP)	<b>CP Nov 2006</b>	<b>-2.5</b>	<b>-1.9</b>	<b>-1.4</b>	<b>-1.0</b>	<b>-0.6</b>
	CP Dec 2005	-2.9	-2.6	-2.2	-1.9	n.a.
	<i>CP Dec 2004</i>	<i>-3.9</i>	<i>-3.2</i>	<i>-2.2</i>	<i>n.a.</i>	<i>n.a.</i>
	COM Nov 2006	-2.5	-2.2	-2.0	-1.8	n.a.
General government expenditure (% of GDP)	<b>CP Nov 2006</b>	<b>43.3</b>	<b>43.7</b>	<b>43.8</b>	<b>42.6</b>	<b>40.6</b>
	CP Dec 2005 <sup>1</sup>	44.9	44.7	43.7	42.4	n.a.
	<i>CP Dec 2004</i>	<i>48.4</i>	<i>48.0</i>	<i>46.2</i>	<i>n.a.</i>	<i>n.a.</i>
	COM Nov 2006	43.3	44.0	44.4	43.6	n.a.
General government revenues (% of GDP)	<b>CP Nov 2006</b>	<b>40.9</b>	<b>41.8</b>	<b>42.4</b>	<b>41.6</b>	<b>40.0</b>
	CP Dec 2005	42	42.1	41.5	40.5	n.a.
	<i>CP Dec 2004</i>	<i>44.5</i>	<i>44.8</i>	<i>44.0</i>	<i>n.a.</i>	<i>n.a.</i>
	COM Nov 2006	40.9	41.8	42.3	41.8	n.a.
Real GDP (% change)	<b>CP Nov 2006</b>	<b>3.5</b>	<b>5.4</b>	<b>5.1</b>	<b>5.1</b>	<b>5.6</b>
	CP Dec 2005	3.3	4.3	4.6	5.0	n.a.
	<i>CP Dec 2004</i>	<i>5.0</i>	<i>4.8</i>	<i>5.6</i>	<i>n.a.</i>	<i>n.a.</i>
	COM Nov 2006	3.2	5.2	4.7	4.8	n.a.

Note:

<sup>1</sup>The budgetary projections exclude the impact of the Eurostat decision of 2 March 2004 on the classification of funded pension schemes, which needs to be implemented by the time of the spring 2007 notification. See Table 6 for the quantification of this effect on the general government balance in the most recent update.

Source:

*Convergence programmes (CP) and Commission services' autumn 2006 economic forecasts (COM)*

## 4.2. The programme's medium-term budgetary strategy

This section covers in turn the following aspects of the medium-term budgetary strategy outlined in the programme: (i) the main goal of the budgetary strategy; (ii) the composition of the budgetary adjustment, including the broad measures envisaged; and (iii) the programme's medium-term objective and the adjustment path towards it in structural terms.

### 4.2.1. The main goal of the programme's budgetary strategy

The main goal of the budgetary strategy in the November 2006 update is to correct the excessive deficit by 2007 thanks to the deduction of a part of the pension reform cost and to further gradually reduce the deficit thereafter so that the 3% of GDP reference value is reached in 2009. The MTO put forward in the programme is a structural general government deficit of 1.0% of GDP (see Section 4.2.3). This is unchanged from the previous update of the programme.

## **Box 2: The excessive deficit procedure for Poland**

According to the excessive deficit procedure (EDP), the Commission and the Council monitor the development of the budgetary position in each Member State, notably in relation to the reference values of 3% of GDP for the deficit and 60% of GDP for the debt, in order to assess the existence (or risk) of an excessive deficit and to ensure its correction. The EDP is laid down in Article 104 of the Treaty and further clarified in the Stability and Growth Pact.

On 5 July 2004 the Council adopted a decision stating that Poland had an excessive deficit in accordance with Article 104(6). At the same time, the Council addressed a recommendation under Article 104(7) specifying that the excessive deficit had to be corrected by 2007, with the following annual targets for the general government deficit (pension reform cost excluded): 5.7% of GDP in 2004, 4.2% of GDP in 2005, 3.3% in 2006 and 1.5% of GDP in 2007. At that time, the pension reform costs were estimated at 1.5% of GDP each year. Poland was recommended to implement with vigour the measures envisaged in the convergence programme, in particular those contained in the so-called Hausner plan. This plan was proposed in 2003 and constituted the most comprehensive and detailed attempt at expenditure reform so far, aimed at reducing public expenditure on social protection, public administration and state aid. The Polish authorities were recommended to take effective action by 5 November 2004 regarding the measures envisaged to achieve the 2005 deficit target. In addition, the Council invited the Polish authorities to allocate possible extra revenues to decrease the general government deficit.

On 22 December 2004, the Commission stated, in its communication to the Council, that the Polish government had taken effective action regarding the measures envisaged to achieve the 2005 deficit target in response to the Council recommendation. Accordingly, the Commission concluded that no further steps were necessary at that point under the excessive deficit procedure.

On 17 February 2005, the Council issued its opinion on the updated convergence programme of Poland for 2004-2007, targeting in 2007 a deficit of 2.2% of GDP (excluding pension reform cost). The Council advised: firstly, to strengthen the fiscal adjustment beyond 2005 and lower the deficit target for 2007; secondly, to ensure a full implementation of the structural measures contained in the Hausner plan and to make further efforts to introduce supplementary measures if implementation risks materialised.

Despite the invitation in the Council opinion of 17 February 2005, the January 2006 update of the convergence programme confirmed the deficit target for 2007 at 2.2% of GDP (excluding the cost of the pension reform). Moreover, the programme revised upwards the costs of the pension reform, by 0.4% of GDP to 1.9% of GDP in 2007. With the pension reform cost included, the 2007 deficit target was higher than in the previous update (4.1% of GDP compared to 3.7% of GDP).

In its opinion on the January 2006 update of the convergence programme, adopted on 14 March 2006, the Council pointed to various risks attached to the budgetary consolidation strategy, such as relatively favourable growth assumptions in the last year of the programme period (2008), relatively optimistic assumptions about tax elasticities and possible difficulties with expenditure control in the face of social spending pressures. The Council concluded that “the convergence programme envisages some progress, but not the effective correction of the excessive deficit in 2007 (...) and that the Commission intends to recommend further steps under the excessive deficit procedure as required by the Stability and Growth Pact”. In addition, the Council mentioned that the planned adjustment in the structural balance was planned to improve on average by  $\frac{1}{4}$ % of GDP per year over the programme period.

On 28 November 2006, the Council adopted a decision in accordance with Article 104(8) stating that the “action taken by Poland in response to the Council Recommendation of 5 July 2004 under Article 104(7) of the Treaty is proving to be inadequate to correct the excessive deficit within the deadline fixed by the Recommendation.” This was based also on the Commission

services' autumn 2006 forecast, which showed that, including the revised pension reform cost, the 2007 deficit was expected to reach 4% of GDP.

The Council is expected to follow-up on this decision by addressing a new recommendation under Article 104(7) to Poland in February 2007.

The November 2006 update of the convergence programme has revised the general government deficit targets approved by the government in the 2007 budget. The deficit target for 2007 has been revised from 1.7% of GDP to 1.4% and the 2008 target from 1.2% of GDP to 1.0%; this does not reflect new measures but a more favourable macroeconomic scenario than the one underpinning the budget. The 2009 target has deteriorated from 0.5% of GDP to 0.6%. All these figures do not include the pension reform cost of just above 2% of GDP annually on average (see Box 3). Furthermore, the programme declares that any windfall revenue will be used to reduce the deficit but this does not seem safeguarded by any formal arrangements.

The adjustment path presented in the November 2006 update of the convergence programme would result in a gradual reduction of the headline general government deficit ratio by 0.4% of GDP annually (0.3% if pension reform cost is included), to 0.6% of GDP in 2009. The primary surplus ratio is planned to increase also by 0.4% of GDP annually. The adjustment is very slightly front-loaded, with a 0.5 percentage point decline in the deficit ratio in 2007 followed by 0.4 percentage point improvements in both 2008 and 2009. The impact of the pension reform (see Box 3) will reach 2.1% of GDP annually on average in 2007-2009, for the deficit ratio, and 8.8% of GDP, for the debt ratio (see Section 5.1 below).

### **Box 3: The classification of pension schemes**

In a country's pension system one can often distinguish different pillars, such as pay-as-you-go or unfunded systems and funded systems; furthermore, pension schemes can be of the defined-benefit (DB) or defined-contribution (DC) variety.

The ESA95 accounting rules state that pension schemes classified within government are those which are "imposed, controlled and financed by government". If a pension scheme is classified in the government sector, contributions collected and benefits paid by the scheme are government revenue and expenditure and influence the government balance. If a pension scheme is classified in a sector other than government, its contributions and benefits do not affect the government balance.

On 2 March 2004, Eurostat clarified(\*) that funded DC pension schemes do not fulfil these criteria because pensions paid by such schemes (i) depend primarily on financial market performance (i.e. not under government control) and (ii) are financed by reserves that are not economically owned by government. Even if they are mandatory or if they are managed by government (for example, managed by the same government agency in charge of the pay-as-you-go pillar) or if there is some government guarantee of a minimum pension, funded DC schemes should not be classified within government.

A transition period, expiring in spring 2007 (first EDP notification of 2007), has been granted to implement this decision(\*\*). Poland is using this transition period. According to the November 2006 update of the convergence programme, the expected impact of implementing the Eurostat decision on the general government deficit ratio is 2.0% of GDP in 2006, 2.0% in 2007, 2.1% in 2008 and 2.3% in 2009. The impact on the general government debt ratio is 6.9% of GDP in 2006, 7.9% in 2007, 8.9% in 2008 and 9.6% in 2009.

(\*) Eurostat News Release No 30/2004 of 2 March 2004.

(\*\*) Eurostat News Release No 117/2004 of 23 September 2004.

In view of the expectations of a much stronger growth especially in 2006, but also in 2007 (average real GDP growth for 2006-2008 is revised from 4.6% in the January 2006 update of the programme to 5.1% in the current macroeconomic projection), the November 2006 update of the convergence programme revises all deficit targets downwards and plans a marginally faster adjustment in the headline government balance (by only 0.1% of GDP in both 2007 and 2008).

**Table 7: Composition of the budgetary adjustment**

(% of GDP)	2005	2006	2007	2008	2009	Change: 2009-2006
<b>Revenues</b>	<b>40.9</b>	<b>41.8</b>	<b>42.4</b>	<b>41.6</b>	<b>40.0</b>	<b>-1.8</b>
<i>of which:</i>						
- Taxes & social contributions	34.3	35.4	35.9	35.4	34.3	-1.1
- Other (residual)	6.6	6.4	6.5	6.2	5.7	-0.7
<b>Expenditure</b>	<b>43.3</b>	<b>43.7</b>	<b>43.8</b>	<b>42.6</b>	<b>40.6</b>	<b>-3.1</b>
<i>of which:</i>						
- Primary expenditure	40.7	41.3	41.4	40.2	38.2	-3.1
<i>of which:</i>						
Consumption	18.3	17.8	17.8	17.1	16.1	-1.7
Transfers other than in kind & subsidies	16.3	16.2	15.7	15.4	14.8	-1.4
Gross fixed capital formation	3.4	3.8	4.6	4.3	4.2	0.4
Other (residual)	2.7	3.5	3.3	3.4	3.1	-0.4
- Interest expenditure	2.6	2.4	2.4	2.4	2.4	0.0
<b>General government balance (GGB)</b>	<b>-2.5</b>	<b>-1.9</b>	<b>-1.4</b>	<b>-1.0</b>	<b>-0.6</b>	<b>1.3</b>
- excluding second-pillar pension scheme <sup>1</sup>	-4.3	-3.9	-3.4	-3.1	-2.9	1.0
<b>Primary balance</b>	<b>0.1</b>	<b>0.5</b>	<b>1.0</b>	<b>1.4</b>	<b>1.7</b>	<b>1.3</b>
One-offs <sup>2</sup>	0.0	0.0	0.0	0.0	0.0	0.0
<b>GGB excl. one-offs</b>	<b>-2.5</b>	<b>-1.9</b>	<b>-1.4</b>	<b>-1.0</b>	<b>-0.6</b>	<b>1.3</b>
<b>Notes:</b>						
<sup>1</sup> This shows the general government balance as it will be after the Eurostat decision of 2 March 2004 on the classification of funded pension schemes has been implemented, which needs to be done by the time of the spring 2007 notification						
<sup>2</sup> One-off and other temporary measures						
<i>Source:</i>						
Convergence programme update; Commission services' calculations						

#### 4.2.2. The composition of the budgetary adjustment

According to the November 2006 update of the convergence programme, the adjustment will be revenue-based in 2007 (revenue ratio increase by 0.6% of GDP with an expenditure ratio rise by 0.1% of GDP) and strongly expenditure-based in 2008-2009 (average annual expenditure ratio reduction by 1.6% of GDP) so as to more than offset the large decline in the revenue ratio (by 1.2% of GDP on average).

As far as the main expenditure categories are concerned, government consumption is planned to decrease by more than 0.5% of GDP annually (but not in 2007) and the expenditure ratio for social transfers other than in kind is intended to decrease by almost 0.5% of GDP annually in 2007-2009. The subsidies-to-GDP ratio will remain unchanged (at 0.9% of GDP). Public investment in fixed assets is planned to rise in 2007 and fall thereafter as a per cent of GDP, despite the declared intention to boost the absorption of the EU funds (which should entail increased co-financing from the Polish general government); though, over the programme period as a whole, the public investment ratio would still rise. The interest expenditure ratio is expected to remain constant across the programme horizon (at 2.4% of GDP).

As regards the main revenue components, in particular, revenue from social contributions is expected to decline by 0.6% of GDP on average in the period 2007-2009, according to the aggregate figures presented in the current update of the programme. That is to be partly compensated by rising revenue from indirect taxes (by 0.3% of GDP on average). The reasons for the decline in other revenues than taxes and social contributions over the programme period are not given in the programme. One can suppose that the government expects lower dividends in the future given very high current pay-outs.

Beyond those presented in the budget for 2007 (see box 4), the specific measures, especially at the expenditure side, are described very generally. No disaggregated impact on the government balance is presented.<sup>17</sup> Consistent with the approach taken in the 2007 budget, the expenditure projections in the November 2006 update of the convergence programme explicitly depart from the spending plans of the local authorities and other extra-budgetary institutions belonging to general government. These plans are said to constitute a cautiously fixed ceiling for the highest possible spending which is not likely to be fully executed according to the programme. The planned major reorganisation of the general government sector (involving e.g. (i) abolition of special extra-budgetary institutions – which are currently in general government but outside the Polish state budget – the finances of which will be included in the central state budget or in the local authorities' budgets and (ii) stricter reporting obligations) has already been postponed once and it is still at an early stage. The positive effects of this measure (estimated in the programme at the total of 0.8% of GDP during a 2-year period after implementation currently scheduled for 2007) are uncertain given the nature of the measure (reorganisation of tasks and expenditure rather than their abolition).

Most of the measures planned for 2008-2009 on the revenue side are deficit-increasing. The government intends to cut by half contributions to the disability fund in 2008-2009 in order to reduce the high tax wedge affecting labour. According to the current estimates (not presented in the programme), the total cost of this measure may reach about 1.3% of GDP in 2008-2009. Furthermore, the government also plans introducing only two marginal personal income tax rates (18% and 32% replacing the current 19%, 30% and 40%) in 2009, with a vast majority of the tax-payers in the lower bracket. As indicated by the current estimates (not presented in the programme), the cost of this measure may reach 0.6-0.7% of GDP. Moreover, the government wants to extend pro-family tax reliefs (budgetary impact not quantified). As far as the compensating measures are concerned, the November 2006 update of the convergence programme mentions the continued rise of the excise duty on cigarettes until the minimum value required by the EU is reached in 2009, a new taxation of cars (to be introduced in 2008) and some increase in the value-added-tax rate on food products. The projected positive developments in the labour market are expected to yield a fast increase in social contributions. The current update of the convergence programme refers also to the favourable evolution of tax collection (thanks to strengthening customs at the eastern border of Poland, introduction of computer systems and training initiatives in the tax administration, successful fight against organised tax fraud, changes in regulation i.e. closing of loopholes). However, once the most apparent inefficiencies in tax collection have been corrected, a further fast

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<sup>17</sup> Table 17 of the November 2006 update of the convergence programme provides very little useful information (except for the qualitative information on the state of implementation): units are not explained (percentages of an unknown denominator), apparently only the budgetary cost is presented (without estimation of benefits) and budgetary expenditure is not separated from extra-budgetary financing (such as EU funds).



improvement in tax collection in the future is more uncertain. The quantification of the budgetary implications of the listed measures is not given in the programme.

