EUROPEAN COMMISSION
DIRECTORATE GENERAL
ECONOMIC AND FINANCIAL AFFAIRS

Brussels, 04/03/2009
ECFIN/G3(2009)REP/50419-EN

CZECH REPUBLIC: MACRO FISCAL ASSESSMENT

AN ANALYSIS OF THE NOVEMBER 2008 UPDATE OF THE CONVERGENCE PROGRAMME

The Stability and Growth Pact requires each EU Member State to present an annual update of its medium-term budgetary programme, called "stability programme" for countries that have adopted the euro as their currency and "convergence programme" for those that have not.

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 (DG ECFIN) of the European Commission, was finalised on 18 February 2009. Comments should be sent to Neil Kay who worked on the assessment in Dir F/G (neil.kay@ec.europa.eu). The main aim of the 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.

The analysis takes into account (i) the Commission services' January 2009 interim 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. Technical issues are explained in an accompanying methodological paper prepared by DG ECFIN.

Based on this technical analysis, the European Commission adopted a recommendation for a Council opinion on the programme on 18 February 2009. The ECOFIN Council is expected to adopt its opinion on the programme on 10 March 2009.

* * *

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

1. INTRODUCTION

This document assesses the November 2008 update of the Czech Republic's convergence programme. It takes into account all currently available information, notably the Commission services' January 2009 interim forecast and the short-term fiscal stimulus measures adopted by the Czech Republic's authorities in response to the economic downturn. The programme, which was submitted on 20 November 2008[1], covers the period 2008-2011 and builds on the 2009 budget and the medium-term expenditure framework 2009-2011. It was approved by the government and presented to the Czech Republic's Parliament on 10 December 2008. An addendum to the programme, detailing the measures adopted by the Czech authorities in response to the economic downturn, including their estimated fiscal impact, was submitted on 30 December. The budgetary projections in the programme incorporate the fiscal impact of these measures.

2. MAIN CHALLENGES IN THE ECONOMIC DOWNTURN AND THE POLICY RESPONSE

Following three years of rapid expansion, growth in the Czech economy moderated to about 4¼% of GDP in 2008 and is set to slow further in 2009. A moderation in GDP growth was expected while it has been accentuated by the effect of the global financial crisis. The deceleration has been broad based. Export growth has declined due to falling external demand, which has so far been the main channel through which the global financial crisis has impacted on the Czech economy. Investment has declined due to tighter credit conditions and falling business confidence as well as weakening inflows of foreign direct investment. Domestic consumption slowed significantly during 2008 primarily as a result of increases to indirect taxation and administrative measures. The Czech economy has been running a positive output gap[2] since 2005 while the output gap is likely to go into negative territory in 2010. The Czech Republic can therefore be considered to be in "bad times" after 2009.

Inflation was high at the beginning of 2008 due to the increases in indirect taxes and rising commodity prices, but has declined throughout the year as the effect of administrative changes has diminished and the trend in commodity prices has reversed. Unemployment has fallen significantly over the recent period of high growth to below 5%, but started to increase toward the end of 2008. In addition to employment growth, this also reflects a decline in the participation rate partly due to an increase in younger people opting for tertiary education. The trade balanced stayed positive in 2008 while repatriation of earnings and profits linked to foreign direct investment contributed to a modest current account deficit. However, the trade balance posted a deficit in October 2008 and is set to decline further. The financial sector has thus far remained relatively stable. While interest spreads have increased in recent months they are still comparatively low with respect to other Eastern European economies. The property market has begun to slow down after a period of strong price rises in private and commercial property.

Public finances have improved significantly. The general government deficit fell from 2.9% of GDP in 2006 to 1% of GDP in 2007, due to a revenue boost from better-than-expected growth as well as government expenditure restraint. According to the Commission's January 2009 Interim Forecast, in 2008 the general government deficit is expected to only marginally deteriorate, despite the slowdown, given the positive balance of fiscal measures implemented in 2008. In particular, cuts to social expenditure are estimated to lead to a saving of about 1%

[1] The English language version was submitted on 4 December 2008.

[2] Output gaps are recalculated by Commission services based on information in the programme, following the commonly agreed methodology.

of GDP. Although the government deficit and debt are relatively low, the Czech Republic has limited fiscal space in which to apply an economic stimulus because long-term fiscal sustainability remains a concern due to rapid ageing.

The Czech National Bank eased monetary policy in the second half of 2008 via successive interest rate reductions (from 3.75% in July 2008 to 2.25% in December 2008). The nominal effective exchange rate of the Czech koruna appreciated slightly (by 1.3%) during 2008.

An addendum to the convergence programme, submitted on 30 December 2008, contains a list of stimulus measures taken in line with the European Economic Recovery Plan. These include measures to stimulate domestic demand and assist enterprises through the downturn in the economy. While the measures are likely to go some way to supporting domestic demand, the openness of the Czech economy means that it is also highly dependent on external demand, in particular, from the economies of its main European trading partners. The fiscal stimulus measures listed in the programme addendum are as follows:

- Exceptional increase in public sector wages compared with planned wage rise.
- Reduction in the social security contribution paid by employees by 1.5 pp.
- Increase in the capital of the Support and Guarantee Agricultural and Forestry Fund.
- Investment incentives for technological projects.
- Additional support for EU co-financed projects in the environmental field.
- Substantial additional investment in transport infrastructure.

These measures are related to the medium-term reform agenda and the country-specific recommendations proposed by the Commission on 28 January 2009 under the Lisbon Strategy for Growth and Jobs.

Measures to help stabilise the financial system

In response to the financial crisis, the Czech Republic took a number of measures, including an increase in capital of the Czech Export Bank, the Export Guarantee and Insurance Corporation, the Czech-Moravian Guarantee and Development Bank, totalling CZK 2 billion. The bolstering of the capital of these institutions will help exporting firms, especially SMEs. In addition, the coverage of the deposit guarantee scheme was increased to EUR 50,000.

3. MACROECONOMIC SCENARIO

The programme's macroeconomic scenario foresees a continuing deceleration of GDP growth in 2009 followed by a gradual pick-up through 2010 and 2011. The slowdown is foreseen to mainly affect growth in exports and investment while consumption is set to increase only marginally in 2009. Unemployment is forecast to remain stable in 2009 at 4.4% and only slightly increase in 2010. The main downside risk to the programme's scenario stems from a worsening economic outlook in the Czech economy's main export markets, which would have a more adverse effect on exports and investment leading to a more marked increase in unemployment.

Reflecting these downside risks to the programme scenario, the Commission services' January 2009 interim forecast foresees a sharper slowdown in 2009 and a more gradual recovery in 2010. The Commission services' forecast projects a steeper decline in export growth and a more marked slowdown in investment. This is a reflection of a more pessimistic growth forecast for the European Union, resulting in far weaker external demand in the Czech

Republic.[3] The effect on the Czech economy is likely to be pronounced given the high proportion of external trade as a percentage of GDP, the majority of which is with the European Union. According to the recalculated output gaps, based on information in the programme, and the Commission services 2009 interim forecast, cyclical conditions will deteriorate and the output gap will turn negative in 2010.

Overall, the programme's macroeconomic scenario appears to be based on markedly favourable assumptions.

The government has adopted a number of fiscal stimulus measures in response to the downturn which are incorporated into the programme's macroeconomic scenario.

Table I: Comparison of macroeconomic developments and forecasts

	2008		2009		2010		2011
	COM	CP	COM	CP	COM	CP	CP
Real GDP (% change)	4.2	4.4	1.7	3.7	2.3	4.4	5.2
Private consumption (% change)	3.0	3.3	3.1	3.9	3.1	4.2	4.2
Gross fixed capital formation (% change)	4.5	5.1	2.8	4.5	3.3	6.2	7.0
Exports of goods and services (% change)	7.6	11.6	0.5	7.1	2.3	9.3	10.7
Imports of goods and services (% change)	6.3	9.3	1.9	7.1	2.6	8.8	9.7
Contributions to real GDP growth:							
- Final domestic demand	2.8	3.0	2.4	3.1	2.5	3.6	3.7
- Change in inventories	0.1	-0.9	0.1	0.2	0.0	0.0	0.0
- Net exports	1.3	2.2	-0.9	0.4	-0.1	0.9	1.5
Output gap[1]	3.4	2.0	0.7	0.4	-1.1	-0.4	-0.2
Employment (% change)	1.1	1.7	-0.2	0.7	-0.5	0.3	0.3
Unemployment rate (%)	5.0	4.4	5.7	4.4	6.6	4.6	4.7
Labour productivity (% change)	3.0	2.6	1.8	2.9	2.8	4.1	4.9
HICP inflation (%)	6.3	6.4	2.6	2.9	2.3	3.0	2.5
GDP deflator (% change)	3.9	2.4	1.9	2.1	1.7	2.9	2.4
Comp. of employees (per head, % change)	7.9	7.3	5.4	7.3	5.3	6.7	7.3
Net lending/borrowing vis-à-vis the rest of the world (% of GDP)	-0.3	-1.0	-0.8	-0.5	-1.1	0.4	1.2

Note:

[1] In percent of potential GDP, with potential GDP growth according to the programme as recalculated by Commission services.

Source:

Commission services' January 2009 Interim economic forecasts (COM); Convergence programme (CP)

4. BUDGETARY STRATEGY

4.1. Budgetary implementation in 2008

The budgetary execution in 2008 was much better than anticipated by the previous update of the convergence programme. The previous update forecast the general government deficit to fall from 3.4% of GDP in 2007 to 2.9% of GDP in 2008. Due to a better-than-anticipated deficit in 2007, by 1p.p. of GDP, the Commission services interim 2009 forecast predicts that the general government deficit will be 1.2% of GDP in 2008. Revenues are set to be 1.3% better-than-expected mainly due to a better starting position in 2007 while revenue growth is likely to be lower-than-anticipated. The increase in the level of collected value added tax has

[3] The Commission services' January 2009 interim forecast predicts EU27 growth to be at -1.9% in 2009 compared to 0.9% in the convergence programme, and at 0.5% compared to 1.7% in 2010.

been slightly less than expected due to a slow down in consumer spending which offset the impact of the increase in the lower band of VAT implemented in 2008, while direct taxes have been more in line with government predictions as the labour market has remained stable. Expenditure is set to be 0.5% of GDP less-than-anticipated due mainly to the better starting position while expenditure growth is likely to be slightly higher than expected.

The convergence programme includes a deficit increasing one-off for 2008 of -0.1% of GDP, relating to several smaller items of lost revenue and additional expenditure. This one-off was not included, as such, in the Commission services' January 2009 forecast, but it was allocated to the normal spending categories on the basis that the components are recurring elements of government expenditure and of a small scale.

4.2. Near-term budgetary strategy

The budget for 2009 was approved by parliament on 10 December 2008. The planned budget implies a general government deficit of -1.6% of GDP in 2009. The forecasted deficit includes the fiscal stimulus measures taken by the Czech authorities which comprise a mix of revenue and expenditure instruments. Based on the programme's budgetary projections the measures will only have a temporary effect and will not imply a permanent deterioration in the budgetary position. The stimulus measures are timely and targeted towards the source of economic challenges, in particular boosting domestic demand and supporting businesses through the downturn, while they do not imply a marked fiscal expansion and most of the cyclical smoothing will come from the operation of automatic stabilizers.

With respect to the main discretionary measures, on the revenue side there will be a decline in the level of social contributions of 0.5% of GDP as a result of reductions in social contributions paid by employees by 1.5 pp.

Table II. Main budgetary measures for 2009

Revenue measures[1]	Expenditure measures[2]
Measures in response to the downturn	
• Reduction in social security contributions (-0.5% of GDP)	• Additional investment in infrastructure (+0.4% of GDP)
Other measures	
	• Compensation of employees and intermediate consumption (-0.6% of GDP) • Indexation of pensions (+0.2% of GDP)

Note:
[1] Estimated impact on general government revenue
[2] Estimated impact on general government expenditure
Source: *Commission services and November 2008 update of the convergence programme*

On the expenditure side, there are planned cuts to intermediate consumption[4] and compensation of employees, although these are not backed up by specific measures, to make room for an increase in government investment allocated to infrastructure development. According to the recalculated structural balance on the basis of information in the convergence programme, the fiscal stance will be marginally restrictive while the Commission services' January 2009 forecast foresees a mild expansion due to the package of

[4] For example, accounting, data processing, transportation, storage, maintenance, and security services

fiscal stimulus measures and an increase in public sector wages agreed after the 2009 budget was approved.

Table III: Composition of the budgetary adjustment

(% of GDP)	2007	2008		2009		2010		2011	Change: 2008-2011
	COM	COM	CP	COM	CP	COM[1]	CP	CP	CP
Revenue	**41.6**	**40.7**	**41.0**	**40.7**	**40.6**	**41.1**	**39.6**	**39.0**	**-2.0**
of which:									
- Taxes on production and imports	10.9	11.1	11.2	11.1	11.1	11.3	10.8	10.4	-0.8
- Current taxes on income, wealth, etc.	9.3	8.3	8.3	8.3	8.3	8.3	8.1	8.2	-0.1
- Social contributions	16.3	16.2	16.2	15.8	15.7	15.9	15.3	15.1	-1.1
- Other (residual)	5.1	5.1	5.3	5.5	5.4	5.6	5.4	5.3	0.0
Expenditure	**42.6**	**42.0**	**42.2**	**43.2**	**42.2**	**43.4**	**41.1**	**40.2**	**-2.0**
of which:									
- Primary expenditure	41.5	40.7	41.0	42.0	40.9	42.2	40.0	39.1	-1.9
of which:									
Compensation of employees and intermediate consumption	13.8	13.1	13.3	12.9	12.7	12.7	12.0	11.5	-1.8
Social payments	18.2	18.0	17.8	18.8	17.9	19.0	17.5	17.0	-0.7
Subsidies	1.8	1.7	1.8	1.8	1.8	1.7	1.7	1.7	-0.1
Gross fixed capital formation	4.7	4.9	4.8	5.3	5.2	5.5	5.3	5.4	0.5
Other (residual)	3.0	3.1	3.2	3.2	3.4	3.3	3.4	3.5	0.2
- Interest expenditure	1.2	1.2	1.3	1.2	1.3	1.2	1.2	1.1	-0.2
General government balance (GGB)	**-1.0**	**-1.2**	**-1.2**	**-2.5**	**-1.6**	**-2.3**	**-1.5**	**-1.2**	**0.1**
Primary balance	**0.2**	**0.0**	**0.0**	**-1.3**	**-0.3**	**-1.1**	**-0.4**	**-0.1**	**-0.1**
One-off and other temporary measures	-0.2	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.1
GGB excl. one-offs	**-0.8**	**-1.2**	**-1.1**	**-2.5**	**-1.5**	**-2.3**	**-1.5**	**-1.1**	**0.0**
Output gap[2]	3.7	3.4	2.0	0.7	0.4	-1.1	-0.4	-0.2	-2.2
Cyclically-adjusted balance[2]	-2.3	-2.4	-2.0	-2.8	-1.7	-1.9	-1.4	-1.1	0.9
Structural balance[3]	**-2.1**	**-2.4**	**-1.9**	**-2.8**	**-1.7**	**-1.9**	**-1.3**	**-1.1**	**0.8**
Change in structural balance		*-0.3*	*0.2*	*-0.3*	*0.2*	*0.9*	*0.4*	*0.3*	
Structural primary balance[3]	-0.9	-1.2	-0.6	-1.5	-0.4	-0.7	-0.2	0.0	0.6
Change in structural primary balance		*-0.3*	*0.3*	*-0.3*	*0.2*	*0.8*	*0.3*	*0.2*	

Notes:

[1]On a no-policy-change basis.

[2]Output gap (in % of potential GDP) and cyclically-adjusted balance according to the programme as recalculated by Commission services on the basis of the information in the programme.

[3]Structural (primary) balance = cyclically-adjusted (primary) balance excluding one-off and other temporary measures.

Source :

Convergence programme (CP); Commission services' January 2009 Interim economic forecasts (COM); Commission services' calculations

4.3. Medium-term budgetary strategy

The main medium-term goal of the budgetary strategy is to continue consolidation after 2009 towards the achievement of the MTO (a structural deficit of -1% of GDP) in 2012, i.e. after the programme horizon. According to the convergence programme, the general government deficit is projected to expand from 1.2% of GDP in 2008 to 1.6% of GDP in 2009 before declining to 1.5% of GDP in 2010 and 1.2% of GDP in 2011. According to the recalculated structural balance on the basis of information in the programme, the structural balance is estimated to improve over the programme period from -1.9% of GDP in 2008 to -1.1% of GDP in 2011. The policy stance implied by the programme, according to the recalculated structural balance, is mildly restrictive over the programme period. By comparison, the Commissions services' January 2009 interim forecast foresees a deterioration in the structural balance in 2009 followed by a marked improvement in 2010 due to the recovery of tax revenue to standard elasticities following the end of major tax changes and further cuts to intermediate consumption and compensation of employees.

The programme does not foresee to achieve the MTO within the programme horizon. Compared with the previous programme the path of fiscal consolidation has been markedly improved. For 2008 the deficit target has been reduced by 1.7 pp. of GDP, for 2009 by 1 pp. of GDP and for 2010 by 0.8 pp. of GDP.

4.4. Risks to the budgetary targets

The main risk to the budgetary projections stems from the macroeconomic scenario. The macroeconomic scenario which underpins the budgetary targets appears favourable. According to the convergence programme, growth in the economy is set to fall below potential level from 2010. Nevertheless, there is a risk that the dip in output will be deeper than predicted implying a negative revenue shock.