With respect to subsectors of general government, it is worthwhile noting that, despite the plans to significantly intensify the absorption of EU funds (which is likely to require a larger domestic contribution to the investment projects at the local level), the current update of the convergence programme projects small surpluses in the local government subsector, slowly declining from 0.3% of GDP in 2007 to 0.1% of GDP in 2009. The central government (which encompasses both the state budget and the central extra-budgetary institutions) is expected to run high deficits at about 4% of GDP on average in 2007-2009, though declining by 0.3% of GDP annually on average across the period (back-loaded to 2008-2009). The surplus of the social security system (excluding pension reform costs) is projected to increase from 2.5% of GDP in 2007 to 2.8% in 2009.

#### Box 4: The budget for 2007

The Polish government adopted the draft 2007 budget on 27 September 2006 and parliament on 15 December 2006. Without introducing new measures, Parliament increased the revenue forecast and the expenditure plans by more than 0.1% of GDP compared to the draft budget that was only partly covered by higher planned revenue of the central bank. The budget complies with the nominal anchor (ceiling) of PLN 30bn (2.7% of GDP in 2007) on the state budget deficit.

The budget sets a 2007 general government deficit target of 1.7% of GDP (pension reform cost of about 2% of GDP not included) compared to 1.4% of GDP presented in the November 2006 update of the convergence programme.

Tax revenues of the central state budget are expected to increase by 10.3%, much faster than the assumed nominal GDP growth (6.1%). Excise duty hikes for fuels and cigarettes will be the main revenue-increasing measures (0.2% of GDP), more than offset by the “unfreezing” of the indexation of personal income tax brackets (compensating for the lack of indexation since 2001) and tax-deductible costs as well as pro-family tax reliefs (together -0.3% of GDP). The overall revenue assumptions are based on revenue buoyancy expectations. Total expenditure of the central state budget (excluding the fraction financed with EU transfers, for the first time included in the budget to enhance monitoring) is planned to increase by 7.4%. The budget includes sharp increases in wages and salaries for medical personnel and teachers (0.5% of GDP). There are also significant increases for military expenditure (by 17.5% or 0.1% of GDP) and social expenditure (0.2% of GDP), including a restoration of the annual indexation of pensions and disability benefits (which had been abandoned as part of the Hausner plan). The offsetting measures on the expenditure side are not clearly spelled out.

Table: Main measures in the budget for 2007

Revenue measures*	Expenditure measures**
<ul style="list-style-type: none"> <li>○ “Unfreezing” of the indexation of personal income tax brackets and tax-deductible cost plus pro-family tax reliefs (-0.3% of GDP)</li> <li>○ Excise duty hikes for fuels and cigarettes (0.2% of GDP)</li> </ul>	<ul style="list-style-type: none"> <li>○ Increases of salaries for medical personnel (0.4% of GDP)</li> <li>○ Restoration of annual indexation of pensions and disability benefits (0.2% of GDP)</li> <li>○ Increased military expenditure (0.1% of GDP)</li> <li>○ Increased salaries of teachers (0.1% of GDP)</li> </ul>

\* Estimated impact on general government revenues.

\*\* Estimated impact on general government expenditure.

Sources: Commission services and budget for 2007.

#### 4.2.3. The medium-term objective (MTO) and the structural adjustment

As in the January 2006 update of the convergence programme, the MTO put forward in the current programme is a structural general government deficit of 1.0% of GDP. The MTO is set in structural terms i.e. cyclically-adjusted and net of one-off and other

temporary measures. The broadly defined time frame for achieving that objective is also unchanged (“after 2010”).

**Box 5: The medium-term objective (MTO) for the budgetary position**

According to the Stability and Growth Pact, stability and convergence programmes must present a medium-term objective (MTO) for the budgetary position. The MTO is country-specific to take into account the diversity of economic and budgetary positions and developments as well as of fiscal risk to the sustainability of public finances.

The MTO should fulfil a triple aim. First, it should provide a safety margin with respect to the 3% of GDP deficit limit. Second, it should ensure rapid progress towards sustainability. Third, taking into account the first two goals, it should allow room for budgetary manoeuvre, considering in particular the needs for public investment. The code of conduct further specifies that, as long as the methodology for incorporating implicit liabilities is not fully developed and agreed by the Council, the country-specific MTOs are set taking into account the current government debt ratio and potential growth (in a long-term perspective), while preserving a sufficient margin against breaching the 3% of GDP deficit reference value. Member States are free to set an MTO that is more demanding than strictly required by these provisions.

The MTO is defined in structural terms, i.e. it is adjusted for the cycle and one-off and other temporary measures are excluded. For countries belonging to the euro area or participating in the exchange-rate mechanism (ERM II), the MTO should be in a range between a deficit of 1% of GDP and balance or surplus (in structural terms).

The MTO satisfies the condition of providing a safety margin as the most recent estimate of the minimum benchmark (i.e. the estimated budgetary position in cyclically-adjusted terms that provides a sufficient safety margin for automatic stabilisers to operate freely during normal economic downturns without breaching the 3% of GDP deficit reference value) is a cyclically-adjusted deficit of 1½% of GDP. The MTO adequately reflects the debt ratio and average potential growth in the long run.

According to the path envisaged in the November 2006 update of the convergence programme, the structural balance (as recalculated by the Commission services according to the commonly agreed methodology) will improve from about -2% of GDP in 2006 to -¾% of GDP in 2009 (excluding pension reform costs). After some smaller improvement in 2006, the average structural change will be about +0.5% of GDP annually in 2007-2009. The expected evolution of the structural primary balance is similar. The fiscal stance can be assessed as restrictive. The projections of the structural balance presented in the programme are similar to the calculations by the Commission services (based on the data from the programme).

**Table 8: Output gaps and cyclically-adjusted and structural balances**

(% of GDP)	2005		2006		2007		2008		2009	Change: 2009-2006
	COM	CP <sup>1</sup>	COM	CP <sup>1</sup>	COM	CP <sup>1</sup>	COM	CP <sup>1</sup>	CP <sup>1</sup>	CP <sup>1</sup>
Gen. gov't balance	-2.5	-2.5	-2.2	-1.9	-2.0	-1.4	-1.8	-1.0	-0.6	1.3
One-offs <sup>2</sup>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Output gap <sup>3</sup>	-0.3	-0.4	0.4	0.5	0.3	0.5	0.1	0.3	0.4	-0.1
CAB <sup>4</sup>	-2.3	-2.4	-2.3	-2.1	-2.1	-1.6	-1.8	-1.1	-0.7	1.3
change in CAB	1.7	:	0.0	0.3	0.2	0.5	0.3	0.5	0.4	
CAPB <sup>4</sup>	0.2	0.2	0.1	0.3	0.3	0.8	0.6	1.3	1.7	1.3
Structural balance <sup>5</sup>	-2.3	-2.4	-2.3	-2.1	-2.1	-1.6	-1.8	-1.1	-0.7	1.3
change in struct. bal.	1.7	:	0.0	0.3	0.2	0.5	0.3	0.5	0.4	
Struct. prim. balance <sup>5</sup>	0.2	0.2	0.1	0.3	0.3	0.8	0.6	1.3	1.7	1.3

**Notes:**  
<sup>1</sup>Output gaps and cyclical adjustment according to the convergence programme (CP) as recalculated by Commission services on the basis of the information in the programme.  
<sup>2</sup>One-off and other temporary measures.  
<sup>3</sup>In percent of potential GDP. See Table 3 above.  
<sup>4</sup>CA(P)B = cyclically-adjusted (primary) balance.  
<sup>5</sup>Structural (primary) balance = CA(P)B excluding one-off and other temporary measures.

**Source:**  
*Commission services' autumn 2006 economic forecasts (COM); Commission services' calculations*

### 4.3. Risk assessment

This section compares the budgetary projections in the programme with the Commission services' autumn 2006 forecast and analysis potential risks to the achievement of the budgetary targets.

As far as the macroeconomic outlook is concerned, there are risks of worse-than-targeted deficit because the growth assumptions are favourable for the period 2008-2009 (see Section 3.7.1 above). The November 2006 update of the convergence programme takes into account the data available after the cut-off date of the autumn forecast of the Commission services. It underlies the programme's assumption of a continuation of smaller transfers other than in kind than predicted by the Commission services in their autumn forecast, which explains around ¼% of GDP of the difference between the deficits.

The positive growth differential for 2007 in the update of the convergence programme (0.5 percentage points), may yield higher revenues compared to the autumn 2006 forecast of the Commission services. All in all, through the operation of the automatic stabilisers, the discrepancy may result in general government deficit in 2007 lower by about 0.3% of GDP compared to the Commission services' forecast, i.e. reach 1.7% of GDP (pension reform cost excluded).

**Table 9: Comparison of budgetary developments and projections**

(% of GDP)	2005	2006		2007		2008		2009
		COM	CP	COM	CP	COM <sup>1</sup>	CP	CP
<b>Revenues</b>	40.9	41.8	41.8	42.3	42.4	41.8	41.6	40.0
<i>of which:</i>								
- Taxes & social contributions	33.9	35.0	35.4	35.5	35.9	35.3	35.4	34.3
- Other (residual)	7.0	6.8	6.4	6.9	6.5	6.5	6.2	5.7
<b>Expenditure</b>	43.3	44.0	43.7	44.4	43.8	43.6	42.6	40.6
<i>of which:</i>								
- Primary expenditure	40.8	41.6	41.3	41.9	41.4	41.1	40.2	38.2
<i>of which:</i>								
Consumption	18.3	17.9	17.8	17.7	17.8	17.5	17.1	16.1
Transfers other than in kind & subsidies	16.3	16.4	16.2	16.1	15.7	15.3	15.4	14.8
Gross fixed capital formation	3.4	3.8	3.8	4.1	4.6	4.2	4.3	4.2
Other (residual)	2.9	3.4	3.5	4.0	3.3	4.1	3.4	3.1
- Interest expenditure	2.6	2.4	2.4	2.4	2.4	2.4	2.4	2.4
<b>General government balance (GGB)</b>	-2.5	-2.2	-1.9	-2.0	-1.4	-1.8	-1.0	-0.6
<b>Primary balance</b>	0.1	0.2	0.5	0.4	1.0	0.6	1.4	1.7
One-offs <sup>2</sup>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>GGB excl. one-offs</b>	-2.5	-2.2	-1.9	-2.0	-1.4	-1.8	-1.0	-0.6
<b>Notes:</b>								
<sup>1</sup> On a no-policy change basis.								
<sup>2</sup> One-off and other temporary measures.								
<b>Source:</b>								
Commission services' autumn 2006 economic forecasts (COM); convergence programme update (CP); Commission services' calculations								

According to the sensitivity analysis presented in the November 2006 update of the convergence programme, real GDP growth slower by 1 percentage point will result in the general government balance being by almost ½% of GDP worse each year compared to the planned adjustment path in 2007-2009. By contrast, Commission services' simulations of the cyclically-adjusted balance under the assumptions of (i) a sustained 1 percentage point downward deviation from the real GDP growth projections in the programme over the 2006-2009 period; (ii) trend output based on the HP-filter and (iii) no policy response (notably, the expenditure level is as in the central scenario), reveal that, by 2009, the cyclically-adjusted balance is by approximately 1 percentage point of GDP below the central scenario each year. Hence, in the case of persistently lower real growth, additional measures of around 1 percentage point of GDP annually, twice as much as indicated in the sensitivity analysis of the programme, would be necessary to keep public finances on the path targeted in the central scenario.

As already indicated in Section 4 above, the programme revises the deficit targets presented in the 2007 budget without planning any new measures. In 2007, the deficit-reducing measures on the revenue side are clear (excise duty hikes) there are no expenditure measures planned for 2007. For the period beyond 2007, the programme provides only general information about the measures supporting the envisaged consolidation. A disaggregated quantified budgetary impact of the measures is not spelled out. Furthermore, the programme itself recognises the political risk attached to the implementation of the measures to be adopted in parliament which is subject to pressures from interest groups. The track record is not favourable in this respect. Under the previous government, only a minority of measures from the Hausner plan was implemented. Under the current government, (i) the plan of reducing expenditure on administration has been abandoned and (ii) the comprehensive reorganisation of the public finance sector (leading to the abolishing of extra-budgetary institutions and increased transparency) has already been postponed once and it is still at an early stage. It

also needs to be reminded that 2009 will be a year of parliamentary elections in Poland and there is some evidence of Poland exhibiting an electoral budget cycle (see Figure 8 in Section 2.3). The lack of information on the envisaged measures and political risks, higher social expenditure (as a result of the adopted legislation which is not fully consistent with the 2007 budget) and a lower surplus of the local government sector in view of an expected higher absorption of EU funds represent a risk that the budgetary outcomes could be worse than targeted in the programme, especially in 2008-2009. Having in mind high expected GDP growth rates across the whole programme period, the planned adjustment in the expenditure ratio is not very ambitious as the growth rate of expenditure will remain relatively high (in nominal terms by ca. 5% annually and ca. 3% in real terms in 2007-2009). In addition, also the output gap analysis points to a favourable economic situation in the near future (see Section 3.7.2).

The government plans introducing measures affecting taxes and social contributions across the whole program period, hence the differences with the OECD theoretical ex-ante elasticities (see Table 10). The apparent tax elasticities for 2007, in the November 2006 update of the convergence programme and in the Commission services' autumn forecast, are quite similar both at the overall and disaggregated level (see Annex 5). The largest difference between the programme and the Commission services as regards the change in the tax-to-GDP ratio (-0.2 p.p.) appears for indirect taxes and is compensated by a positive difference (more optimistic forecast in the programme) for direct taxes. There is more disagreement about 2008 at a disaggregated level (especially for indirect taxes and social contributions) but again offset to a large extent at the overall level, with the Commission forecast being slightly more favourable with respect to tax receipts. The autumn forecast is based on a no-policy-change assumption as opposed to the planned-policy-implementation assumption in the programme. All in all, tax projections embody plausible assumptions about the intensity of economic activity and the impact of the measures which may be taken.

The overall track record, when it comes to respecting the general government balance targets, can be assessed positively (see Table 6 and Figure 9 in Section 2.3), with deficit outcomes better than planned by approximately 1½% of GDP in 2004 and 2005.<sup>18</sup> However, part of that achievement resulted from one-off factors such as a partial implementation of planned expenditure, a consumption boost related to EU accession in 2004 and statistical revisions in 2005.

The overall balance of risks is negative: outcomes in public finances may be worse than targeted in the programme. The main risk factors are the reliance on the macroeconomic scenario (especially in 2007 when the adjustment is revenue-based) rather than reforms and the lack of information on the envisaged measures, which appear to be in an early conceptual phase, and political risks for their implementation (especially in 2008-2009).

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<sup>18</sup> The positive track record in the deficit ratios net of reform cost is partially counterweighted by a negative track record of upward revisions of the estimated annual pension reform cost (by ca. ½% of GDP).