The expenditure targets in the programme are drawn from annual budgets and based on those set in the medium-term expenditure framework. In the past these targets have been exceeded in the budgetary outturn. There is a risk that this will be repeated and will not be compensated for by higher revenues.

An annual reduction by more than ½ percentage point of GDP in intermediate consumption and compensation of employees could entail risks for the overall quality of public services without significant efficiency-enhancing measures. The projected decline in expenditure on social payments does not seem to take into account the likely increase in unemployment benefits due to the expected worsening of the labour market.

Most of the measures in the stimulus package will have a temporary effect. However, the reduction in social security contributions will have a permanent effect on revenue and could pose a risk to budgetary targets in the medium-term.

The Czech Republic stopped the accumulation of unspent allocations in the reserve funds in 2008, currently amounting to about 2¾% of GDP. In previous years, the reserve fund has grown while, as a result of the economic slowdown and the limit on further accumulation, there is a greater likelihood that allocations accumulated by government departments will be drawn down over the programme period.

There is an absence of well specified measures to back-up the planned reduction in primary expenditure by 1.9 pp. of GDP. In particular, the planned reductions in intermediate consumption and compensation of employees are not spelled out.

5. DEBT AND LONG-TERM SUSTAINABILITY

5.1. Debt developments

The government gross debt-to-GDP ratio has been on a declining trend and stood at 29% of GDP in 2007. In 2008, the update of the convergence programme estimates it to remain at the same level while the Commission services forecast a further decrease to 28% of GDP. This is a result of a much lower government deficit which outweighs the projected lower growth.

According to the convergence programme, the level of debt in terms of GDP is projected to decrease over the programme period from 29% of GDP in 2008 to 25½% of GDP by 2011, while the Commission services' January 2009 interim forecast predicts that the level of debt will increase over the programme period to above 30% of GDP as a result of slower growth and higher deficits.

Table IV: Debt dynamics

(% of GDP)	average 2002-06	2007	2008		2009		2010		2011
			COM	CP	COM	CP	COM	CP	CP
Gross debt ratio[1]	**29.7**	**28.9**	**27.9**	**28.8**	**29.4**	**27.9**	**30.6**	**26.8**	**25.5**
Change in the ratio	0.9	-0.7	-1.0	-0.1	1.5	-0.9	1.1	-1.0	-1.3
Contributions[2] :									
1. Primary balance	**3.3**	**-0.2**	**0.0**	**0.0**	**1.3**	**0.3**	**1.1**	**0.4**	**0.1**
2. "Snow-ball" effect	**-0.6**	**-1.4**	**-0.9**	**-0.6**	**0.3**	**-0.3**	**0.0**	**-0.7**	**-0.8**
Of which:									
Interest expenditure	1.2	1.2	1.2	1.3	1.2	1.3	1.2	1.2	1.1
Growth effect	-1.3	-1.6	-1.1	-1.2	-0.5	-1.0	-0.7	-1.1	-1.3
Inflation effect	-0.5	-1.0	-1.0	-0.6	-0.5	-0.6	-0.5	-0.7	-0.6
3. Stock-flow adjustment	**-1.9**	**1.0**	**0.5**	**0.5**	**-1.0**	**-1.0**	**-0.6**	**-0.6**	**-0.6**
Of which:									
Cash/accruals diff.	-0.6	-0.4		-0.2		-0.1		-0.1	0.0
Acc. financial assets	-1.3	1.5		1.0		-0.9		-0.6	-0.6
Privatisation	-1.9	-0.6		-0.7		-1.9		0.0	0.0
Val. effect & residual	0.0	-0.1		-0.2		0.0		0.0	0.0

Notes:

[1]End of period.

[2]The snow-ball effect captures the impact of interest expenditure on accumulated debt, as well as the impact of real GDP growth and inflation on the debt ratio (through the denominator). The stock-flow adjustment includes differences in cash and accrual accounting, accumulation of financial assets and valuation and other residual effects.

Source :

Convergence programme (CP); Commission services' January 2009 interim forecasts (COM); Commission services' calculations

The programme outlook includes revenue from privatizations over the programme period, which will be used to reduce debt allowing save on interest payments, and the programme further notes that the privatization of Prague airport should take place in 2009. Debt financing costs are expected to increase marginally in 2008 and 2009 due to an expected increase in interest spreads of approximately 100 basis points as a consequence of the financial crisis. The increase in interest rates is estimated to add CZK 0.6 bn. to debt servicing costs in 2008 and CZK 2.5 bn. (~0.05% of GDP) in 2009.

5.2. Long-term sustainability

The age-related spending is above the EU average and is projected to rise by 7.6 percentage points of GDP between 2010 and 2050(Table 3 in Annex II). The bulk of the increase is due to rising expenditure on pensions and health care. Sustainability indicators for two scenarios are presented in Table 2 in Annex II. Including the increase of age-related expenditure and assuming that the structural primary balance remains at the level of 2008, the sustainability gap (S2)[5] would amount to 6.1% of GDP; about 2½ percentage points of GDP less than in last year's assessment, which is due to a lower estimated structural primary balance in the starting year. However, the starting budgetary position is not sufficient to stabilize the debt ratio over the long-term, hence entailing a risk that public finances will be unsustainable, even before taking into account the long-term budgetary impact of ageing. If the 2009 budgetary position of the Commission services' January 2009 forecast was taken as the starting point, long-term

[5] The S2 indicator is defined as the change in the current level of the structural primary balance required to make sure that the discounted value of future structural primary balances covers the current level of debt.

sustainability would be compounded by the budgetary deterioration. The sustainability gap would widen to about 7% of GDP.

In contrast to the "2008 scenario", which reflects a weakening of the budgetary position, the "programme scenario" based on the projected end-of-programme structural primary balance, has a smaller sustainability gap. If the budgetary consolidation planned in the programme were to be achieved, risks to long-term sustainability of public finances would be somewhat mitigated. Based on the assumptions applied for calculating the sustainability indicators, Figure 1 in Annex II projects the Debt/GDP ratio over the long-term.

. The long-term budgetary impact of ageing is above the EU average according to the projections made in 2005, which are based on the common methodology. While pension and health care reforms have been introduced which will reduce expenditure, further reforms are required in both areas. While the budgetary position in 2008, as estimated in the programme, is markedly improved, it is largely due to a better starting position in 2007 rather than discretionary measures, and still compounds the impact of population ageing. Achieving high primary surpluses over the medium term would contribute to reducing the risks to the sustainability of public finances.

6. INSTITUTIONAL FEATURES OF PUBLIC FINANCES

The Czech Republic has a medium-term budgetary framework in place since 2004. The framework is based on nominal expenditure limits set for state expenditure and revenue calculated on the basis of growth projections for three following years. Since the instigation of the medium-term budgetary framework, the initial expenditure limits have been exceeded but have been off-set by higher-than-expected revenues due to higher-than-anticipated-growth. In 2006 and 2007, outturn expenditure exceeded the initial ceilings by on average 7%.

In order to increase awareness of the importance of the overall budgetary framework, the Czech Republic has increased reporting on its operation through a six monthly report addressed publically – “Fiscal Outlook”. Monitoring of spending by local government has also been improved by using a series of financial indicators to assess the status of municipal finances, in particular, credit risk and overall liquidity. In addition, the Czech Republic will make a range of changes aimed at improving the efficiency of the budgetary framework and enhancing tax collection. The main changes are as follows: increased integration and simplification of the tax system from January 2010; implementation of an IT system to facilitate the work of the treasury department, for which tenders were launched in 2008, and the introduction of output and target orientated budgeting from January 2009.

7. ASSESSMENT

This section assesses the budgetary strategy, taking into account risks, in the light of (i) the adequacy of the fiscal stimulus package and the overall fiscal stance; (ii) the criteria for short-term action laid down in the Commission Communication of 26 November 2008 on the European Economic Recovery Plan (EERP) as endorsed by the European Council conclusions on the European Economic Recovery Plan (EERP) on 16 December 2008; (iii) the objectives of the Stability and Growth Pact.

An addendum to the convergence programme describes a number of stimulus measures taken by the Czech Republic in response to the global financial crisis. This is already included in the budget for 2009 with the exception of an increase to public sector wages. The balance of measures is spread evenly in fiscal terms between revenue and expenditure. The main tax revenue measure is a reduction in the social security contribution paid by employees by 1.5 pp. The main expenditure measure is an increase in investment in transport infrastructure compared to what was previously planned. The two measures make up 90% of the package in fiscal terms (0.9% of GDP). Other measures are aimed at easing credit conditions for businesses, particularly export oriented small and medium sized enterprises, by providing capital injections to small specialised banks, increasing government incentives for technological projects, and increasing funds for co-financing EU environmental projects. The stimulus measures appear adequate given the limited fiscal space available while further measures may be necessary if the economy deteriorates further.

The measures are timely in that the Czech economy has already started to feel the impact of the global financial crisis, initially through a drop in external demand which has had a negative impact on the wider economy. The measures taken are also appropriately targeted in that they will stimulate domestic demand, partially compensating for the decline in export growth, and provide some bridging support for businesses during the downturn. The reduction in social security contributions should have a positive impact on consumer spending given that it affects all workers, including low wage earners, and will partly counteract the effect of an increase in the lower band of value added tax introduced at the beginning of 2008. It is also likely to place some downward pressure on gross wages. On the expenditure side, as well as raising domestic demand, increasing government investment in transport infrastructure will bring longer-term benefits to the Czech economy. The capital injections to banks are minor but appropriately focused on supporting export-oriented businesses and regional development in the face of recent tightening credit tightening.

Most of the stimulus measures are of a temporary nature and should not interfere with the achievement of medium-term fiscal targets. The main exception is the reduction in social security contributions paid by employees which is a permanent measure and reduces tax revenue by approximately ½% of GDP. The measure would not be easily reversible and in the event of a more prolonged slowdown, there is a risk that it may need to be counterbalanced by tax increases to avoid a permanent budgetary deterioration.

The package of measures will not have a significant fiscal impact based on the budgetary plans in the convergence programme. Most cyclical smoothing will come from the operation of automatic stabilisers. The Czech economy appears reasonably positioned to weather the downturn. In this respect, it will benefit from a much improved fiscal stance, relatively stable external position, and an efficient industrial sector that has attracted strong inflows of foreign direct investment over a number of years.

The projected fiscal stance is mildly expansionary in 2009 according to the Commission services' January 2009 Interim Forecast partly due to an exceptional increase granted for public sector wages. The safety margin against breaching the MTO (-1.6% of GDP) is not respected. The structural balance improves after 2009 mainly thanks to expenditure restraint, in particular in intermediate consumption and compensation of employees while these are not backed up by concrete measures. The achievement of the fiscal targets may be difficult without further measures, given the programme's favourable macroeconomic assumptions, and concrete actions to back-up the planned expenditure reductions. There is also a likelihood that accumulated rolled-over expenditure allocations in the reserve funds will be drawn down over the programme period.

.

ANNEX 1.

THE PERFORMANCE OF THE CZECH LABOUR MARKET INCLUDING FISCAL IMPLICATIONS

1. INTRODUCTION

The Commission's assessment of the 2007 national reform programme of the Czech Republic contained a recommendation on employment. Within an integrated flexicurity approach, it was recommended that the Czech Republic "further modernises employment protection, including legislation, improves the efficiency and equity of education and training, especially its responsiveness to labour market needs, provide incentives to invest in training particularly for older workers and the low-skilled, and increases the diversification of tertiary education supply." This section examines the cyclical and structural factors affecting the Czech labour market, in order to assess whether the recent strong increase in employment is sustainable given an expected fall in aggregate demand, and the sensitivity of public finances to swings in employment.

Table 1: Selected labour market indicators

	2000	2001	2002	2003	2004	2005	2006	2007	EU-10	EU-27
Unemployment	8.7	8.0	7.3	7.8	8.3	7.9	7.2	5.3	6.4	7.1
Youth unemployment rate	17.8	17.3	16.9	18.6	21.0	19.2	17.5	10.7	13.3	15.4
% Long-term unemployment	48.6	52.1	50.2	48.8	51.0	53.0	54.2	52.2	41.4	42.8
NAIRU	7.2	7.7	7.7	7.5	7.3	7.0	6.7	6.1	-	-
Employment rate (15 to 64)	65.0	65.0	65.4	64.7	64.2	64.8	65.3	66.1	63.8	65.4
Employment rate (15 to 24)	36.4	34.2	32.2	30.0	27.8	27.5	27.7	28.5	32.2	37.2
Employment rate (25 to 54)	81.6	82.1	82.5	81.7	81.4	82.0	82.5	83.5	79.5	79.1
Employment rate (55 to 64)	36.3	37.1	40.8	42.3	42.7	44.5	45.2	46.0	43.3	44.7
% Part-time workers	5.3	4.9	4.9	5.0	4.9	4.9	5.0	5.0	7.2	18.2
% Temporary contracts	8.1	8.0	8.1	9.2	9.1	8.6	8.7	8.6	9.6	14.5
% Employment Services	56	56.2	56.9	57.5	57.6	57.9	58.2	58.4	62.0	68.9
% Employment Industry	39.1	39.2	38.8	38.3	38.4	38.3	38.1	38.0	31.6	24.8
% Employment Agriculture	4.8	4.6	4.3	4.2	4.0	3.8	3.7	3.5	6.3	6.2
Activity rate (15 and 64)	71.2	70.7	70.4	70.2	69.9	70.4	70.3	69.9	68.2	70.5
Activity rate (15 and 24)	43.9	41.1	38.3	35.8	34.6	34.0	33.5	31.9	37.0	44.0
Activity rate (25 and 54)	88.5	88.4	88.2	88.0	87.8	88.3	88.2	87.8	84.3	84.4
Activity rate (55 and 64)	38.1	38.6	41.9	44.3	44.9	46.9	47.7	48.2	45.3	47.3

Source: Eurostat

New employment has been spread evenly across secondary and tertiary sectors. Many jobs have been created in industrial manufacturing as well as property services and financial intermediation, reflecting the Czech Republic's growing services sector. The share of employment in services has been growing steadily, although it is still somewhat below EU-10 and EU-27 averages, while employment in industry has declined only marginally since 2000.

About 95% of recent employment has been taken by those educated to secondary school level and above (Czech Statistical Office, 2008[6]). Employment rates have risen for all age cohorts while a marked rise in the vacancy rate has also highlighted tensions in the labour market, including skills shortages, which may constrain further employment growth towards the

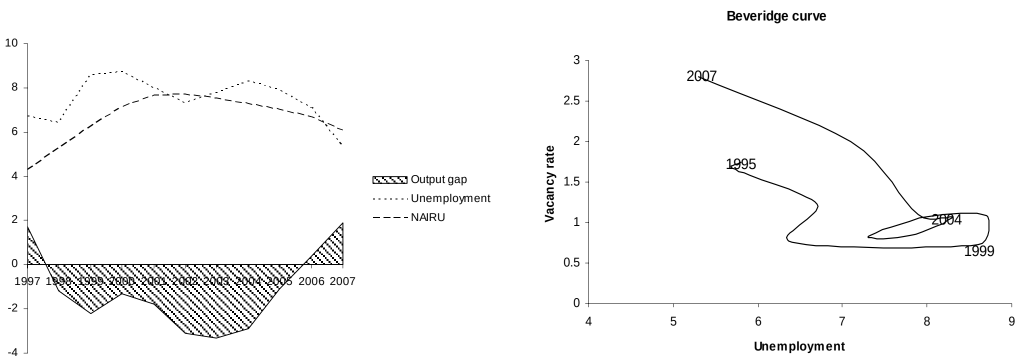
[6] Czech Statistical Office (2008), Labour and social statistics.

Lisbon target of seventy per cent. In 2007, the employment rate of all age cohorts rose above the EU-10 and EU-27 with the exception of younger workers (15–24). Unemployment is lowest for university graduates underlining the demand for higher skills.

During the transition period to a market economy the Czech Republic maintained low unemployment, in contrast to Hungary and Poland where unemployment rose steeply. This was partly attributable to the strength of the industrial base as well as favourable lending conditions extended by the partially state-owned banking sector which provided a cushion for enterprises. A temporary rise in unemployment, normally associated with transition, was delayed until the recession of 1997, when it increased from 5½% in 1996 to over 8½% in 1999 as a result of a steep rise in labour costs. Following the recession, unemployment remained at around 8% until 2005, during which the Czech Republic went through a long period of relatively 'jobless' growth with rising productivity and capital deepening accounting for nearly all output growth. Since 2005 unemployment has fallen sharply, similar to the situation in other new member states following an upswing in demand. Unemployment is currently at about 5% which is the lowest level since the recession and below the estimated NAIRU.