**Table 10: Assessment of tax projections**

	2007			2008			2009
	CP	COM	OECD <sup>3</sup>	CP	COM <sup>1</sup>	OECD <sup>3</sup>	CP
Change in tax-to-GDP ratio (total taxes)	0.5	0.5	-0.2	-0.5	-0.2	0.0	-1.2
Difference (CP – COM) <i>of which</i> <sup>2</sup> :	0.0		/	-0.3		/	/
- discretionary and elasticity component	0.0		/	-0.5		/	/
- composition component	0.0		/	0.4		/	/
Difference (COM – OECD) <i>of which</i> <sup>2</sup> :	/	0.7		/	0.0		/
- discretionary and elasticity component	/	0.5		/	0.0		/
- composition component	/	0.3		/	0.0		/
p.m.: Elasticity to GDP	1.2	1.2	0.9	0.8	0.9	0.9	0.6
<b>Notes:</b> <sup>1</sup> On a no-policy change basis. <sup>2</sup> The decomposition is explained in Annex 5. <sup>3</sup> Based on OECD ex-ante elasticity relative to GDP.  <b>Source:</b> <i>Commission services' autumn 2006 economic forecasts (COM); Commission services' calculations and OECD (N. Girouard and C. André (2005), "Measuring Cyclically-Adjusted Budget Balances for the OECD Countries", OECD Working Paper No. 434)</i>							

#### 4.4. Assessment of the fiscal stance and budgetary strategy

The table below offers a summary assessment of the country's position relative to the budgetary requirements laid down in the Stability and Growth Pact. In order to highlight the role of the preceding analysis of the risks that are attached to the budgetary targets presented in the programme, this assessment is done in two stages: first, a preliminary assessment on the basis of the targets taken at face value is made (middle column) and, second, the final assessment that also takes into account risks (final column).

**Table 11: Overview of compliance with the Stability and Growth Pact<sup>4</sup>**

	Based on programme <sup>3</sup> (with targets taken at face value)	Assessment (taking into account risks to targets)
a. Consistency with correction of excessive deficit by 2007 deadline	yes	no
b. Safety margin against breaching 3% of GDP deficit limit <sup>1</sup>	not within programme period	not within programme period
c. Achievement of the MTO	not within programme period	not within programme period
d. Adjustment towards MTO in line with the Pact (after the correction of the excessive deficit) <sup>2</sup> ?	in line	should be strengthened
<b>Notes:</b> <sup>1</sup> The risk of breaching the 3% of GDP deficit threshold with normal cyclical fluctuations, i.e. the existence of a safety margin, is assessed by comparing the cyclically-adjusted balance with the above mentioned minimum benchmark (estimated as a deficit of around 1.5% of GDP for Poland). These benchmarks represent estimates and as such need to be interpreted with caution. <sup>2</sup> The Stability and Growth Pact requires Member States to make progress towards their MTO (for countries in the euro area or in ERM II, this has been quantified as an annual improvement in the structural balance of at least 0.5% of GDP as a benchmark). In addition, the structural adjustment should be higher in good times, whereas it may be more limited in bad times. <sup>3</sup> Targets in structural terms as recalculated by Commission services on the basis of the information in the programme.		

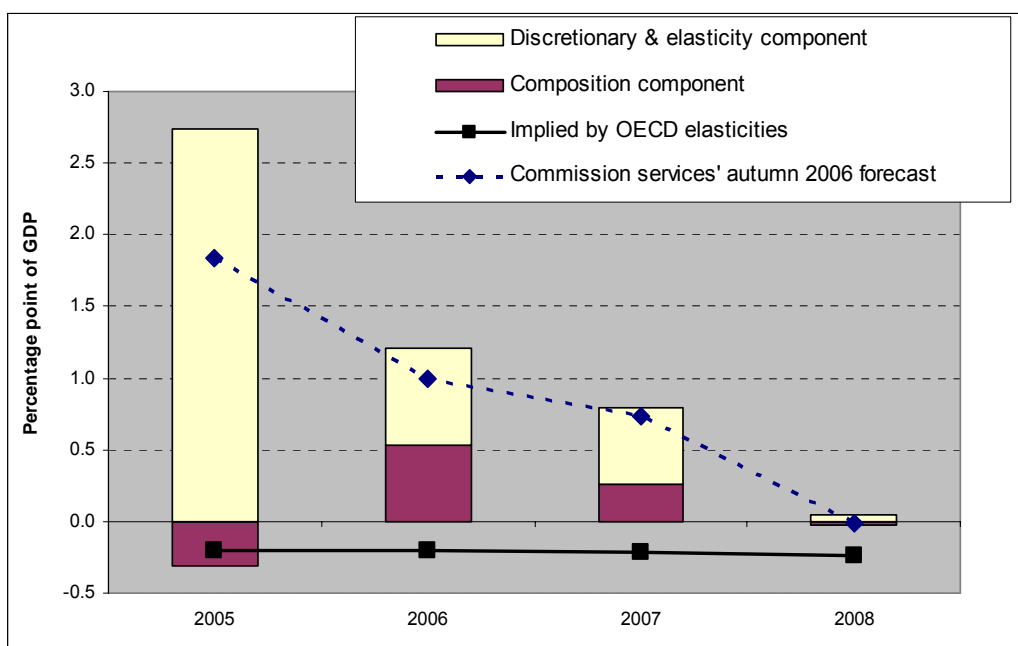
<sup>4</sup>Taking into account the impact of the implementation of the March 2004 Eurostat decision on the classification of funded pension schemes as of spring 2007.

Source:

*Commission services*

Taking into account the risks to the budgetary targets highlighted above, Poland does not satisfy the requirements of the Stability and Growth Pact. The deficit target for 2007, and therefore the correction of the excessive deficit, is uncertain. A safety margin against breaching the reference value is not respected within the programme period as the cyclically-adjusted adjusted balance is worse than the minimum benchmark (estimated as a deficit of around 1½% of GDP for Poland). It is planned that the MTO is achieved only after 2010. While the programme envisages a structural adjustment effort of about 0.5% of GDP per year (after the correction of the excessive deficit), the adjustment towards the MTO should be strengthened by backing it up with concrete measures; furthermore, a strengthening would be appropriate considering the positive cyclical conditions (“good times”, see Section 3.7.2) and, consistent with that, the tax system can be expected to yield more than implied by the OECD ex-ante elasticities.

**Figure 10: Changes in the tax-to-GDP ratio:  
actual/projected changes vs. changes implied by OECD elasticity**



Note:

The dashed line displays the change in the tax ratio in the Commission services' 2006 autumn forecast, for 2008, on a no-policy-change basis. The solid line shows the change in the tax ratio implied by the ex-ante OECD elasticity with respect to GDP. The difference between the two is explained by the bars. The composition component captures the effect of differences in the composition of aggregate demand (more tax rich or more tax poor components). The discretionary and elasticity component captures the effect of discretionary fiscal policy measures as well as variations of the yield of the tax system that may result from factors such as time lags, variations of taxable income that do not necessarily move in line with GDP e.g. capital gains. Both components may not add up to the total difference because of a residual component, which is generally small. The decomposition is explained in detail in Annex 5.

Source:

*Commission services*

## 5. GOVERNMENT DEBT AND LONG-TERM SUSTAINABILITY

Government debt is the result of the financing needs of government over the years. It corresponds primarily to an accumulation of deficits, although the build-up of financial assets and other adjustments may also play a role.<sup>19</sup> The reform of the Stability and Growth Pact has raised attention to the crucial importance of government debt and of sustainability in fiscal surveillance.

This section is in two parts: a first part describes recent developments and the medium-term prospects for government gross debt; it describes the convergence programmes targets, compares them with the Commission services' forecasts and assesses the associated risks. A second part looks into the government debt from a longer-term perspective with the aim of assessing the long-term sustainability of public finances.

### 5.1. Recent debt developments and medium-term prospects

#### 5.1.1. Debt projections in the programme

Consistent with a positive track record of past targets and outcomes in government balances, Poland has also a positive experience with targeted and achieved debt ratios in 2004-2005 (see Figure 11). At the end of 2006, the debt ratio amounted to 42.0% of GDP, virtually unchanged over the last two years.

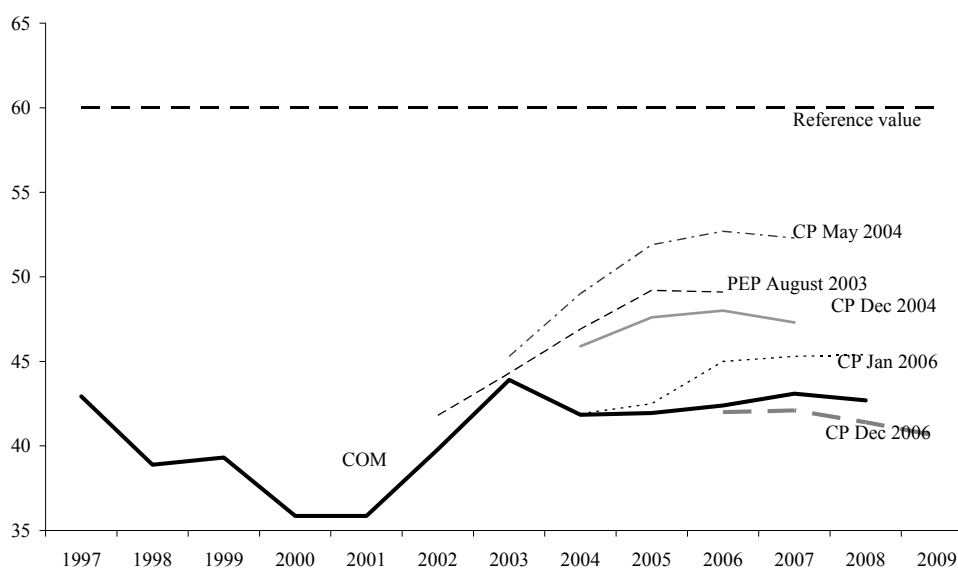
By the end of the period covered by the November 2006 convergence programme, the debt ratio is expected to remain stable and start slowly declining. It is projected that the ratio will reach a maximum of about 42% of GDP (pension reform cost not included) in 2006 and 2007 compared to the target of approximately 45% of GDP in the previous update of the programme.

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<sup>19</sup> On the factors other than the deficit which explain the evolution of the government debt, see "The dynamics of government debt: decomposing the stock-flow adjustment", chapter II.2.2 of *Public Finances in EMU 2005*, European Economy, N°3/2005.



**Figure 11: Debt projections in successive convergence programmes (% of GDP)<sup>1</sup>**



Note:

<sup>1</sup> Excluding the impact of the 2004 Eurostat decision on the classification of funded pension schemes, which needs to be implemented by spring 2007. Once such a decision is fully implemented in Poland, the debt for 2006 will shift upwards by almost 7% of GDP and rising by around 1 percentage point per year.

**Source:** Commission services' autumn 2006 forecast (COM) and successive convergence programmes.

Poland still avails itself of the transition period for the implementation of the Eurostat decision of 2 March 2004 on the classification of funded second-pillar pension schemes. The estimated impact on the debt ratio of the classification of the second-pillar funded scheme outside the general government sector (which has to be implemented by the time of the spring 2007 notification) is expected to increase from almost 7% of GDP in 2006 to more than 9½% in 2009. As a result; including pension reform costs, the debt ratio is expected to stabilise only in 2009, somewhat above 50% of GDP, as it is projected that the impact of the reform on the debt of almost 7% of GDP in 2006 will be rising by ca. 1 p.p. annually.<sup>20</sup>

<sup>20</sup> The positive track record in the debt ratios net of reform cost has been partially counterweighted by a negative track record of upward revisions of the pension reform cost.

**Table 12: Debt dynamics**

(% of GDP)	average 2001-04	2005	2006		2007		2008		2009
			COM	CP	COM	CP	COM	CP	CP
<b>Gross debt ratio<sup>1</sup></b>	<b>41.8</b>	<b>42.0</b>	<b>42.4</b>	<b>42.0</b>	<b>43.1</b>	<b>42.1</b>	<b>42.7</b>	<b>41.4</b>	<b>40.6</b>
Change in the ratio	1.5	0.1	0.4	0.0	0.7	0.1	-0.4	-0.7	-0.8
<i>Contributions<sup>2</sup>:</i>									
Primary balance	1.1	-0.1	-0.2	-0.5	-0.4	-1.0	-0.6	-1.4	-1.7
“Snow-ball” effect	0.7	0.1	-0.1	0.0	-0.2	-0.3	-0.6	-0.5	-0.7
<i>Of which:</i>									
Interest expenditure	2.8	2.6	2.4	2.4	2.4	2.4	2.4	2.4	2.4
<i>Growth effect</i> <i>(real GDP)</i>	-1.1	-1.3	-2.1	-2.1	-1.9	-2.0	-1.9	-2.0	-2.1
<i>Inflation</i> <i>(GDP deflator)</i>	-1.0	-1.2	-0.4	-0.2	-0.8	-0.7	-1.0	-0.9	-1.0
Stock-flow adjustment	-0.3	0.1	0.7	0.5	1.3	1.4	0.8	1.2	1.7
<i>Of which:</i>									
Cash/accruals diff.	0.1	-0.4	n.a.	0.0	n.a.	0.0	n.a.	0.0	0.0
Acc. financial assets	-0.1	0.8	n.a.	0.6	n.a.	1.4	n.a.	1.2	1.6
<i>Privatisation</i>	-0.7	-0.4	n.a.	0.0	n.a.	-0.2	n.a.	-0.2	-0.1
Val. effect & residual	-0.3	-0.3	n.a.	-0.2	n.a.	-0.1	n.a.	-0.1	-0.2
<i>p.m.: Debt ratio excl. second-pillar pension scheme<sup>3</sup></i>	43.4	47.4	49.3	48.9	51.0	50.0	51.6	50.3	50.2
<b>Notes:</b>									
<sup>1</sup> End of period.									
<sup>2</sup> The change in the gross debt ratio can be decomposed as follows:									
$\frac{D_t}{Y_t} - \frac{D_{t-1}}{Y_{t-1}} = \frac{PD_t}{Y_t} + \left( \frac{D_{t-1}}{Y_{t-1}} * i_t - y_t \right) + \frac{SF_t}{Y_t}$									
where $t$ is a time subscript; $D$ , $PD$ , $Y$ and $SF$ are the stock of government debt, the primary deficit, nominal GDP and the stock-flow adjustment respectively, and $i$ and $y$ represent the average cost of debt and nominal GDP growth (in the table, the latter is decomposed into the growth effect, capturing real GDP growth, and the inflation effect, measured by the GDP deflator). The term in parentheses represents the “snow-ball” effect. The stock-flow adjustment includes differences in cash and accrual accounting, accumulation of financial assets and valuation and other residual effects.									
<sup>3</sup> This shows general government gross debt as it will be after the Eurostat decision of 2 March 2004 on the classification of funded pension schemes has been implemented, which needs to be done by the time of the spring 2007 notification.									
<b>Source:</b>									
Convergence programme update (CP); Commission services’ autumn 2006 economic forecasts (COM); Commission services’ calculations									

### 5.1.2. Assessment

The November 2006 update of the convergence programme projects debt ratios for 2007 and 2008 which are around 1% of GDP lower than the Commission services’ autumn 2006 forecast. The difference in the debt ratio projections results from primary balances which are more ambitious than in the Commission services forecasts, as discussed above in section 4.

The programme expects relatively high debt-increasing stock-flow adjustments (in 2007 and 2008, by ¼% of GDP annually on average higher than in the Commission services’ forecast) reaching almost 1½% of GDP on average annually in 2007-2009. These stock-flow adjustments are to be almost entirely shaped by the accumulation of financial assets, in connection with the accumulation of securities other than government paper by the funded pension schemes. Once funded pension schemes are classified in the financial sector, the stock-flow adjustment will be reduced, and the evolution in the debt ratio developments will be more in line with deficit developments. Based on the data submitted in the programme, state guarantees to loans by private and public enterprises is expected to rise from 3.2% of GDP in 2005 to 4.5% in 2009; if these guarantees are

weighted with the average portfolio risk reported in the programme (33% and 28% respectively) the weighted ratio is projected to increase between 2005 and 2009 by 0.2 percentage points to 1¼% of GDP.

In spite of a reduction of the weight of foreign debt in total government debt over the last ten years, debt denominated in foreign currencies amounted in 2005 to around ⅓ of total debt, thus exposing Poland to a non-negligible exchange rate risk. Moreover, there has been a reduction in the residual maturity of debt.

## 5.2. Long-term debt projections and the sustainability of public finances

The issue of long-term sustainability is a multi-faceted one. It involves avoiding imposing an excessive burden on future generations and ensuring the country's capacity to appropriately adjust budgetary policy in the medium and long run.<sup>21</sup>

Debt sustainability is derived from the government's *intertemporal budget constraint*. It imposes that current total liabilities of the government, i.e. the current public debt and the discounted value of future expenditure including the budgetary impact of ageing populations, should be covered by the discounted value of future government revenue. If current policies ensure that the intertemporal budget constraint is fulfilled, current policies are sustainable.