Figure 1: Cyclical factors and tensions in the Czech labour market

Unemployment, NAIRU and output gap Beveridge curve for Czech Republic



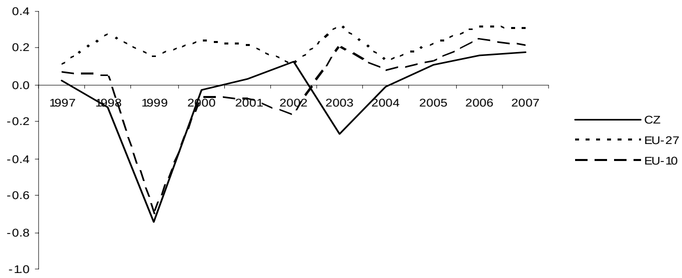
Source: Eurostat, Czech statistical office, Commission services

The Beveridge curve (Figure 1) represents the relationship between the vacancy rate and unemployment. Typically the curve slopes downwards from left-to-right as higher levels of unemployment tend to be associated with lower vacancy rates. The Beveridge curve for the Czech Republic shows that low unemployment before the on-set of the recession in 1997 was accompanied by frictions in the labour market, as the number of vacancies was relatively high. The vacancy rate dropped considerably during the recession when unemployment was rising and more workers came on to the job market. The reduction in unemployment started to regain momentum in 2004, accompanied by a rise in the vacancy rate, but the Beveridge curve seems to have shifted upwards, despite a strong increase in capacity utilization (IMF, 2008[7]) suggesting increasing friction in the labour market. One reason for the shift in the Beveridge curve appears to be the skills shortage in the economy, resulting from a growing demand for higher skills.

[7] IMF (2008), Czech Republic Staff Report for the 2008 Article IV Consultation.

Similar to other new member states, the Czech Republic went through a long period of growth up to 2004 without significant increases to employment. During the period 1995-2004, the contribution of labour to gross value added was low while positive for all industries (EU Klems, 2007[8]). Since 2004, the elasticity of employment to growth has been increasing. This is a result of the growth in labour intensive sectors such as construction and services; structural conditions in the labour market have not changed significantly. The service sector as a whole is likely to become an increasingly important source of future job growth as the economy continues to develop along a path of *tertiarization*.

Figure 2: Employment elasticity of growth

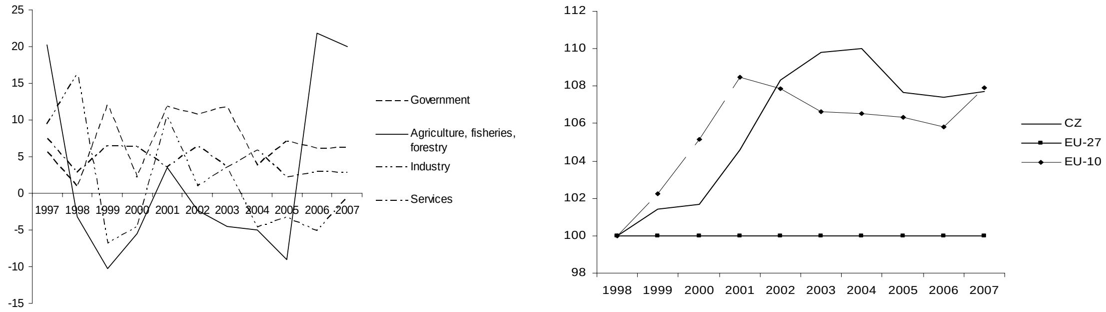


Source: Eurostat, Commission services

Despite the tightening labour market nominal unit labour costs have grown less strongly than the EU-10 average and are closer to the EU-27 average than in 2004. Average nominal wage growth increased from 6½ per cent in 2004 to 9 per cent in 2007 reflecting increasing demand for labour as well as higher inflation expectations. Over the last five years, government sector wages have grown most strongly, from a relatively lower starting base, while wages in industry have declined. Wages in the agricultural sector have risen steeply in the last two years. This may be a consequence of labour mobility into higher paid sectors (average wages are less than half those in the service sector) creating supply pressures.

Figure 3: Wage growth and comparative wage costs

Nominal wage growth (annual percentage change) | Nominal unit labour costs (relative to EU-27)



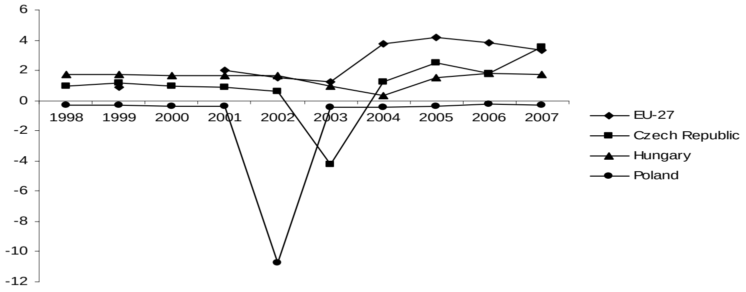
Source: Eurostat

In contrast to some other new member states, the Czech Republic has not experienced a strong outflow of workers. Annual net immigration was only negative in 2003 in the lead up to accession. Net migration has been slightly positive over the past ten years and has recently increased to about the EU average (3.5 migrants per 1000 inhabitants) as a consequence of

[8] The EU-Klems productivity report (2007), University of Groningen, Issue 1, March 2007.

strong growth in the economy. However, given skill shortages in the labour market, the government has recently increased the provision to attract workers from abroad. In August 2008, a system of greencards was introduced for foreign workers to simplify the previous system based on residence permits and working visas. Foreign workers are able to apply for any job not taken by an EU national if the job remains unfilled after thirty days.

Figure 4: Net migration (per 1000 inhabitants)



Source: Eurostat

2. IMPACT OF LABOUR MARKET ON PUBLIC FINANCES

The proportion of government revenues directly related to the labour market (social contributions and taxes on income and wealth[9] paid by households) is below the EU average. The Czech Republic has higher than average social contributions but these are outweighed by relatively low labour tax. In 2007, revenues directly related to the labour market counted 20.8% of GDP compared with 23.9% of GDP in the EU as a whole. Direct taxes are also lower as a proportion of overall revenue than the EU average. Revenues derived from the labour market will also fall as a result of changes in the stabilisation package: personal taxation ad social contributions were lowered in 2008 and social contributions are set to be reduced further.

With respect to government expenditure directly related to the labour market, the Czech Republic has lower expenditure on social benefits than the EU average as a proportion of GDP. In 2006, expenditure on social benefits other than social transfers in kind was 12.8% of GDP compared with an EU average of 15.1% of GDP. Expenditure on social benefits is also lower as a proportion of overall expenditure than the EU average. The proportion of spending on social benefits other than social transfers in kind has increased over the past five years reflecting discretionary increases. However, as a result of measures in the stabilisation package the proportion of expenditure on social benefits is likely to decline below 12% of GDP.

Therefore, given the lower proportion of revenue and expenditure compared to EU averages, public finances in the Czech Republic are *prima facie* less sensitive to the performance of the labour market and, as a result of recent legislative changes, the sensitivity will decline further in the near term. This is reflected in the estimated elasticities of revenue and expenditure components to output[10] (EC, 2005). Personal income tax has a lower elasticity than the EU average, which is most likely a reflection of a low level of average income tax combined with low progressivity of tax rates. The elasticity of social contributions is higher than the EU

[9] Wealth and income taxes are aggregated by Eurostat. This measure has been used for comparative purposes.
[10] European Commission (2005) New and updated budgetary sensitivities for the EU budgetary surveillance.

average due to the high level of social contributions while elasticity of unemployment expenditure is below average.

Figure 5: Theoretical elasticities of labour market revenue and expenditure

	Personal income tax	Social contributions	Expenditure
CZ	1.19	0.8	-0.02
EU-25	1.35	0.72	-0.12

Source: Commission services

In consideration of the recent performance of the labour market and the impact on public finances, over the period 2002-2007 government revenue from social contributions and current taxes on income and wealth increased from 19.6 to 20.6% of GDP, providing an annual boost to government revenues of about 0.15% of GDP. The increase was, however, substantially due to a discretionary rise in social contributions in 2004 estimated to have a fiscal impact of 1% of GDP[11] related to increased contributions for self-employed workers[12]. After extracting the influence of wealth taxes, the level of which is below the EU average, individual income tax declined as a percentage of GDP from 4.7 per cent to 4.3 per cent[13]. By EU comparison, the proportion of government revenue from social contributions and current taxes on income and wealth in the EU-27 fell from 27.6% to 26.4% of GDP.

Over the same period, expenditure on social benefits other than transfers in kind increased from 12.4 to 12.8% of GDP. However, this appears to be mostly a reflection of discretionary increases given that unemployment fell during the period. In particular, in 2007 spending on social benefits other than transfers in kind rose by 0.2% of GDP while unemployment fell by 1.9 per cent. This was due to discretionary increases in social expenditure estimated to have a negative fiscal impact of approximately 1% of GDP[14]. Therefore, without the discretionary increase in 2007 it is likely that expenditure on social benefits would have been significantly lower, in the region of 12% of GDP, representing a decline in social benefit expenditure of approximately ½% of GDP compared to 2002. By comparison, for the EU-27 average expenditure on social benefits other than transfers in kind declined from 15.8 to 15.2% of GDP and for the new member states from 14.1% to 12.8% of GDP. In this respect, after extracting the influence of discretionary measures, the reduction in social benefit expenditure appears to be similar to the falling trend in the EU-27. However, social benefit expenditure was at a much lower base in 2002 in the Czech Republic than the average for the EU-27.