The approach adopted by the Commission services and the Ageing Working Group of the Economic Policy Committee (EPC) is to project the debt, and to calculate the associated sustainability indicators (see box 7), on the basis of two different scenarios. The first scenario assumes that the structural primary balance will remain unchanged from 2006 through 2009, the final year of the convergence programme; it is called the “2006 scenario”. Debt projections in this scenario start in 2007. The second scenario assumes that the macroeconomic and budgetary plans until 2009 provided in the convergence programme will be fully respected. This is the “programme scenario”. Debt and primary balance projections in this scenario start in 2010. Both projections assume zero stock-flow adjustments. In addition to this quantitative analysis, other relevant factors are taken into account which allows to better qualify the assessment with regard to where the main risks are likely to stem from and to reach an overall assessment.

### 5.2.1. Sustainability indicators and long-term debt projections

Table 133 shows the evolution of government spending on pensions, healthcare, long-term care for the elderly, education and unemployment benefits according to the EPC's projections.<sup>22</sup> Non age-related primary expenditure and revenue is assumed to remain constant as a share of GDP.

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<sup>21</sup> For a detailed analysis of long-term sustainability issues, see “The Long Term Sustainability of Public Finances – A report by the Commission services”, European Economy n°4/2006 (hereinafter Sustainability Report).

<sup>22</sup> These assumptions cover labour productivity growth, real GDP growth, participation rates, unemployment rate, demographic developments, government spending in pensions, healthcare, long-term care for the elderly, education and unemployment benefits. See Economic Policy Committee and European Commission (DG ECFIN) (2006), “The impact of ageing on public expenditure: projections for the EU25 Member States on pensions, health-care, long-term care, education and unemployment transfers (2004-2050)”, European Economy, Special Report No 1 (hereinafter Ageing Report).

**Table 133: Long-term age-related expenditure: main projections**

(% of GDP)	2004	2010	2020	2030	2040	2050	changes
<b>Total age-related spending</b>	23.7	20.2	17.9	17.6	17.3	17.0	-6.7
Pensions	13.9	11.3	9.7	9.2	8.6	8.0	-5.9
Healthcare	4.1	4.4	4.8	5.1	5.3	5.5	1.4
Long-term care	0.1	0.1	0.1	0.1	0.2	0.2	0.1
Education	5.0	3.9	3.0	3.0	3.0	3.1	-1.9
Unemployment benefits	0.5	0.4	0.3	0.2	0.2	0.2	-0.4

*Source: Economic Policy Committee and Commission services.*

The projected dynamics in age-related spending in Poland is well below the EU average; falling by 6.7 p.p. of GDP between 2004 and 2050. This is mainly due to the projected decline in pension expenditures falling by almost 6 p.p. of GDP over the projection period due to the pension reform enacted in 1999, featuring a significant reduction in public pensions as a share of GDP. The increase in health-care expenditure is projected to be 1.4 p.p. of GDP, slightly above the EU average. For long-term care spending, the projected increase of 0.1 p.p. of GDP up to 2050 is below the EU average.

Based on the long-term budgetary projections, sustainability indicators can be calculated.

**Table 14: Sustainability indicators and the required primary balance**

	2006 scenario			Programme scenario		
	S1	S2	RPB	S1	S2	RPB
Value	-1.6	-1.4	-0.9	-2.8	-2.6	-0.9
<i>of which:</i>						
Initial budgetary position	1.6	2.0	-	0.5	0.9	-
Debt requirement in 2050	-0.1	-	-	-0.2	-	-
Future changes in budgetary position	-3.1	-3.4	-	3.1	-3.4	-

*Source: Commission services.*

On the basis of the current budgetary position and the projected budgetary changes over the long-term, Poland has no sustainability gap in the baseline scenario (S2 is negative, at -1.4% of GDP). Compared with the results of the Commission's Sustainability Report, the situation concerning the sustainability gaps has even improved, by about 1% of GDP. This is influenced by a lower structural primary deficit, in 2006 (-1.3% of GDP) compared with the structural primary balance in 2005 estimated in spring 2006 (-1.7% of GDP) that was used in the Sustainability Report.<sup>23</sup>

The initial budgetary position constitutes a risk to the sustainability of public finances before considering the long-term budgetary impact of ageing. The budgetary plans in the programme imply a strengthening of the structural balance, of 1.4% of GDP, between 2006 and 2009, with similar developments for the structural primary balance. If achieved, such a consolidation would further reduce risks to long-term sustainability of public finances. The difference between the initial budgetary position in the 2006

<sup>23</sup> Both figures include the revenue-reducing and deficit-increasing impact of classifying funded defined-contribution pension schemes outside the general government sector. Moreover, the projections of the debt ratio and the structural primary balance (programme scenario) start in 2010 in the present assessment, while they started in 2011 in the Sustainability Report. This has a non-negligible impact for Poland, since age-related expenditure as a share of GDP is projected to fall between 2010 and 2011, as a result of relatively high nominal (and real) GDP growth and pensions being indexed below wages. Therefore, the change in age-related spending between 2010 and 2050 used in the current assessment is projected to be -3.2 p.p. of GDP, while between 2011 and 2050, which was used in the Sustainability Report, the decrease was projected to be smaller: -2.6% points of GDP.

scenario and the programme scenario illustrates how the full respect of the convergence programme targets, will contribute to avoid sustainability risks although Poland would still have a structural primary deficit in 2009. The weak initial position would result in a slight increase in the debt/GDP ratio over the medium-term, but the projected future decrease in age-related expenditures as a share of GDP – assuming that the full impact of the pension reform materialises – would compensate for this and eventually stabilise the debt/GDP ratio.

### Box 7 – Sustainability indicators\*

- The **sustainability gap S1** shows the permanent budgetary adjustment (often presented as an increase in the tax burden\*\*) required to reach a debt ratio in 2050 of 60% of GDP.
- The **sustainability gap S2**, shows the permanent budgetary adjustment that guarantees the respect of the intertemporal budget constraint of the government. In order to estimate S2, the revenue and expenditure ratios (age-related and non age-related) after 2050 are assumed to remain constant at the 2050 level.
- The sustainability indicators can be decomposed into the:\*\*\* (i) **initial budgetary position (IBP)**; and, (ii) **long-term change in the budgetary position (LTC)**;
- In addition, the **required primary balance (RPB)** can be derived from the S2 indicator. It measures the average primary balance over the first five years after the programme horizon (i.e. 2010-2014) that results from a permanent budgetary adjustment carried out to comply fully with the S2 indicator.

#### Summarizing the sustainability indicators

	Impact of		
	Initial budgetary position		Long-term changes in the primary balance
<b>S1***=</b>	Gap to the debt-stabilizing primary balance	+	Additional adjustment required to finance the increase in public expenditure <i>up to 2050</i>
<b>S2=</b>	Gap to the debt-stabilizing primary balance	+	Additional adjustment required to finance the increase in public expenditure <i>over an infinite horizon</i>

\* For a complete description of the sustainability indicators, see Annex I of the “The Long Term Sustainability of Public Finances – A report by the Commission services”, European Economy n°4/2006, published in October 2006.

\*\* Although the sustainability gap indicators (S1, S2) are usually defined as differences between revenue ratios, this does not mean that countries are asked to increase taxes to reach sustainability. There are several ways to ensure sustainability and governments typically choose a combination of budget consolidation over the medium term (either through expenditure reduction and/or tax hikes) and the implementation of structural reforms aiming at curbing long-term public spending (e.g. pension reforms).

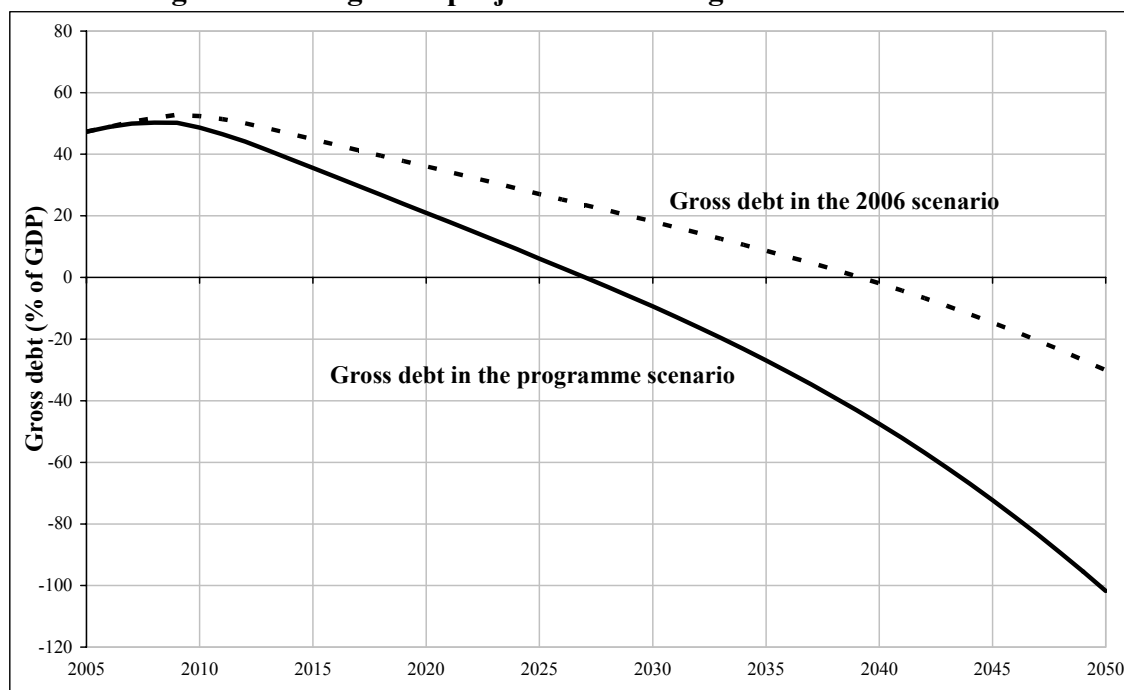
\*\*\* Moreover, in the case of S1, the decomposition also separates the impact of the debt position (60% of GDP in 2050); the debt requirement in 2050 (DR). In particular, if the current debt/GDP ratio is below 60% of GDP debt is allowed to rise and this component reduces the sustainability gap as measured by the S1 indicator, and vice versa.

Another way to look at the prospects for long-term public finance sustainability is to project the debt/GDP ratio over the long-term using the same assumptions as for the calculations of S1 and S2. The long-term projections for government debt under the two scenarios are shown in Figure 12.

The gross debt ratio is currently below the 60% of GDP reference value, estimated in the programme at close to 49% of GDP in 2006. According to the “2006 scenario”, the debt ratio is projected to increase slightly over the coming years and thereafter it would be on a declining path, as a consequence of the projected decrease in age-related expenditure as a share of GDP. In the “programme scenario” the projected decrease in the debt ratio will

start somewhat earlier, reflecting the fiscal consolidation over the programme period to 2009.<sup>24</sup>

**Figure 12: Long-term projections for the government debt ratio**



Note: The government debt ratio is usually compiled in gross terms, that is assets are not netted from government liabilities. Therefore, the gross debt can never be negative. In this chart, the negative values for the debt ratio should be understood as accumulation of financial assets. This issue has no implications on the conclusions drawn from the sustainability assessment.

Note: The starting point for the debt projections in 2006 in the “2006 scenario” and in 2009 in the “programme scenario” is the debt that results from classifying the funded defined-contribution schemes, in line with the Eurostat decision of 2 March 2004, outside the government sector.

*Source: Commission's services*

### 5.2.2. Additional factors

To reach an overall assessment of the sustainability of public finances, other relevant issues are taken into account which in addition allows to better qualify the assessment with regard to where the main risks are likely to stem from.

First, the projections in the programme update do not consider the recent changes in the pension system, adopted by the government,<sup>25</sup> which reverse the pension reform measures for the groups of people working in difficult conditions, e.g. miners. Moreover, the right to early retirement of any person employed in difficult conditions was prolonged until the end of 2007. This implies that pension expenditure in the future could be higher than projected. While the 2006 update of the convergence programme does not provide any information on policy intentions in this area, granting additional exemptions would weaken the reform’s long-term outcome.

<sup>24</sup> It should be recalled, however, that being a mechanical, partial-equilibrium analysis, the long-term debt projections are bound to show highly accentuated profiles. As a consequence, the projected evolution of debt levels should not be seen as a forecast similar to the Commission services’ short-term forecasts, but as an indication of the risks faced by Member States

<sup>25</sup> Legally enforced by the Polish authorities on 27 July 2005 according to the update.

Second, the benefit ratio – that is the average pension divided by the GDP per worker – in Poland is projected to decrease markedly, by around 40%, in the period to 2050, which is the largest projected fall among EU Member States.<sup>26</sup> Employment rates of older workers in Poland are currently considerably below the EU average (40%), but are projected to increase slightly more than on average in the EU, though remaining below the EU average in 2050 (at 49% compared with the EU25 of 59%). A greater increase in the employment rate of older workers than assumed in the projections would mean that the decrease in the benefit ratio would be less marked than projected, as it would foster GDP growth and ensure that workers can accumulate more pension rights<sup>27</sup>.

### 5.2.3. *Assessment*

The long-term budgetary impact of ageing in Poland is the lowest in the EU, with age-related expenditure projected to fall, partly as a result of the considerable expenditure-reducing impact of the reform of the pension system – assuming that the pension reforms are fully implemented.

The initial budgetary position, although slightly improved compared to 2005, still constitutes a risk to sustainable public finances before the long-term budgetary impact of an ageing population is considered and further budgetary consolidation would contribute to contain risks to the sustainability of public finances.

Overall, Poland appears to be at low risk with regard to the sustainability of public finances.

## **6. STRUCTURAL REFORM, THE QUALITY OF PUBLIC FINANCES AND INSTITUTIONAL FEATURES**

The pension reform initiated in 1999 is a major structural reform mentioned in the November 2006 update of the convergence programme. The reform redirects 20% of old-age pension contributions to private pension funds which invest that capital in the financial markets, whereas the remaining 80% is still transferred to the pay-as-you-go system and used for the financing of current pensions. The reform, if applied consistently to the whole working population and for all the following years, should be beneficial for the long-run sustainability of the Polish public finances (see Section 5.2). Therefore recent emerging policy inconsistencies are worrying. Firstly, there is a risk that the number of people classified as “working in difficult conditions” (e.g. coal miners) will be extended and they would be reintegrated into the pay-as-you-go system, based on an ad-hoc and group-specific regulation. Work on the harmonisation of rules for early pensions for people working in difficult conditions with the reformed pension system (the

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<sup>26</sup> If the pensions from the private funded scheme are not considered, the reduction in the benefit ratio is even larger, of 57%.

<sup>27</sup> Recent proposal by the Polish Ministry of Labour if implemented would effectively reverse the pension reform" (see section 6).

programme of “bridge pensions”) seems to be delayed.<sup>28</sup> Secondly, the reform is unfinished as only the contribution side but not yet the benefit side has been regulated.<sup>29</sup> According to recent proposals by the Polish Ministry of Labour,<sup>30</sup> the reform would be reversed to some extent. The Ministry plans that the accumulated funds would be transferred to the pay-as-you-go institution at the moment of retirement and this institution would be responsible for both paying pensions and investing the accumulated funds. There may be expectations that the accumulated age-related private savings could be redistributed, if directly managed by a state institution, negatively affecting the incentives to save in the reformed system (increase evasion in contributions).

There are also a number of smaller structural reforms proposed by the government. As reported in the current update of the convergence programme, the Polish authorities intend to cut contributions to the disability fund by half. In view of a quickly declining but still high unemployment ratio, this may be a reasonable measure. However, such costly<sup>31</sup> deficit-increasing reforms should be proposed and implemented in packages, together with sufficient compensating deficit-decreasing measures with clearly estimated effects, in order to ensure that the continued excessive deficit correction is not impaired.