[11] Based on estimates in the May 2004 convergence programme.
[12] Self-employed workers make up approximately twenty per cent of the Czech work force, one of the highest proportions in the EU.
[13] Based on figures in the April 2007 Fiscal Outlook published by the Czech Ministry of Finance.
[14] Based on estimates in the December 2007 update of the convergence programme of the Czech Republic.

Table 2: Revenue and expenditure directly related to the labour market (% of GDP)

	2002	2003	2004	2005	2006	2007
Taxes on income and wealth	4.7	5	4.9	4.7	4.4	4.4
- of which individual income taxation	4.7	4.9	4.8	4.6	4.2	4.3
Social contributions	14.9	15.1	16.1	16.2	16.3	16.2
Social benefits other than in kind	12.4	12.2	12.9	12.6	12.7	12.8
Balance	7.2	7.8	8	8.2	7.8	7.7

Source: Eurostat, Czech statistical office

In summary, over the period from 2002–2007, the balance of revenue and expenditure directly related to the labour market including discretionary measures increased by ½% of GDP, based on an increase in social contributions of about 1.3 percentage points of GDP, a decline in individual taxation of 0.4 percentage points of GDP, and an increase in social benefits other than in kind of 0.4 percentage points of GDP. In terms of sensitivity, public finances in the Czech Republic appear less sensitive to swings in the labour market than the EU average due to lower levels of labour market related revenue and social expenditure, as a percentage of GDP, as well as generally lower elasticities to output. Furthermore, potential falls in equity and property prices during the anticipated slowdown would have only a marginal impact on government revenue, given that wealth taxes were approximately 0.1% of GDP annually from 2002-2007.

3. Flexibility of the Czech labour market

This section assesses the main structural factors underpinning the Czech labour market. The Czech labour market has been grouped together with the Visegrad group of countries which are considered to operate a similar employment system; the so-called *Eastern European employment system* (Philips and Eamets, 2007[15]). In general, this system is noted for relatively low mobility, high long-term unemployment, limited employment participation in older cohorts, and a lower level of social security than in EU-15 countries (EC, 2006[16]).

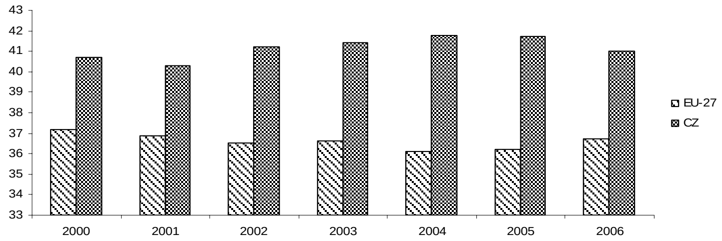
3.1. Labour taxation

The level of labour taxation, including social contributions paid by employers and employees, can influence the dynamism of a labour market by conditioning both supply and demand. In general, lowering average effective tax rates tends to encourage workers into the labour market, while lowering marginal tax rates tends to encourage longer working.

Prior to the introduction of a *flat-tax* on personal income effective from 2008 (Figure 5), the implicit tax rate on labour in the Czech Republic was slightly higher than the EU-15 average, and above rates in neighbouring new member states. This is mainly due to a high level of social contributions. The tax changes effective from 2008 will reduce the implicit rate of tax further to approximately 39.7 per cent, based on figures in the December 2007 update of the convergence programme, while this is still somewhat higher than the EU-27 average.

[15] Philips, K., Eamets, R. (2007), Approaches to flexicurity: EU models, European Foundation for the Improvement of Living and Working Conditions.
[16] Employment Commission (2006), Employment in Europe 2006.

Figure 6: Implicit rate of labour taxation



Source: Eurostat

In association with labour taxation, the minimum wage and the level of out-of-work benefits and can also potentially affect labour market flexibility. The minimum wage in the Czech Republic is similar to that of Poland and Hungary and does not appear to be a significant supply factor given that it only affects two per cent of the workforce. With regard to out-of-work benefits, net replacement rates are comparable with neighbouring eastern European countries and lower than the EU-15 average (OECD, 2006[17]).

[17] OECD (2006), OECD Employment outlook 2006.

Box 1: Recent changes to labour taxation and benefits

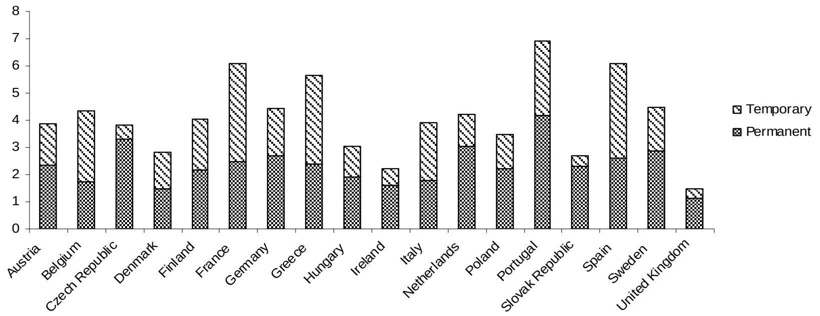
The Czech government introduced a package of legislation in 2007, effective from 1 January 2008, which reduced labour taxation and social benefits. In place of a system of several marginal rates, a flat tax of 15 per cent on personal income was introduced. The system followed the implementation of similar flat taxes in several new member states. The tax will be levied on an expanded base of gross earnings plus social security contributions implying an average effective tax rate of 23%. While due to the effect of tax credits, social security contributions and means tested social benefits, it will also give rise to several marginal rates (OECD, 2008[18]). In terms of influencing labour supply, the reform will reduce effective tax rates at the top and bottom of the earnings scale (IMF, 2008). In addition, the implicit tax rate on high earners will be substantially reduced by capping social security contributions to four times the average gross wage. In addition to a reduction in personal income tax, employment growth may be stimulated by a reduction in the corporate income tax rate which was lowered from 24% to 21%, with further reductions planned up to 2010 to 19%, while the tax base will be gradually expanded. In the 2009 budget, social contributions paid by employees were lowered by 1.5 percentage points. On the side of benefits, rules for claiming out-of-work benefits have been tightened and social and welfare benefits have been reduced. In particular, poverty relief assistance will be only offered to long-term unemployed who demonstrate sufficient efforts to obtain employment, e.g. re-training; otherwise benefit will be reduced. Those made redundant due to gross professional misconduct will lose their entitlement to unemployment benefit and claimants found to be working will be debarred for six months. A number of social and welfare benefits will be reduced including child benefits, social care allowances, parental allowances and maternity benefits. The level of most social care benefits will cease to be derived from the minimum subsistence level (defined as a fixed amount) and will be set on a discretionary basis. The minimum subsistence and existence levels will also cease to be indexed automatically. In August 2008, the period of unemployment benefits was reduced from six to five months for those below the age of 50; from nine to eight months for those below 55, and from 12 to 11 months for those over 55. Eligibility criteria were also tightened.

3.2. Employment protection legislation

Employment protection legislation has an important influence on the flexibility of a labour market by setting parameters around hiring and retention. Stringent employment protection legislation can reduce activity in a labour market and, in particular, restrict the opportunities of particular groups, for example, the low skilled or those re-entering the job market after a long period of absence. In this respect, there is a perceived relationship between the stringency of employment law and long-term unemployment (EC, 2006).

[18] OECD (2008), 2008 Czech Republic Economic Review.

Figure 7: Employment protection legislation in the European Union



Source: OECD 2004[19]

Similar to other new member states, the Czech Republic inherited stringent employment protection legislation from the pre-transition era on permanent employment while temporary employment is relatively lightly regulated (EC, 2006). In particular, there are tight conditions on the dismissal of employees on permanent contracts (Munich, 2006[20]) and the costs of dismissal are largely fixed irrespective of the duration of employment (OECD, 2008). There have been two notable revisions to employment protection legislation. In 2003, employment protection was slightly increased by restricting the use of fixed-term contracts. The duration of fixed-term contracts was limited to 24 weeks where as no limit had existed beforehand. In January 2007, a new labour code was introduced which, in general, strengthened the position of the unions and work councils by abolishing several restrictions regarding freedom of association and giving a greater role to collective bargaining. The level of employment protection was largely maintained; while the statutory period of notice was reduced from three to two months, the duration of severance pay was increased from two to three months and dismissal conditions were not lowered according to the length of tenure.

Although employment rates have increased significantly during the recent period of high growth, further increases may be tempered by low levels of non-standard employment. Employment in the Czech labour market is predominantly on the basis of permanent contracts; less than 5% of employees are part-time. This is much lower than the EU average and can be linked to a number of factors. In the pre-transition era, permanent full-time employment was the norm. Following transition, the basic structure of permanent employment was maintained while a combination of long working hours (the second highest in the EU) and a high degree of shift work, appears to have absorbed some of the demand for non-standard employment. The structure of the economy may also have contributed. Employment in the secondary sector is the highest in the EU, reflecting the strength of the manufacturing sector, while the size of the tertiary sector is below the EU average.