The privatisation outcomes are disappointing: the 2006 budget planned for privatisation revenues of PLN 5 bn (about ½% of GDP), but the accomplished privatisation was below PLN 0.4 bn by end-September. Both for public finances and the efficiency and competitiveness of the Polish economy, the effective interruption of privatisation has a negative impact. The debt ratio increases faster than it could if there were a more active policy. State-owned enterprises are deprived of an access to modern technologies, managerial knowledge and necessary capital increases. The industries where privatisation lags behind are at risk of losing competitiveness as there is too little competitive pressure resulting in a relatively low productivity growth. Operating in oligopolistic or network industries, they weaken the competitiveness of the whole economy by imposing too high prices on their customers.

The introduction of multi-annual task-oriented budgeting can be expected to increase the efficiency of public expenditure through value-for-money reviews. However, its implementation for the whole central state budget is planned only for 2011 and for the whole public finance sector (Polish definition roughly corresponding to the general government) only from 2012. Opportunities for accelerating the process should be investigated. Besides, the size of the effects of this measure is by definition uncertain, because there is no prior knowledge on the amount of inefficiencies in the sector and exactly this measure is intended to reveal them. The same argument applies to the uncertainty about the size of effects of the major reorganisation and enhanced reporting in the sector planned for 2008-2009.

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<sup>28</sup> In the National Reform Programme implementation report, there is no information provided on the implementation progress in the “bridge pensions” since September 2005. The reform should be finished by end-2007.

<sup>29</sup> First pension payments in the new system are planned for 2009.

<sup>30</sup> <http://www.mps.gov.pl/bip/download/OFE.pdf>

<sup>31</sup> According to the current estimates (not presented in the programme), the total cost of this measure may reach about 1.3% of GDP in 2008-2009.



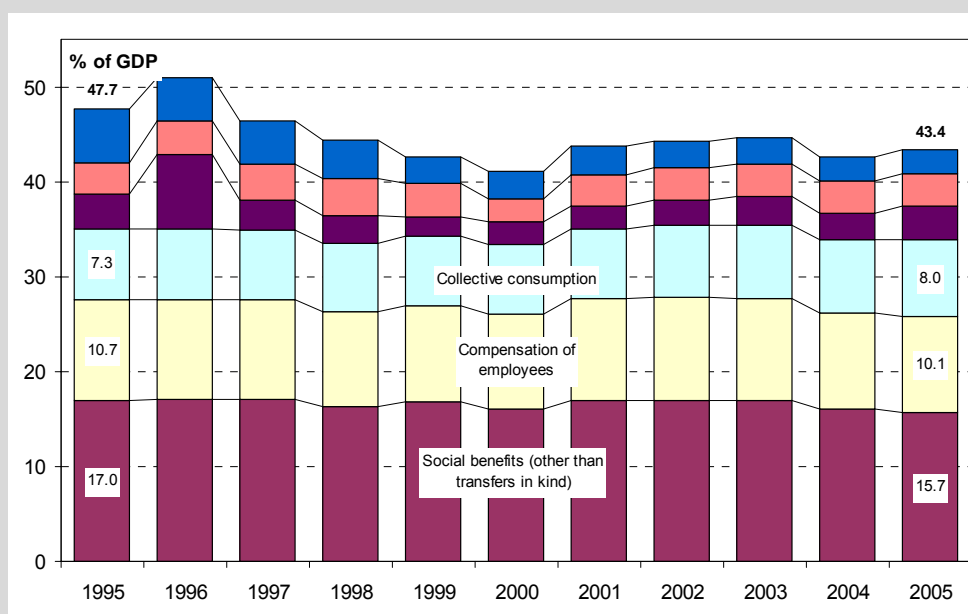
The nominal deficit anchor of PLN 30 bn (2.9% of GDP in 2006) for the central state budget, was presented in the January 2006 convergence programme for the period 2006-2009. The anchor is a move in the right direction but it has a number of shortcomings. It has not been implemented as a law which reduces its credibility. It covers the state budget only and thus allows for shifting deficits to other parts of the general government sector. It is also not very ambitious: at the current level of the nominal anchor and a nominal GDP growth outlook of around 6-7%, it leads to a reduction of the deficit ratio by merely 0.2% of GDP per year. In addition, the anchor does not target the causes of high deficits in Poland, i.e. too high level of public expenditure (especially social transfers, see Box 8). Consequently, implementing some additional fiscal rules aimed at controlling the increase in government expenditure would be beneficial.

Finally, the list of other measures corresponds to those presented in the national reform programme: implementation of the “basket” of guaranteed medical services financed by the state healthcare fund, harmonisation of the disability benefit system with the pension system, introduction of more rational rules for contributions and benefits in the farmers’ social fund, harmonisation of pensions of men and women.

### Box 8: The level and composition of government expenditure in Poland since 1995

Despite fluctuations in other components of the general government expenditure in Poland, the ratio of social transfers to GDP was quite stable and high at 16-17% in the last 10 years.

#### The evolution of government expenditure (economic classification, % of GDP)

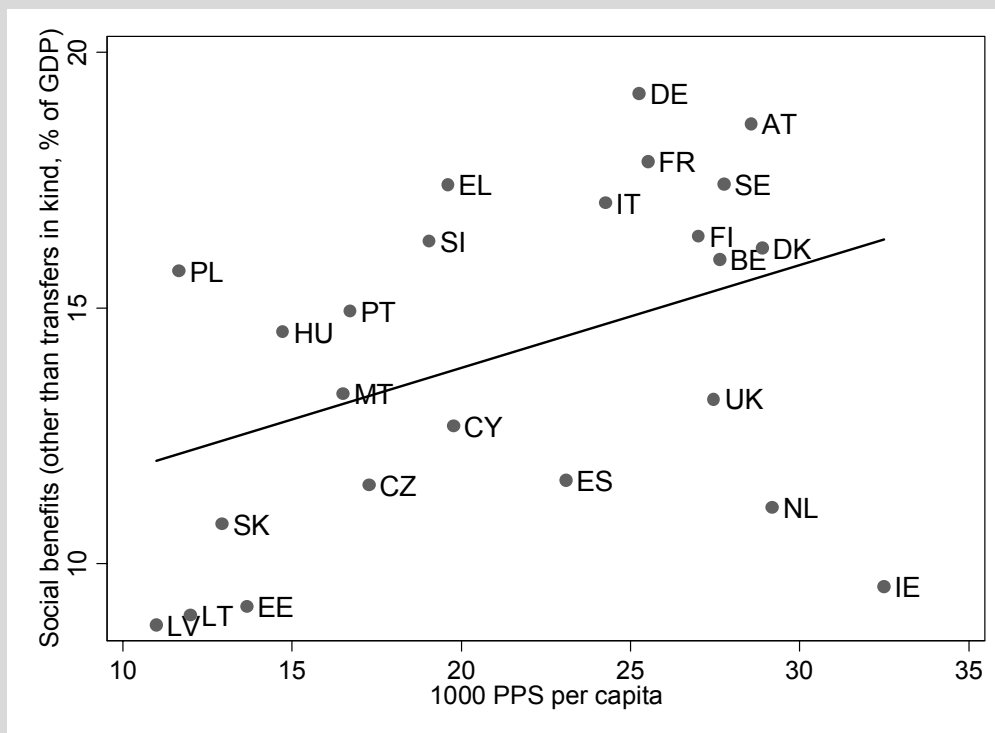


*Note: The three small components from the top are respectively: Interest, Gross fixed capital formation, Other (subsidies and other current and capital expenditure). Numbers at the top of the columns indicate total expenditure.*

*Source: Commission services*

Social expenditure in Poland also appears to be high compared to other EU member states if the level of economic development is considered.

### Social expenditure in Poland and in other EU countries in 2005



*Source: Commission services*

Besides causing imbalances in public finances and crowding out other public expenditure (such as investment, which is politically easier to cut), excessive social transfers can contribute to high unemployment through distortion of job-seeking and re-training incentives.<sup>1</sup> The Polish government appears to realise that excessive social transfers create problems. According to the November 2006 update of the convergence programme, spending on social protection (according to the international classification of the functions of government, COFOG) will decrease from 18% of GDP in 2004 to less than 15% of GDP in 2009. However, more precise estimation of the effects of specific measures which would contribute to achieving that general goal has not been presented.

<sup>1</sup> "Country Study: Growth and Competitiveness in the Polish Economy: The Road to Real Convergence", *European Economy, Occasional Papers*, No. 27

## 7. CONSISTENCY WITH THE NATIONAL REFORM PROGRAMME AND WITH THE BROAD ECONOMIC POLICY GUIDELINES

The targets and measures included in the convergence programme update are broadly consistent with the National Reform Programme (NRP) and the progress recorded in the Implementation Report of the National Reform Programme (IR-NRP) submitted in October 2006 in the context of the renewed Lisbon strategy for growth and jobs. The November 2006 update of the convergence programme contains a qualitative assessment of the impact of the measures from the National Reform Programme within the medium term fiscal strategy and information on the direct budgetary costs associated with the some reforms envisaged in the NRP.<sup>32</sup> The NRP and convergence programme update are

<sup>32</sup> See footnote 17.

consistent in the sense that the convergence programme specifies broadly the measures outlined in the NRP. The programme's budgetary projections take into account some of the public finance implications of the IR-NRP.

**Box 9: The Commission assessment of the implementation report of the National Reform Programme**

The implementation report of the National Reform Programme of Poland, provided in the context of the renewed Lisbon strategy for growth and jobs, was submitted on 31 October 2006. The Commission's assessment of this report, which was adopted on 12 December 2006 as part of its Annual Progress Report, can be summarised as follows.

Poland is making limited progress in the implementation of its National Reform Programme, which as key challenges identifies: retaining the high pace of economic growth and stimulating the creation of new jobs while respecting the principles of sustainable development. There are signs that Poland is beginning to move ahead strongly in the micro-economic area, even though implementation of many measures is still in the early stages. Implementation of the macro-economic and employment reforms is so far insufficient.

Among the most promising reforms being undertaken by Poland are simplifications to the tax system, the introduction of systematic impact assessments for legislation and steps to increase SME's access to finance.

The policy areas in the Polish National Reform Programme where weaknesses need to be tackled with the highest priority are: fiscal consolidation; improving competition in network industries and financial sectors; increasing the quantity and quality of R&D; making active labour market policies more extensive and more effective; and improving human capital and incentives to work. Against this background Poland is recommended to:

- pursue its action to step up fiscal consolidation and supplement the nominal state budget deficit "anchor" (deficit ceiling) with an expenditure rule, in order to contain overall expenditure growth;
- improve competition in network industries and in the financial sectors, including through a review of the role of regulators;
- in order to boost R&D and innovation, pursue the reform of the public research sector and introduce policies to better attract and maximise the benefits of medium and high-tech foreign direct investment;
- complete the reform of public employment services in order to increase the level and efficiency of active labour market policy to cover a larger share of unemployed, especially older persons and youth;
- lower the tax burden on labour and review benefit systems in order to improve work incentives, while developing policies to increase adult participation in lifelong learning and to modernise education and training systems in view of labour market needs.

In addition, it will be important for Poland over the period of the National Reform Programme to focus on: upgrading transport infrastructure; improving environmental protection; further reducing and redirecting state aids; the full liberalization of energy markets; speeding-up the business registration process; and ensuring that cohesion policy instruments underpin the structural measures highlighted in the Implementation Report with a view to contributing to boosting growth, competitiveness, employment and social cohesion. A firm and realistic target for overall investment in R&D by 2010 should be set.

The table below provides an overview of whether the strategy and policy measures in the programme are consistent with the broad economic policy guidelines in the area of public

finances, which are included in the integrated guidelines for the period 2005-2008. The assessment of guideline 1 corresponds to the evaluation in Section 4.4 above, whereas that of the pace of debt reduction in guideline 2 (relevant for high-debt countries only) is covered in Section 5.1.2 above. Information on the different elements covered by the remaining guidelines in the table can be found in Sections 4 and 6.

Overall, the budgetary strategy in the convergence programme is partly consistent with the broad economic policy guidelines.

**Table 14: Consistency with the broad economic policy guidelines**

Broad economic policy guidelines	Yes	Steps in right direction	No	Not applicable
<b>1. To secure economic stability</b>				
– Member States should respect their medium-term budgetary objectives. As long as this objective has not yet been achieved, they should take all the necessary corrective measures to achieve it <sup>1</sup> .		X		
– Member States should avoid pro-cyclical fiscal policies <sup>2</sup> .				X
– Member States in excessive deficit should take effective action in order to ensure a prompt correction of excessive deficits <sup>3</sup> .			X	
– Member States posting current account deficits that risk being unsustainable should work towards (...), where appropriate, contributing to their correction via fiscal policies.				X
<b>2. To safeguard economic and fiscal sustainability</b>				
In view of the projected costs of ageing populations,				
– Member States should undertake a satisfactory pace of government debt reduction to strengthen public finances.				X
– Member States should reform and re-enforce pension, social insurance and health care systems to ensure that they are financially viable, socially adequate and accessible (...)	X			
<b>3. To promote a growth- and employment-orientated and efficient allocation of resources</b>				
Member States should, without prejudice to guidelines on economic stability and sustainability, re-direct the composition of public expenditure towards growth-enhancing categories in line with the Lisbon strategy, adapt tax structures to strengthen growth potential, ensure that mechanisms are in place to assess the relationship between public spending and the achievement of policy objectives and ensure the overall coherence of reform packages.		X		
<p><u>Notes:</u></p> <p><sup>1</sup>As further specified in the Stability and Growth Pact and the code of conduct, i.e. with an annual 0.5% of GDP minimum adjustment in structural terms for euro area and ERM II Member States.</p> <p><sup>2</sup>As further specified in the Stability and Growth Pact and the code of conduct, i.e. Member States that have already achieved the medium-term objective should avoid pro-cyclical fiscal policies in “good times”.</p> <p><sup>3</sup>As further specified in the country-specific Council recommendations and decisions under the excessive deficit procedure.</p> <p><u>Source:</u> Commission services</p>				

\* \* \*

## Annex 1: Glossary

**Automatic stabilisers** Various features of the tax and spending regime which tend to have a dampening effect on economic fluctuations without requiring a discretionary intervention of the fiscal authorities. As a result, the budget balance in percent of GDP tends to improve in years of high growth and deteriorate during economic slowdowns. See also *cyclically-adjusted balance*, *structural balance* and *minimum benchmark*.

**Broad economic policy guidelines (BEPGs)** Guidelines for the economic and budgetary policies of the Member States. Together with the Employment Guidelines, they form the Integrated Guidelines, prepared by the Commission and adopted by the Council of Ministers responsible for Economic and Financial Affairs (ECOFIN). See also *Lisbon strategy*.

**Budget balance** The balance between total public revenue and expenditure (according to *ESA95*); with a positive balance indicating a surplus (also known as *government net lending*) and a negative balance indicating a deficit (also known as *government net borrowing*). For the monitoring of Member States' budgetary positions, the EU uses *general government* aggregates. See also *cyclically-adjusted balance*, *primary balance*, *structural balance* and *reference values*.

**Budget constraint** A basic condition applying to the public finances, according to which total public expenditure in any one year must be financed by taxation, borrowing or changes in the monetary base; the latter is prohibited in the EU. See also *stock-flow adjustment* and *long-term sustainability*.

**Budgetary sensitivity** The variation in the *budget balance* brought about by a change in the *output gap*. In the EU, it is estimated to be 0.5 on average, i.e. for any percentage point of GDP below or above potential, the budget-balance-to-GDP ratio deteriorates or improves by half a percentage point. The size of the budgetary sensitivity essentially reflects (i) the revenue and expenditure elasticities of the budget and (ii) the size of discretionary government expenditure. See also *cyclically-adjusted balance*, *structural balance* and *tax elasticity*.

**Code of conduct** Policy document adopted by the Economic and Financial Committee (an advisory committee gathering high-level officials from national governments, national central banks, the European Central Bank and the European Commission which prepares the meetings of the Council of Ministers responsible for Economic and Financial Affairs (ECOFIN)) and endorsed by the ECOFIN Council in October 2005, containing specifications on the implementation of the *Stability and Growth Pact* and guidelines on the format and content of *stability programmes* and *convergence programmes*.

**Contingent liabilities** A possible government obligation to pay, the existence of which will be confirmed by the occurrence of one or more uncertain events in the future not wholly under the control of the government. For instance, government guarantees on debt issued by private or public companies are contingent liabilities since the government obligation to pay depends on the non-ability of the original debtor to honour its obligations. See also *implicit liabilities*.

**Convergence programme** Medium-term budgetary strategy presented by each Member State that has not yet adopted the euro; updated annually, according to the provisions of the *Stability and Growth Pact*. See also *stability programme*, *code of conduct* and *medium-term objective*.

**Cyclically-adjusted balance** The *budget balance* adjusted for its cyclical component (which captures the part of public revenue and expenditure that is linked to the *output gap*), i.e. the budget balance that would prevail if GDP were at its potential level. See also *structural balance*, *budgetary sensitivity* and *output gap*.

**Cyclically-adjusted primary balance** The *cyclically-adjusted balance* net of interest expenditure on *general government* debt. See also *interest burden*.

**Debt dynamics** The evolution of *government debt* as a ratio to GDP; it depends on the primary deficit, the debt-increasing impact of interest payments, the dampening effect of GDP growth on the ratio and the *stock-flow adjustment*.

**EDP notification** See *notification of deficit and debt*.

**ERM II** Exchange rate mechanism linking some currencies of non-euro Member States to the euro, which is the centre of the mechanism. For the currency of each Member State participating in the mechanism, a central rate against the euro and a standard fluctuation band of  $\pm 15\%$  are defined.

**ESA95** European accounting standards for the compilation and reporting of macroeconomic (including budgetary) data by the EU Member States.

**Excessive deficit procedure (EDP)** A procedure, laid down in the EC Treaty, according to which the Commission and the Council monitor the development of national *budget balances* and *public debt* in relation to the *reference values*, in order to assess the existence (or risk) of an excessive deficit in each Member State and to ensure its correction. Its application has been further clarified in the *Stability and Growth Pact*.

**Fiscal stance** A measure of the thrust of discretionary fiscal policy such as, in this document, the change in the *structural balance* (or in the *structural primary balance*) relative to the preceding year. When the change is positive (negative) the fiscal stance is said to be restrictive (expansionary).

**Funded pension scheme** Pension system in which current pension expenditures are financed by running down assets accumulated over the years on the basis of contributions by the scheme beneficiaries. According to *ESA95*, defined-contribution funded pension schemes are not considered as part of the *general government* sector. See also *pay-as-you-go pension scheme*.

**Government debt** See *public debt*.

**General government** The focus of EU budgetary surveillance under the *Stability and Growth Pact* and the *excessive deficit procedure* is on general government aggregates, with the general government sector covering national, regional and local government, as well as social security. In principle, public enterprises are excluded.

**Government net lending/borrowing** See *budget balance*.

**Implicit liabilities** Future government expenditure which has not yet been funded, even when future expenditure is not backed by law or contractual obligations, but is simply grounded in strong expectations of the public. To be meaningful for economic analysis, implicit liabilities should be assessed net of future revenue assuming that the government will keep collecting taxes (and other non-tax revenue) at rates comparable to current levels. See also *contingent liabilities*.

**Interest burden** *General government* interest expenditure on *government debt* as a share of GDP.

**Intertemporal budget constraint** A basic condition imposing that current total liabilities of the government, i.e. the current public debt and the discounted value of future expenditure including the budgetary impact of ageing populations, be covered by the discounted value of future government revenue.

**Lisbon strategy** Partnership between the EU and Member States for growth and more and better jobs. Originally approved in 2000, the Lisbon Strategy was revamped in 2005. Based on the Integrated Guidelines (merger of the *broad economic policy guidelines* and the employment guidelines, dealing with macro-economic, micro-economic and employment issues) for the period 2005-2008, Member States drew up 3-year national reform programmes in autumn 2005. They reported on the implementation of the national reform programmes for the first time in autumn 2006. The Commission analyses and summarises these reports in an EU Annual Progress Report each year, in time for the Spring European Council.

**Long-term sustainability** A combination of *budget balance* and *public debt* that ensures that the latter does not grow without bound. While conceptually intuitive, an agreed operational definition of sustainability has proven difficult to achieve.

**Maturity structure of public debt** The profile of *public debt* in terms of when it is due to be paid back. Interest rate changes affect the *budget balance* directly to the extent that the *general government* sector has debt with a relatively short maturity structure. Long maturities reduce the sensitivity of the *budget balance* to changes in the prevailing interest rate. See also *interest burden*.

**Medium-term objective (MTO)** According to the *Stability and Growth Pact*, *stability programmes* and *convergence programmes* must present a medium-term objective for the budgetary position. It is country-specific to take into account the diversity of economic and budgetary positions and developments as well as of fiscal risk to the sustainability of public finances, and is defined in structural terms (see *structural balance*).

**Minimum benchmark** Estimated budgetary position (in *cyclically-adjusted* terms) that provides a “safety margin” that is enough for the *automatic stabilisers* to operate freely during normal economic slowdowns without breaching the 3% of GDP deficit *reference value*. The minimum benchmarks are estimated by the European Commission. They do not cater for other risks such as unexpected budgetary developments and interest rate shocks.

**National reform programme (NRP)** See *Lisbon strategy*.

**Notification of deficit and debt (EDP notification)** Twice a year (by 1 April and 1 October), EU Member States have to notify their *general government* deficit and debt figures (and a number of associated data) to the Commission, the quality of which is then checked by Eurostat, the Commission department in charge of statistics. See also *budget balance* and *public debt*.

**One-off and temporary measures** Government transactions having a transitory budgetary effect that does not lead to a sustained change in the intertemporal budgetary position. See also *structural balance*.

**Output gap** The difference between actual GDP and potential GDP in any given year, usually expressed as a percent of potential GDP. Potential GDP is an unobserved variable and needs to be estimated from actual data. It is the level of real GDP in a given year that is consistent with a stable rate of inflation. If actual output rises above its potential level, then constraints on capacity begin to bind and inflationary pressures build; if output falls below potential, then resources are lying idle and inflationary pressures abate. See also *production function method*.

**Pay-as-you-go pension scheme (PAYG)** Pension system in which current pension expenditures are financed by the contributions of current employees. Also known as *unfunded pension scheme*. See also *funded pension scheme*.

**Primary balance** The *budget balance* net of interest expenditure on *general government* debt. See also *interest burden*.

**Pro-cyclical fiscal policy** A *fiscal stance* which amplifies the economic cycle by lowering the *structural balance* when the *output gap* is positive or improving, or by increasing the *structural balance* when the *output gap* is negative or widening, as opposed to a counter-cyclical fiscal policy stance. A neutral fiscal policy keeps the *structural balance* unchanged over the economic cycle by letting the *automatic stabilisers* work.

**Production function method** A method to estimate potential GDP typically based on a Cobb-Douglas production function. Potential GDP is estimated as the level of GDP consistent with a full utilisation of capital, an unemployment rate that does not accelerate inflation and factor productivity at its trend level. See also *output gap*, *cyclically-adjusted balance*, *budgetary sensitivity*.

**Public debt (or government debt)** Consolidated gross debt for the *general government* sector. It includes the total nominal value of all debt owed by government units, except that part of the debt which is owed to government units in the same Member State. It is a gross debt measure meaning that government financial assets on other sectors are not netted out. See also *debt dynamics* and *reference values*.

**Public investment** The component of total public expenditure which consists in the acquisition of durable assets and through which governments increase and improve the stock of capital employed in the production of the goods and services they provide. Also known as government gross fixed capital formation (GFCF).

**Public-private partnerships (PPP)** Agreements between government and corporations according to which the latter build and operate public-use infrastructure (roads, tunnels, bridges, but also hospitals, prisons, concert halls, etc.) which were traditionally directly controlled by government. In exploiting the infrastructure, the corporation receives prices paid by final users, rentals or fees from the government or both. Infrastructure built under PPPs is considered as either *public investment* or corporate investment depending on a number of specific criteria.

**Quality of public finances** A multi-dimensional concept which refers to the contribution that public finances make to the efficient allocation of resources in the economy and to achieving the government's strategic objectives (sustainable growth, macroeconomic stability, competitiveness, social cohesion etc.). It concerns notably the overall level of expenditure and taxation, their composition, the budgeting and control mechanisms and the institutional arrangements for deciding on public finance issues.

**Reference values for public deficit and debt** Respectively, a 3 percent *general government* deficit-to-GDP ratio and a 60 percent *general government* debt-to-GDP ratio. See also *excessive deficit procedure*, *government debt* and *budget balance*.

**Sensitivity analysis** An econometric or statistical simulation designed to test the robustness of an estimated economic relationship or projection to changes in the underlying assumptions.

**'Snow-ball' effect** The self-reinforcing effect of *public debt* accumulation or decumulation arising from a positive or negative differential between the implicit interest rate on public debt and the GDP growth rate. See also *debt dynamics*.

**Stability and Growth Pact (SGP)** Approved in 1997 and reformed in 2005, the SGP clarifies the provisions on budgetary surveillance in the EC Treaty. The "preventive" arm of the SGP obliges Member States to submit annual *stability programmes* or *convergence programmes*, while the "corrective" arm of the SGP clarifies and speeds up the *excessive deficit procedure*.

**Stability programme** Medium-term budgetary strategy presented by each Member State that has already adopted the euro; updated annually, according to the provisions of the *Stability and Growth Pact*. See also *convergence programme*, *code of conduct* and *medium-term objective*.

**Stock-flow adjustment (SFA)** The stock-flow adjustment (also known as the debt-deficit adjustment) ensures consistency between *government net borrowing*, which is a flow variable, and the variation in *government debt*, which is a stock variable. It includes differences between cash and accrual accounting, accumulation of financial assets, changes in the value of debt denominated in foreign currency and remaining statistical adjustments. See also *debt dynamics*.

**Structural balance** The *budget balance* in *cyclically-adjusted* terms and excluding *one-off and temporary measures*. See also *fiscal stance*.

**Structural primary balance** The *structural balance* net of interest expenditure on *general government* debt. See also *interest burden*.

**Tax elasticity** A parameter measuring the relative change in tax revenues with respect to a relative change in GDP. The tax elasticity is an input to the *budgetary sensitivity*.

## Annex 2: Summary tables from the programme update

The tables below present the information provided in the programme in the format prescribed by the code of conduct (Annex 2 thereof).

**Table 1a. Macroeconomic prospects**

	ESA Code	2005	2005	2006	2007	2008	2009
		Level	rate of change	rate of change	rate of change	rate of change	rate of change
<b>1. Real GDP</b>	B1*g	864.7	3.5	5.4	5.1	5.1	5.6
<b>2. Nominal GDP</b>	B1*g	980.7	6.2	6.0	6.9	7.4	8.1

### Components of real GDP

<b>3. Private consumption expenditure</b>	P.3	544.3	1.9	4.8	4.0	4.6	5.6
<b>4. Government consumption expenditure</b>	P.3	154.7	5.3	1.9	3.4	3.0	1.5
<b>5. Gross fixed capital formation</b>	P.51	169.2	6.5	12.0	12.0	12.0	11.0
<b>6. Changes in inventories and net acquisition of valuables (% of GDP)</b>	P.52 + P.53	9.2	1.1	0.8	0.9	0.9	0.8
<b>7. Exports of goods and services</b>	P.6	306.7	8.0	16.1	8.1	7.2	6.9
<b>8. Imports of goods and services</b>	P.7	319.8	4.7	15.4	9.6	9.0	8.1

### Contributions to real GDP growth

<b>9. Final domestic demand</b>		-	2.4	5.5	5.8	6.0	6.3
<b>10. Changes in inventories and net acquisition of valuables</b>	P.52 + P.53	-	-0.9	-0.3	0.2	0.0	0.0
<b>11. External balance of goods and services</b>	B.11	-	1.0	0.0	-0.7	-0.9	-0.7

**Table 1b. Price developments**

	ESA Code	2005	2005	2006	2007	2008	2009
		Level	rate of change	rate of change	rate of change	rate of change	rate of change
<b>1. GDP deflator</b>		-	2.6	0.5	1.7	2.2	2.4
2. Private consumption deflator		-	2.2	1.2	2.2	2.6	2.4
<b>3. HICP<sup>1</sup></b>		-	2.2	1.4	2.1	2.5	2.5
4. Public consumption deflator		-	3.8	1.1	2.1	2.5	2.5
5. Investment deflator		-	0.3	1.5	2.5	2.5	2.5
<b>6. Export price deflator (goods and services)</b>		-	-2.6	-0.5	1.0	1.5	1.5
<b>7. Import price deflator (goods and services)</b>		-	-3.7	1.3	2.0	2.0	1.5

<sup>1</sup> Optional for stability programmes.

**Table 1c. Labour market developments**

	ESA Code	2005	2005	2006	2007	2008	2009
		Level	rate of change	rate of change	rate of change	rate of change	rate of change
<b>1. Employment, persons<sup>1</sup></b>		14116	2.3	3.9	1.4	1.8	2.0
2. Employment, hours worked <sup>2</sup>		-	-	-	-	-	-
<b>3. Unemployment rate (%)<sup>3</sup></b>		17.7	17.7	14.1	12.3	10.5	8.8
<b>4. Labour productivity, persons<sup>4</sup></b>		69.5	1.1	1.5	3.6	3.2	3.5
5. Labour productivity, hours worked <sup>5</sup>		-	-	-	-	-	-
<b>6. Compensation of employees</b>	D.1	364.3	5.9	7.1	6.9	7.7	7.6

<sup>1</sup> Occupied population, domestic concept national accounts definition.

<sup>2</sup> National accounts definition.

<sup>3</sup> Harmonised definition, Eurostat; levels.

<sup>4</sup> Real GDP per person employed.

<sup>5</sup> Real GDP per hour worked.



**Table 1d. Sectoral balances**

% of GDP	ESA Code	2005	2006	2007	2008	2009
<b>1. Net lending/borrowing vis-à-vis rest of the world</b>	B.9	1.4	1.6	1.8	2.2	2.7
<i>of which:</i>						
- Balance on goods and services		0.3	0.5	1.7	2.7	3.2
- Balance of primary incomes and transfers		1.5	1.4	0.9	0.6	0.5
- Capital account		-0.3	-0.3	-0.7	-1.1	-1.0
2. Net lending/borrowing of the private sector	B.9	1.1	0.3	-0.4	-1.2	-2.1
3. Net lending/borrowing of general government	EDP B.9	-2.5	-1.9	-1.4	-1.0	-0.6
4. Statistical discrepancy		-	-	-	-	-

**Table 2. General government budgetary prospects**

	ESA code	2005	2005	2006	2007	2008	2009
		Level	% of GDP	% of GDP	% of GDP	% of GDP	% of GDP
<b>Net lending (EDP B.9) by sub-sector</b>							
<b>1. General government</b>	S.13	-24	-2.5	-1.9	-1.4	-1.0	-0.6
<b>2. Central government</b>	S.1311	-43	-4.4	-4.4	-4.3	-3.9	-3.5
<b>3. State government</b>	S.1312	-	-	-	-	-	-
<b>4. Local government</b>	S.1313	-2.0	-0.2	0.2	0.3	0.2	0.1
<b>5. Social security funds</b>	S.1314	21	2.1	2.3	2.5	2.7	2.8
<b>General government (S13)</b>							
<b>6. Total revenue</b>	TR	40.1	40.9	41.8	42.4	41.6	40.0
<b>7. Total expenditure</b>	TE <sup>1</sup>	425	43.3	43.7	43.8	42.6	40.6
<b>8. Net lending/borrowing</b>	EDP B.9	-24	-2.5	-1.9	-1.4	-1.0	-0.6
<b>9. Interest expenditure (incl. FISIM)</b>	EDP D.41 incl. FISIM	25	2.6	2.4	2.4	2.4	2.4
<b>p.m.: 9a. FISIM</b>		0	0.0	0.0	0.0	0.0	0.0
<b>10. Primary balance</b>	<sup>2</sup>	1	0.1	0.5	1.0	1.4	1.7
<b>Selected components of revenue</b>							
<b>11. Total taxes (11=11a+11b+11c)</b>		202	20.6	22.0	22.5	22.9	22.6
<b>11a. Taxes on production and imports</b>	D.2	134	13.6	13.4	13.7	14.1	14.3
<b>11b. Current taxes on income, wealth, etc</b>	D.5	68	7.0	8.6	8.8	8.8	8.3
<b>11c. Capital taxes</b>	D.91	0	0.0	0.0	0.0	0.0	0.0
<b>12. Social contributions</b>	D.61	134	13.7	13.4	13.4	12.5	11.7
<b>13. Property income</b>	D.4	19	1.9	1.6	1.8	1.8	1.7
<b>14. Other (14=15-(11+12+13))</b>		48	4.7	4.8	4.7	4.4	4.0
<b>15=6. Total revenue</b>	TR	401	40.9	41.8	42.4	41.6	40.0
<b>p.m.: Tax burden (D.2+D.5+D.61+D.91-D.995)<sup>3</sup></b>		333	33.9	35.9	36.3	35.9	34.6
<b>Selected components of expenditure</b>							
<b>16. Collective consumption</b>	P.32	78	8.0	7.8	7.8	7.5	7.0
<b>17. Total social transfers</b>	D.62+D.63	255	26.0	25.3	24.8	24.1	23.0
17a. Social transfers in kind	P.31=D.63	101	10.3	10.0	10.0	9.6	9.1
17b. Social transfers other than in kind	D.62	154	15.7	15.3	14.8	14.5	13.9
<b>18=9. Interest expenditure (incl. FISIM)</b>	EDP D.41 incl. FISIM	25	2.6	2.4	2.4	2.4	2.4
<b>19. Subsidies</b>	D.3	6	0.6	0.9	0.9	0.9	0.9
<b>20. Gross fixed capital formation</b>	P.51	33	3.4	3.8	4.6	4.3	4.2
<b>21. Other (21=22-(16+17+18+19+20))</b>		28	2.7	3.5	3.3	3.4	3.1
<b>22=7. Total expenditure</b>	TE <sup>1</sup>	425	43.3	43.7	43.8	42.6	40.6
<b>p.m.: Compensation of employees</b>	D.1	99	10.1	10.3	10.1	9.5	9.0

<sup>1</sup>Adjusted for the net flow of swap-related flows, so that TR-TE=EDP B.9.