Given the expansion of the service sector demand for non-standard employment is likely to increase in line with the EU as a whole where over half of all employment creation from 2000-2005 was in non-standard employment (EC, 2006). In contrast, over this period the share of part-time employment in the Czech Republic actually decreased. Hence, close attention should be given to the conditions surrounding part-time and temporary work. The tax wedge on part-time work may also be prohibitive given that there is a minimum healthcare contribution equal to the contribution on a full-time minimum-wage job (OECD, 2008).

[19] OECD (2004), OECD Employment Outlook 2004.
[20] Munich, D. (2006), Contribution to the EEO Autumn Review 2006 ‘Flexicurity’.

In summary, the flexibility/adaptability of the Czech labour market does not appear to be restricted by current levels of labour taxation and out-of-work benefits. However, relatively heavy employment protection legislation on permanent employment may hinder employment growth over the long-term.

4. PARTICIPATION AND SKILLS IN THE CZECH LABOUR MARKET

Employment rates have risen strongly over the recent phase of record growth; both overall employment and male employment have risen above the EU-27 average and are substantially higher than in neighbouring member states such as Hungary and Poland. However, while employment growth has been strong, a high vacancy rate is indicative of skills shortages in the labour market and participation remains limited in certain groups. Compared to the OECD average, participation is low for older workers (aged 50-55); women aged (20–40) and young people (aged 19-30) (OECD, 2008). In addition, despite record growth since 2005, long-term unemployment has risen since 2004 and is significantly above the EU average.

Low participation amongst a section of older workers may be partly a legacy of transition. When the Czech economy started to restructure at the end of the nineties, many older workers faced the challenge of acquiring new skills and jobs at the same time as a fall-off in demand. Between 1998 and 2001, long-term unemployment rose from 30 to 50 per cent, highlighting the extent of the structural shift in the economy. On the other hand, participation of older workers approaching retirement age (55-64) is above the EU-27 average and considerably higher than in Poland and Hungary. This may be due to the Czech pension system which provides relatively little incentive for early retirement compared to Poland, Hungary and Slovakia (World Bank, 2007[21]).

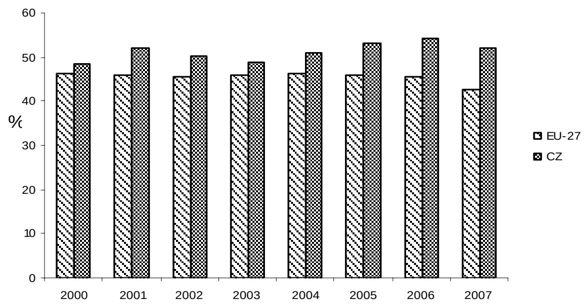
Low participation amongst women of fertility age may be partly related to maternity provision. The Czech Republic provides for a relatively long period of up to four years paid parental leave which may make a return to the labour market difficult. Participation of younger people may be partly restricted by the limited possibilities for non-standard employment as well as high completion rates of secondary education. It also appears to be linked to educational achievement given that the rate of unemployment of younger men is higher than that of younger women (Czech Statistical Office, 2008) which corresponds with a far higher proportion of males leaving secondary education without basic qualifications.

4.1. Structural unemployment and mobility

Long-term unemployment concerns all groups of the Czech labour market and seems primarily linked to skills-mismatches and restricted regional mobility. Over fifty percent of long-term unemployed are concentrated in three regions: Moravskoslezsky, Ustecky and Jihomoravsky which have been the focus of industrial restructuring. While new jobs have been created in the tertiary sector, jobs have been lost in industrial manufacturing, mining and metallurgy. Low regional mobility has intensified the impact of localised job losses. This has been linked in part to the persistence of a large proportion of state controlled rents which reduce the stock of rentable property in high growth regions (OECD, 2008) and push other rents higher. Moreover, areas of high unemployment are more likely to have devalued housing stock further constraining mobility.

[21] World Bank (2007), Labour markets in EU8+2: from the shortage of jobs to the shortage of skilled workers, Regular Economic Report, September 2007.

Figure 8: Long-term unemployment (% of unemployed)



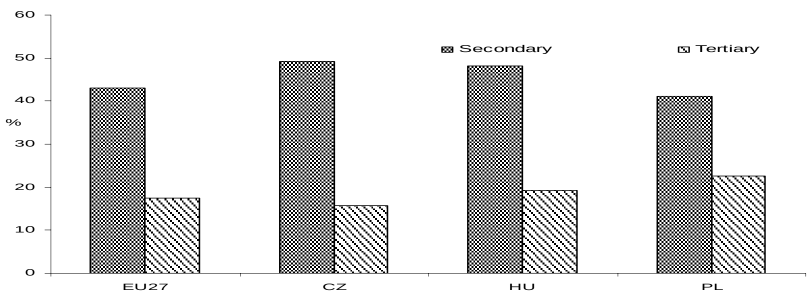
Source: Eurostat (2007)

Similar to the picture for overall unemployment, long-term unemployment is linked to educational attainment, while a greater proportion of long-term unemployed lack basic education (CSO, 2008). In terms of public support, there still appears to be room to increase expenditure to assist job seekers back into employment. The Czech Republic scores poorly on active labour market policies (ALMP) as a whole where spending is particularly low compared to other EU countries (EC, 2006). Participation in life long-learning is also relatively poor in the Czech Republic compared to the EU average, particularly amongst unemployed low-skilled and low-educated workers (Munich, 2006).

4.2. Education system and skills shortages

As a whole there is a strong link between unemployment and education. Over seventy per cent of unemployed have only primary education or secondary education without qualifications, and on average less than five per cent of university graduates are unemployed (Czech Statistical office, 2008)[22].

Figure 9: Participation rates in secondary and tertiary education



Source: Eurostat (2006)

The Czech Republic has the highest participation rate in the EU for secondary level education while a smaller percentage of students attend university level institutions than the EU-average, and less than in Poland and Hungary. Investment in tertiary education is also below average. In order to manage growing demand for tertiary education, the introduction of tuition fees has been proposed (OECD, 2008). However, while introducing fees would manage demand in the tertiary sector, an increase in the supply of tertiary education should also be considered in hand with further investment given the growing demand for higher skills.

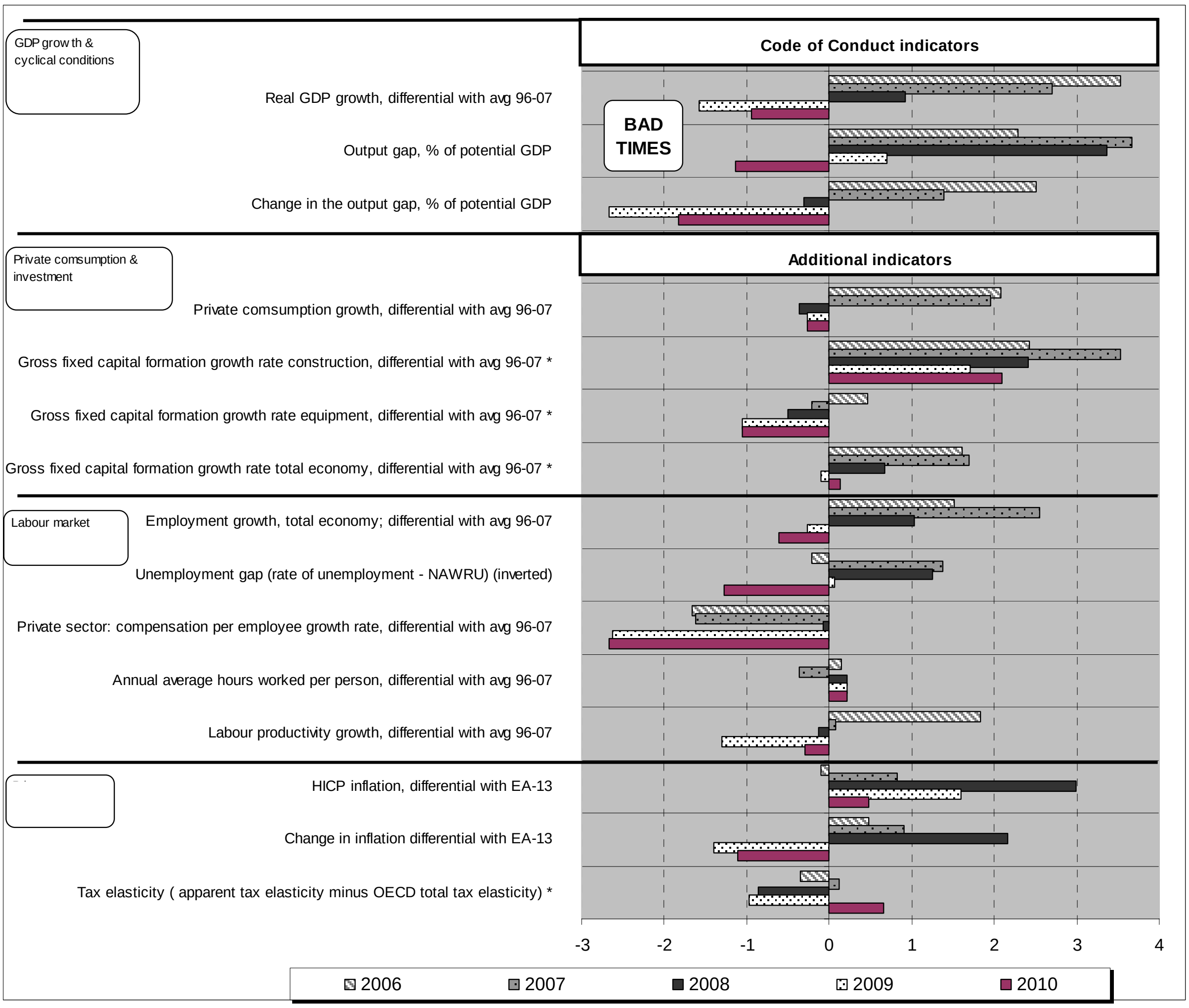
[22] Czech Statistical Office (2008), Labour and social statistics.