<sup>2</sup>The primary balance is calculated as (EDP B.9, item 8) plus (EDP D.41 + FISIM recorded as intermediate consumption, item 9).

<sup>3</sup>Including those collected by the EU and including an adjustment for uncollected taxes and social contributions (D.995), if appropriate.

**Table 3. General government expenditure by function**

% of GDP	COFOG Code	2004	2009
1. General public services	1	5.6	6
2. Defence	2	1.1	1.3
3. Public order and safety	3	1.6	1.9
4. Economic affairs	4	3.1	3.7
5. Environmental protection	5	0.6	0.7
6. Housing and community amenities	6	1.4	1.1
7. Health	7	4.3	4.3
8. Recreation, culture and religion	8	0.9	0.9
9. Education	9	6	6
10. Social protection	10	18	14.7
11. Total expenditure (=item 7=26 in Table 2)	TE <sup>1</sup>	42.6	40.6

<sup>1</sup>Adjusted for the net flow of swap-related flows, so that TR-TE=EDP B.9.

**Table 4. General government debt developments**

% of GDP	2005	2006	2007	2008	2009	
<b>1. Gross debt<sup>1</sup></b>	41.9	42.0	42.1	41.4	40.6	
<b>2. Change in gross debt ratio</b>	0.1	0.1	0.1	-0.7	-0.8	
<b>3. Primary balance<sup>2</sup></b>	0.1	0.5	1.0	1.4	1.7	
<b>4. Interest expenditure (incl. FISIM)<sup>3</sup></b>	2.6	2.4	2.4	2.4	2.4	
<b>5. Stock-flow adjustment</b>	0.1	0.6	1.4	1.2	1.6	
<i>of which:</i>						
- Differences between cash and accruals <sup>4</sup>						
- Net accumulation of financial assets <sup>5</sup>						
<i>of which:</i>						
- privatisation proceeds	-0.3	0.0	-0.2	-0.2	-0.1	
- Valuation effects and other <sup>6</sup>	-0.3	-0.2	-0.1	-0.1	-0.2	
<b>p.m.: implicit interest rate on debt<sup>7</sup></b>	6.5	6.0	6.1	6.2	6.2	
<b>Other relevant variables</b>						
6. Liquid financial assets <sup>8</sup>	47.3	48.9	50	50.3	50.2	
7. Net financial debt (7=1-6)	-	-	-	-	-	

<sup>1</sup>As defined in Regulation 3605/93 (not an ESA concept).

<sup>2</sup>Cf. Item 10 in Table 2.

<sup>3</sup>Cf. Item 9 in Table 2.

<sup>4</sup>The differences concerning interest expenditure, other expenditure and revenue could be distinguished when relevant.

<sup>5</sup>Liquid assets, assets on third countries, government controlled enterprises and the difference between quoted and non-quoted assets could be distinguished when relevant.

<sup>6</sup>Changes due to exchange rate movements, and operation in secondary market could be distinguished when relevant.

<sup>7</sup>Proxied by interest expenditure (incl. FISIM recorded as consumption) divided by the debt level of the previous year.

<sup>8</sup>AF1, AF2, AF3 (consolidated at market value), AF5 (if quoted in stock exchange; including mutual fund shares).

**Table 5. Cyclical developments**

% of GDP	ESA Code	2005	2006	2007	2008	2009
<b>1. Real GDP growth (%)</b>		3.5	5.4	5.1	5.1	5.6
<b>2. Net lending of general government</b>	EDP B.9	-2.5	-1.9	-1.4	-1.0	-0.6
<b>3. Interest expenditure (incl. FISIM recorded as consumption)</b>	EDPD.41 incl. FISIM	2.6	2.4	2.4	2.4	2.4
4. Potential GDP growth (%)		4.4	4.8	5.0	5.2	5.2
contributions:						
- labour		-	-	-	-	-
- capital		-	-	-	-	-
- total factor productivity		-	-	-	-	-
5. Output gap		-0.7	0.0	0.0	-0.1	0.3
6. Cyclical budgetary component		-0.2	0.0	0.0	0.0	0.1
7. Cyclically-adjusted balance (2-6)		-2.3	-1.9	-1.4	-1.0	-0.7
8. Cyclically-adjusted primary balance (7-3)		0.3	0.5	1.0	1.4	1.7

**Table 6. Divergence from previous update**

	ESA Code	2005	2006	2007	2008	2009
<b>Real GDP growth (%)</b>						
<b>Previous update</b>		3.3	4.3	4.6	5.0	
<b>Current update</b>		3.5	5.4	5.1	5.1	5.6
<b>Difference</b>		0.2	1.1	0.5	0.1	
<b>General government net lending (% of GDP)</b>	EDP B.9					
<b>Previous update</b>		-4.7	-4.6	-4.1	-3.7	
<b>Current update</b>		-4.3	-3.9	-3.4	-3.1	-2.9
<b>Difference</b>		0.4	0.7	0.7	0.6	
<b>General government gross debt (% of GDP)</b>						
<b>Previous update</b>		47.9	51.2	52.1	52.6	
<b>Current update</b>		47.3	48.9	50.0	50.3	50.2
<b>Difference</b>		-0.6	-2.3	-2.1	-2.3	

**Table 7. Long-term sustainability of public finances**

% of GDP	2000	2005	2010	2020	2030	2050
Total expenditure	-	-	-	-	-	-
Of which: age-related expenditures	-	18.6	15.2	12.8	12.4	12.4
Pension expenditure <sup>1</sup>	-	13.7	11.3	9.8	9.4	9.3
Social security pension	-	13.7	11.3	9.7	9.2	8.0
Old-age and early pensions <sup>2</sup>	-	11.1	9.4	8.4	7.9	6.6
Other pensions (disability, survivors)	-	2.6	2.0	1.3	1.3	1.4
Occupational pensions (if in general government)	-	-	-	-	-	-
Health care <sup>3</sup>	-	4.1	4.3	4.7	5.0	5.4
Long-term care ( <i>this was earlier included in health care</i> )	-	0.1	0.1	0.1	0.1	0.2
Education expenditure <sup>4</sup>	-	4.9	3.9	3.0	3.0	3.1
Other age-related expenditures <sup>4</sup>	-	-	-	-	-	-
Interest expenditure	-	-	-	-	-	-
Total revenue	-	-	-	-	-	-
Of which: property income	-	-	-	-	-	-
<i>of which: from pensions contributions (or social contributions if appropriate)</i>	-	9.3	9.7	10.1	10.1	10.1
Pension reserve fund assets	-	0.2	0.4	0.3	0.4	0.5
Of which: consolidated public pension fund assets (assets other than government liabilities)	-	7.8	8.0	8.1	7.9	7.9
<b>Assumptions</b>						
Labour productivity growth	-	4.2	3.6	3.1	2.7	1.7
Real GDP growth	-	3.3	5.0	3.2	2.2	0.4
Participation rate males (aged 15-64) <sup>5</sup>	-	77.8	79.9	82.1	84.0	81.7
Participation rates females (aged 15-64) <sup>5</sup>	-	65.1	67.0	71.3	74.4	70.3
Total participation rates (aged 15-64) <sup>5</sup>	-	71.4	73.4	76.7	79.2	76.1
Unemployment rate	-	18.2	15.8	9.9	7.0	7.0
Population aged 65+ over total population	-	13.1	13.5	18.2	22.6	29.4
<p><sup>1</sup> Including pension payments from other funds than Social Security Fund. Projection of the Ministry of Finance until 2010, projection of the EPC AWG afterwards, corrected with the effect of the stabilisation measures of 2006-2007.</p> <p><sup>2</sup> Including survivor pension paid after the retirement age and other pension-type benefits.</p> <p><sup>3</sup> 2005-2050: projection of the EPC AWG, 2000: OECD Health Data 2005.</p> <p><sup>4</sup> Projection of the EPC AWG.</p> <p><sup>5</sup> In the Code of conduct the age limits are 20-64</p>						

**Table 8. Basic assumptions**

	2005	2006	2007	2008	2009
<b>Short-term interest rate<sup>1</sup> (annual average)</b>	5.3	4.1	4.6	5.2	-
<b>Long-term interest rate (annual average)</b>	5.2	5.3	5.3	5.4	-
<i>for countries in euro area or ERM II:</i> <b>USD/€ exchange rate (annual average)</b>	-	-	-	-	-
<b>Nominal effective exchange rate</b>	-11.3	-3.1	-0.8	-1.0	-
<i>for countries not in euro area or ERM II:</i> <b>exchange rate vis-à-vis the € (annual average)</b>	4.0	3.9	3.9	3.9	-
<b>World excluding EU, GDP growth</b>	5.6	5.7	5.2	-	-
<b>EU GDP growth</b>	1.7	2.8	2.4	2.4	-
<b>Growth of relevant foreign markets</b>	7.5	10.8	7.9	7.4	-
<b>World import volumes, excluding EU</b>	7.3	8.8	8.2	7.7	-
<b>Oil prices (Brent, USD/barrel)</b>	54.1	65.6	66.3	68.0	-

<sup>1</sup>If necessary, purely technical assumptions.

### Annex 3: Compliance with the code of conduct

The table below provides a detailed assessment of whether the programme respects the requirements of Section II of the code of conduct. It is in four parts, covering compliance with (i) the window for the date of submission of the programme; (ii) the model structure (table of contents) in Annex 1 of the code; (iii) the data requirements (model tables) in Annex 2 of the code; and (iv) other information requirements.

Guidelines in the code of conduct	Yes	No	Comments
<b>1. Submission of the programme</b>			
Programme was submitted not earlier than mid-October and not later than 1 December <sup>1</sup> .	X		
<b>2. Model structure</b>			
The model structure for the programmes in Annex 1 of the code of conduct has been followed.	X		
<b>3. Model tables (so-called data requirements)</b>			
The quantitative information is presented following the standardised set of tables (Annex 2 of the code of conduct).	X		
The programme provides all compulsory information in these tables.	X		
The programme provides all optional information in these tables.		X	
The concepts used are in line with the European system of accounts (ESA).	X		
<b>4. Other information requirements</b>			
<i>a. Involvement of parliament</i>			
The programme mentions its status vis-à-vis the national parliament.	X		
The programme indicates whether the Council opinion on the previous programme has been presented to the national parliament.		X	
<i>b. Economic outlook</i>			
Euro area and ERM II Member States uses the “common external assumptions” on the main extra-EU variables.			Not applicable
Significant divergences between the national and the Commission services’ economic forecasts are explained <sup>2</sup> .	X		
The possible upside and downside risks to the economic outlook are brought out.		X	
The outlook for sectoral balances and, especially for countries with a high external deficit, the external balance is analysed.		X	
<i>c. Monetary/exchange rate policy</i>			
The convergence programme presents the medium-term monetary policy objectives and their relationship to price and exchange rate stability.	X		
<i>d. Budgetary strategy</i>			
The programme presents budgetary targets for the general government balance in relation to the MTO, and the projected path for the debt ratio.	X		
In case a new government has taken office, the programme shows continuity with respect to the budgetary targets endorsed by the Council.			Not applicable
When applicable, the programme explains the reasons for possible deviations from previous targets and, in case of substantial deviations, whether measures are taken to rectify the situation, and provide information on them.			Not applicable
The budgetary targets are backed by an indication of the broad measures necessary to achieve them and an assessment of their quantitative effects on the general government balance is analysed.		X	
Information is provided on one-off and other temporary measures.		X	
The state of implementation of the measures (enacted versus planned) presented in the programme is specified.	X		

<b>Guidelines in the code of conduct</b>	<b>Yes</b>	<b>No</b>	<b>Comments</b>
If for a country that uses the transition period for the classification of second-pillar funded pension schemes, the programme presents information on the impact on the public finances.	X		
<i>e. "Major structural reforms"</i>			
If the MTO is not yet reached or a temporary deviation is planned from the achieved MTO, the programme includes comprehensive information on the economic and budgetary effects of possible 'major structural reforms' over time.		X	
The programme includes a quantitative cost-benefit analysis of the short-term costs and long-term benefits of such reforms.			Not applicable
<i>f. Sensitivity analysis</i>			
The programme includes comprehensive sensitivity analyses and/or develops alternative scenarios showing the effect on the budgetary and debt position of: a) changes in the main economic assumptions b) different interest rate assumptions c) for non-participating Member States, different exchange rate assumptions d) if the common external assumptions are not used, changes in assumptions for the main extra-EU variables.		X	
In case of "major structural reforms", the programme provides an analysis of how changes in the assumptions would affect the effects on the budget and potential growth.			Not applicable
<i>g. Broad economic policy guidelines</i>			
The programme provides information on the consistency with the broad economic policy guidelines of the budgetary objectives and the measures to achieve them.	X		
<i>h. Quality of public finances</i>			
The programme describes measures aimed at improving the quality of public finances on both the revenue and expenditure side (e.g. tax reform, value-for-money initiatives, measures to improve tax collection efficiency and expenditure control).	X		
<i>i. Long-term sustainability</i>			
The programme outlines the country's strategies to ensure the sustainability of public finances, especially in light of the economic and budgetary impact of ageing populations.	X		
Common budgetary projections by the AWG are included in the programme. The programme includes all the necessary additional information. (...) To this end, information included in programmes should focus on new relevant information that is not fully reflected in the latest common EPC projections.	X		
<i>j. Other information (optional)</i>			
The programme includes information on the implementation of existing national budgetary rules (expenditure rules, etc.), as well as on other institutional features of the public finances, in particular budgetary procedures and public finance statistical governance.	X		
<p><u>Notes:</u></p> <p><sup>1</sup>The code of conduct allows for the following exceptions: (i) Ireland should be regarded as complying with the deadline in case of submission on "budget day", i.e. traditionally the first Wednesday of December, (ii) the UK should submit as close as possible to its autumn pre-budget report; and (iii) Austria and Portugal cannot comply with the deadline but will submit no later than 15 December.</p> <p><sup>2</sup>To the extent possible, bearing in mind the typically short time period between the publication of the Commission services' autumn forecast and the submission of the programme.</p> <p><u>Source:</u> <i>Commission services</i></p>			

## Annex 4: Key economic indicators of past economic performance

This Annex includes two tables. The first displays key economic indicators that summarise the economic performance of the country. To put the country's performance into perspective, the second table displays the same set of indicators for the EU10.

### Poland - Key economic indicators

	Averages			2003	2004	2005
	1996-2005	1996-2000	2001-2005			
<b>Economic activity</b>						
Real GDP (% change)	4.2	5.4	3.0	3.8	5.3	3.2
Private consumption % change	4.3	5.9	2.7	1.9	3.9	2.3
Government consumption % change	2.8	2.4	3.2	4.9	4.2	2.8
Investment % change	6.1	13.0	-0.7	-0.1	6.3	6.2
Exports % change	10.3	11.9	8.7	14.2	14.0	7.1
Imports % change	11.0	16.9	5.0	9.3	15.2	3.4
Contributions to real GDP growth						
Demand						
Domestic demand	4.4	6.8	2.0	2.8	6.1	1.9
Net exports	-0.2	-1.4	1.0	1.1	-0.8	1.4
Output gap	-0.8	-0.8	-0.7	-1.2	0.5	-0.3
<b>Prices and costs</b>						
HICP inflation % change	n.a.	n.a.	2.7	0.7	3.6	2.2
Unit labour costs % change	5.3	10.9	-0.2	-3.1	-1.9	-0.4
Labour productivity % change	4.7	5.8	3.6	5.1	3.9	0.9
Real unit labour costs % change	-1.6	-0.4	-2.8	-3.5	-5.7	-3.2
Comparative price levels (EUR25=100)	50.6	48.3	52.9	49.1	48.2	54.6
<b>Labour market</b>						
Employment % change	-0.4	-0.3	-0.6	-1.2	1.3	2.3
Employment % of pop work age	54.9	57.4	52.3	51.2	51.6	52.6
Unemployment rate in %	15.8	12.7	18.9	19.6	19.0	17.7
NAIRU in %	14.3	11.3	17.2	17.9	17.8	17.0
Participation rate in %	65.1	65.8	64.5	63.7	63.7	64.0
Working age population % change	0.5	0.6	0.4	0.5	0.5	0.4
<b>Competitiveness and external position</b>						
Real effective exchange rate % change (1)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Export performance % change (2)	3.5	3.2	3.9	9.3	5.4	0.5
External balance of g & s	-3.4	-4.5	-2.4	-2.6	-2.0	-0.3
Net borrowing v-à-v RoW	-3.2	-3.8	-2.7	-2.1	-4.0	-1.9
FDI	n.a.	n.a.	n.a.	2.2	5.1	2.7
<b>Public finances</b>						
Total expenditure % of GDP	44.4	45.1	43.7	44.6	42.6	43.3
Total revenue % of GDP	40.9	41.7	40.1	39.9	38.7	40.9
General government balance % of GDP	-3.5	-3.4	-3.6	-4.7	-3.9	-2.5
General government debt % of GDP	40.4	40.1	40.7	43.9	41.8	42.0
Structural budget balance % of GDP	n.a.	n.a.	n.a.	-4.2	-4.1	-2.3
<b>Financial indicators (3)</b>						
Short term real interest rate (4)	6.7	7.8	5.7	5.3	2.1	2.4
Long term real interest rate (4)	n.a.	n.a.	4.5	5.4	2.8	2.3
Household credit % change	n.a.	n.a.	n.a.	10.9	14.8	n.a.
Corporate sector credit % change (5)	n.a.	27.7	n.a.	6.4	-4.6	n.a.
Household debt in % of GDP	n.a.	n.a.	n.a.	13.4	14.0	n.a.
Corporate sector debt in % of GDP	n.a.	n.a.	n.a.	32.9	28.7	n.a.
Notes:						
(1) ulc relative to rest of a group of industrialised countries (usd): EUR24 (excl. LU), BG, RO, TR, CH, NR, US, CA, JP, AU, MX and NZ						
(2) Market performance of exports of goods and services on export weighted imports of goods and services of 35 industrial markets (2000=100).						
(3) Data available up to 2004						

- (4) Using GDP deflator  
(5) Households' and non-profit institutions serving households' debt defined as loans and securities other than shares  
(6) Non-financial corporate sector debt, defined as loans and securities other than shares

### EU10 - Key economic indicators

	Averages			2003	2004	2005
	1996-2005	1996-2000	2001-2005			
<b>Economic activity</b>						
Real GDP (% change)	4.0	4.3	3.7	4.0	5.1	4.6
Private consumption % change						
Government consumption % change						
Investment % change						
Exports % change						
Imports % change						
Contributions to real GDP growth						
Demand						
<i>Domestic demand</i>	4.3	5.3	3.4	4.0	5.6	3.0
<i>Net exports</i>	-0.3	-1.0	0.4	0.0	-0.5	1.6
Output gap						
<b>Prices and costs</b>						
HICP inflation % change	n.a.	n.a.	3.3	1.9	4.1	2.5
Unit labour costs % change						
Labour productivity % change	4.2	4.6	3.7	4.3	4.5	2.9
Real unit labour costs % change	-0.8	-0.6	-1.0	-0.7	-2.5	-1.8
Comparative price levels (EUR25=100)						
<b>Labour market</b>						
Employment % change	-0.1	-0.3	0.0	-0.2	0.6	1.7
Employment % of pop work age						
Unemployment rate in %	12.8	11.3	14.2	14.3	14.2	13.4
NAIRU in %						
Participation rate in %						
Working age population % change						
<b>Competitiveness and external position</b>						
Real effective exchange rate % change (1)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Export performance % change (2)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
External balance of g & s	-3.4	-4.2	-2.6	-2.9	-2.6	-1.3
Net borrowing v-à-v RoW						
FDI						
<b>Public finances</b>						
Total expenditure % of GDP						
Total revenue % of GDP						
General government balance % of GDP	n.a.	n.a.	-4.2	-5.1	-3.7	-3.3
General government debt % of GDP	37.9	35.8	40.1	39.9	43.4	41.3
Structural budget balance % of GDP	n.a.	n.a.	n.a.	-4.5	-3.4	-3.0
<b>Financial indicators (3)</b>						
Short term real interest rate (4)						
Long term real interest rate (4)	n.a.	n.a.	n.a.	3.5	2.2	2.2
Household credit % change						
Corporate sector credit % change (5)						
Household debt in % of GDP	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Corporate sector debt in % of GDP	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Notes:

- (1) ulc relative to rest of a group of industrialised countries (usd): EUR24 (excl. LU), BG, RO, TR, CH, NR, US, CA, JP, AU, MX and NZ  
(2) Market performance of exports of goods and services on export weighted imports of goods and services of 35 industrial markets (2000=100).  
(3) Data available up to 2004  
(4) Using GDP deflator  
(5) Households' and non-profit institutions serving households' debt defined as loans and securities other than shares  
(6) Non-financial corporate sector debt, defined as loans and securities other than shares



## Annex 5: Assessment of tax projections

Table 10 in the main text compares the tax projections of the programme with those of the Commission services' autumn 2006 forecast and those obtained by using standard ex-ante elasticities, as estimated by the OECD. It summarises the results for the total tax-to-GDP ratio. The underlying analysis exploits information for the four major tax categories, i.e. indirect taxes, corporate and private income taxes and social contributions (see results in the table below)<sup>33</sup>.

Conceptually, the analysis draws on the definition of a semi-elasticity, which measures the change in a ratio vis-à-vis the relative change in the denominator. The semi-elasticity of the tax-to-GDP ratio of the  $i$ -th tax  $\frac{T_i}{Y}$  can be written as:

$$\eta_i = \frac{d\left(\frac{T_i}{Y}\right)}{dY} Y = \left(\frac{dT_i}{dY} \frac{Y}{T_i} - 1\right) \frac{T_i}{Y} = \left(\frac{dT_i}{dB_i} \frac{B_i}{T_i} \frac{dB_i}{dY} \frac{Y}{B_i} - 1\right) \frac{T_i}{Y} = (\varepsilon_{T_i, B_i} \varepsilon_{B_i, Y} - 1) \frac{T_i}{Y}$$

where  $\varepsilon_{T_i, B_i}$  and  $\varepsilon_{B_i, Y}$  denote the elasticity of the  $i$ -th tax  $T_i$  relative to its tax base  $B_i$  and the elasticity of the tax base  $B_i$  relative to aggregate GDP  $Y$  respectively.

To the extent that  $\varepsilon_{T_i, B_i}$  is derived from observed or projected data, it will typically reflect (i) the effect of discretionary measures (including one-offs) and (ii) the tax elasticity<sup>34</sup>. By contrast, if  $\varepsilon_{T_i, B_i}$  is the standard *ex-ante* elasticity, as estimated by the OECD, it will be net of discretionary measures.

The second elasticity  $\varepsilon_{B_i, Y}$  can be used as an indicator of the tax intensity of GDP growth; for instance, a higher elasticity of consumption relative to GDP means that for the same GDP growth indirect taxes will be higher.

The definition of a semi-elasticity has two practical implications. First, any change in the tax-to-GDP ratio of the  $i$ -th tax can be written as the product of the semi-elasticity and GDP growth:

$$d\left(\frac{T_i}{Y}\right) = \eta_i \cdot \frac{dY}{Y}$$

and the change in the total tax-to-GDP ratio is the sum:

$$\sum_i d\left(\frac{T_i}{Y}\right) = \sum_i \eta_i \frac{dY}{Y}.$$

Second, differences between two tax projections can be decomposed into an elasticity component and a composition component:

$$d\left(\frac{T_i}{Y}\right)' - d\left(\frac{T_i}{Y}\right) \approx \left[ (\varepsilon_{T_i, B_i}' \varepsilon_{B_i, Y}' - 1) \frac{T_i}{Y} - (\varepsilon_{T_i, B_i} \varepsilon_{B_i, Y} - 1) \frac{T_i}{Y} \right] \frac{dY}{Y}$$

<sup>33</sup>Private and corporate income taxes are generally not provided, neither in the programme nor in the Commission services' autumn 2006 forecast. Only the aggregate, direct income taxes, is given. For the purpose of this exercise the breakdown is obtained using the average shares over the past ten years, i.e. the composition of direct taxes is assumed to stay constant.

<sup>34</sup>The observed or projected elasticity (ex-post elasticity) of the  $i$ -th tax also includes the effect of other factors (OF) such as discretionary measures:  $\frac{\Delta T_i}{T_i} = \varepsilon_{T_i, B_i, ex\,ante} \frac{dB_i}{B_i} + \frac{OF_i}{T_i} = \varepsilon_{T_i, B_i, ex\,post} \frac{dB_i}{B_i}$ .

If  $(\varepsilon'_{T_i, B_i} - \varepsilon_{T_i, B_i}) = \alpha_i$ ;  $(\varepsilon'_{B_i, Y} - \varepsilon_{B_i, Y}) = \beta_i$ ,

then  $d\left(\frac{T_i}{Y}\right)' - d\left(\frac{T_i}{Y}\right) \approx \left[ (\alpha_i \varepsilon_{B_i, Y} + \beta_i \varepsilon_{T_i, B_i} + \alpha_i \beta_i) \frac{T_i}{Y} \right] \frac{dY}{Y}$

where  $\alpha_i \varepsilon_{B_i, Y} \frac{T_i}{Y} \frac{dY}{Y}$  determines the elasticity component and  $\beta_i \varepsilon_{T_i, B_i} \frac{T_i}{Y} \frac{dY}{Y}$  the composition

component. The third component in the equation  $\alpha_i \beta_i \frac{T_i}{Y} \frac{dY}{Y}$  measures the interaction of the elasticity and the composition components. It is generally small but can become important in some cases. The tax elasticity relative to GDP of total taxes is obtained as  $\varepsilon = \sum_i w_i \varepsilon_{T_i, B_i} \varepsilon_{B_i, Y}$

with  $w_i$  the share of the  $i$ -th tax in the overall tax burden.

### Assessment of tax projections by major tax category

	2007			2008			2009
	CP	COM	OECD <sup>1</sup>	CP	COM <sup>2</sup>	OECD <sup>1</sup>	CP
<b>Taxes on production and imports:</b>							
Change in tax-to-GDP ratio	0.3	0.5	0.0	0.4	-0.1	0.0	0.2
<i>Difference SP/CP – COM</i>	-0.2			0.6			/
<i>of which<sup>3</sup>:</i>							
- discretionary & elasticity component	-0.1			0.4			/
- composition component	-0.1			0.1			/
<i>Difference COM – OECD<sup>1</sup></i>	/	0.5		/	-0.1		/
<i>of which<sup>3</sup>:</i>							
- discretionary & elasticity component	/	0.6		/	0.0		/
- composition component	/	-0.1		/	-0.1		/
p.m.: Elasticity							
- of taxes to tax base <sup>4</sup>	1.5	1.6	1.0	1.5	1.0	1.0	1.2
- of tax base <sup>4</sup> to GDP	0.9	0.9	1.0	1.0	0.9	1.0	1.0
<b>Social contributions:</b>							
Change in tax-to-GDP ratio	0.0	0.0	-0.3	-1.0	-0.3	-0.3	-0.9
<i>Difference SP/CP – COM</i>	0.0		/	-0.6		/	/
<i>of which<sup>3</sup>:</i>							
- discretionary & elasticity component	0.0		/	-0.7		/	/
- composition component	0.0		/	0.2		/	/
<i>Difference COM – OECD<sup>1</sup></i>	/	0.3		/	0.0		/
<i>of which<sup>3</sup>:</i>							
- discretionary & elasticity component	/	0.0		/	-0.1		/
- composition component	/	0.3		/	0.1		/
p.m.: Elasticity							
- of taxes to tax base <sup>5</sup>	1.0	1.0	1.0	0.0	0.8	1.0	0.2
- of tax base <sup>5</sup> to GDP	1.0	1.0	0.7	1.0	0.8	0.7	0.9
<b>Personal income tax<sup>6</sup>:</b>							
Change in tax-to-GDP ratio	0.1	0.0	0.0	0.0	0.1	0.0	-0.4
<i>Difference SP/CP – COM</i>	0.1		/	-0.1		/	/
<i>of which<sup>3</sup>:</i>							
- discretionary & elasticity component	0.1		/	-0.2		/	/
- composition component	0.0		/	0.1		/	/
<i>Difference COM – OECD<sup>1</sup></i>	/	0.0		/	0.1		/
<i>of which<sup>3</sup>:</i>							
- discretionary & elasticity component	/	-0.1		/	0.1		/
- composition component	/	0.1		/	0.1		/

p.m.: Elasticity							
- of taxes to tax base <sup>5</sup>	1.4	1.1	1.4	1.0	1.7	1.4	0.3
- of tax base <sup>5</sup> to GDP	1.0	1.0	0.7	1.0	0.8	0.7	0.9
<b>Corporate income tax<sup>6</sup>:</b>							
Change in tax-to-GDP ratio	0.1	0.0	-0.3	0.0	0.1	-0.3	-0.2
<i>Difference SP/CP – COM</i>	0.1		/	-0.1		/	/
<i>of which<sup>3</sup>:</i>							
- discretionary & elasticity component	0.0		/	0.0		/	/
- composition component	0.0		/	0.0		/	/
<i>Difference COM – OECD<sup>1</sup></i>	/	0.3		/	0.0		/
<i>of which<sup>3</sup>:</i>							
- discretionary & elasticity component	/	0.0		/	-0.1		/
- composition component	/	0.3		/	0.1		/
p.m.: Elasticity							
-of taxes to tax base <sup>7</sup>	1.4	1.1	1.0	1.0	1.2	1.0	0.2
-of tax base <sup>7</sup> to GDP	1.0	1.0	0.7	1.0	1.1	0.7	1.0
<b>Notes:</b>							
<sup>1</sup> Based on OECD ex-ante elasticities							
<sup>2</sup> On a no-policy change basis							
<sup>3</sup> The decomposition is explained in the text above							
<sup>4</sup> Tax base = private consumption expenditure							
<sup>5</sup> Tax base = compensation of employees							
<sup>6</sup> Taxes on income and wealth are split into private and corporate income tax using the average tax share over the past ten years, i.e. the share is assumed to be constant over the programme period							
<sup>7</sup> Tax base = gross operating surplus							
<i>Source:</i>							
Commission services' autumn 2006 economic forecasts (COM); Commission services' calculations and OECD (N. Girouard and C. André (2005), "Measuring Cyclically-Adjusted Budget Balances for the OECD Countries", OECD Working Paper No. 434)							