5. CONCLUSION

Similar to other new member states, the Czech labour market went through a phase of relatively jobless growth from the late nineties up to 2004. During this period unemployment remained high while growth was driven by rising productivity and capital deepening. Employment has increased strongly during the recent period of high output growth, which has had a positive effect on public finances. Public finances appear relatively less sensitive to swings in the labour market, compared to the EU average, given comparatively low levels of related taxation and expenditure. The rise in employment has highlighted supply-side constraints, in particular the growing demand for higher skills. The Czech economy has benefitted from a well educated work force but the education system is in need of further development at the tertiary level. The outward shift in the Beveridge curve indicates tensions in the Czech labour market have increased which may be related to skills shortages, in particular stemming from the education system and low investment in retraining. Furthermore, the high level of employment protection on permanent employment may still hamper long-term employment growth. Permanent employment has grown while non-standard employment still appears to be restricted even though this is type of employment is likely to become more important as the service sector grows.

ANNEX 2. ADDITIONAL TABLES AND FIGURES

Figure 1: Good and bad economic times



* These variables have been divided by their standard deviation over the period 2003-2010, with a view to reducing their variability relative to other variables in the figure.

Source: Commission services' January 2009 forecast (COM)

Table 1: Budgetary implementation in 2008

	2007		2008	
	Planned CP Nov 2007	Outcome CP Dec 2008	Planned CP Nov 2007	Outcome CP Dec 2008
Government balance (% of GDP)	-3,4	-1,0	-2,9	-1,2
Difference compared to target	**2,5**		**1,7**	
Of which : due to a different starting position end 2007			1,2	
due to different revenue / expenditure growth in 2008			-0,9	
p.m. Denominator effect and residual [2,3]			-0,1	
p.m. Nominal GDP growth (planned and outcome)			8,3	6,9
Revenue (% of GDP)	39,8	41,7	39,5	41,0
Revenue surprise compared to target [1]	**1,8**		**1,5**	
Of which : due to a different starting position end 2007			1,8	
due to different revenue growth in 2008			-0,8	
p.m. Denominator effect [2]			0,5	
p.m. Residual [3]			0,0	
p.m. Revenue growth rate (planned and outcome)			7,3	5,2
Expenditure (% of GDP)	43,3	42,6	42,4	42,2
Expenditure surprise compared to target [1]	**0,6**		**0,2**	
Of which : due to different starting position end 2007			0,6	
due to different expenditure growth rate in 2008			0,1	
p.m. Denominator effect [2]			-0,5	
p.m. Residual [3]			0,0	
p.m. Expenditure growth rate (planned and outcome)			6,1	5,9

Notes:

[1] A positive number implies that the outcome was better (in terms of government balance) than planned.

[2] The denominator effect captures the mechanical effect that, if GDP turns out higher than planned, the ratio of revenue or expenditure to GDP will fall because of a higher denominator. Although the denominator effect can be very significant for revenue and

[3] The decomposition leaves a small residual that cannot be assigned to the previous components. The residual is generally small, except in some cases where planned and actual growth rates of revenue, expenditure and GDP differ significantly.

Source : Commission services

Table 2: Evolution of budgetary targets in successive programmes

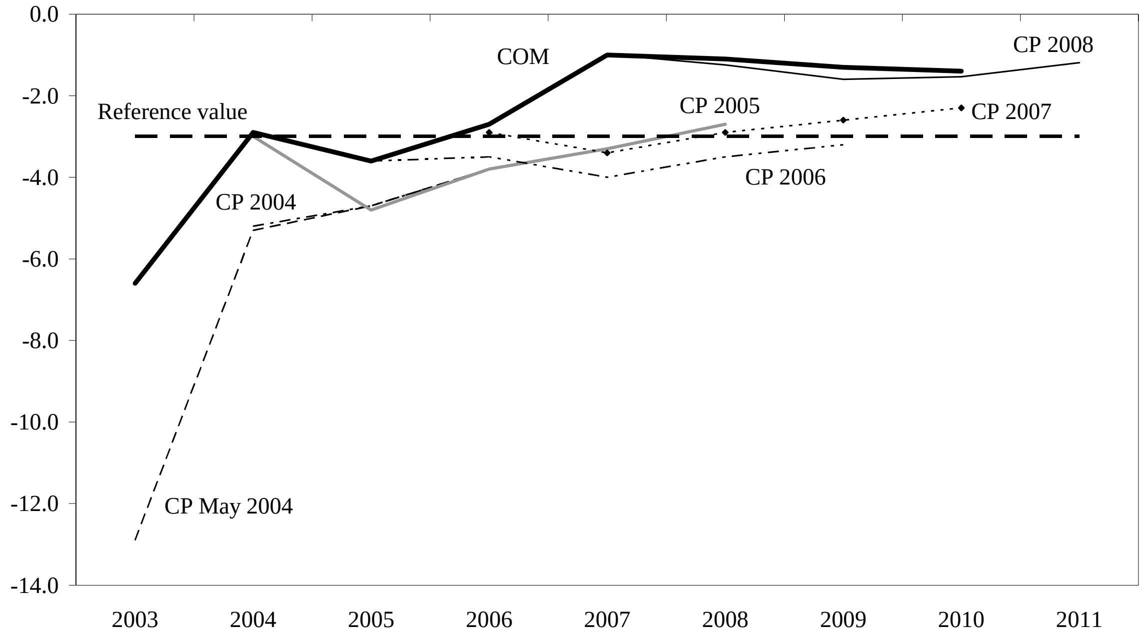
		2007	2008	2009	2010	2011
General government balance (% of GDP)	**CP Dec 2008**	**-1,0**	**-1,2**	**-1,6**	**-1,5**	**-1,2**
	CP Nov 2007	*-3,4*	*-2,9*	*-2,6*	*-2,3*	*n.a.*
	COM Nov 2008	-1,0	-1,2	-2,5	-2,3	n.a.
General government expenditure (% of GDP)	**CP Dec 2008**	**42,6**	**42,2**	**42,2**	**41,1**	**40,2**
	CP Nov 2007	*43,3*	*42,4*	*40,7*	*39,4*	*n.a.*
	COM Nov 2008	42,6	42,0	43,2	43,4	n.a.
General government revenue (% of GDP)	**CP Dec 2008**	**41,7**	**41,0**	**40,6**	**39,6**	**39,0**
	CP Nov 2007	*39,8*	*39,5*	*38,1*	*37,1*	*n.a.*
	COM Nov 2008	41,6	40,7	40,7	41,1	n.a.
Structural balance[1] (% of GDP)	**CP Dec 2008**	**-1,7**	**-1,9**	**-1,7**	**-1,3**	**-1,1**
	CP Nov 2007	*-4,1*	*-3,4*	*-2,8*	*-2,5*	*n.a.*
	COM Nov 2008	-2,1	-2,4	-2,8	-1,9	n.a.
Real GDP (% change)	**CP Dec 2008**	**6,6**	**4,4**	**3,7**	**4,4**	**5,2**
	CP Nov 2007	*5,9*	*5,0*	*5,1*	*5,3*	*n.a.*
	COM Nov 2008	6,0	4,2	1,7	2,3	n.a.

Note:

[1]Cyclically-adjusted balance excluding one-off and other temporary measures. Cyclically-adjusted balances according to the programmes as recalculated by the Commission services on the basis of the information in the programmes. One-off and other temporary measures are [X.X% of GDP in Year and X.X% in Year; all deficit-reducing. Quantify one-offs in each year that they're not zero. Edit text as required] according to the most recent programme and [X.X% of GDP in Year and X.X% in Year; all deficit-reducing. Quantify one-offs in each year that they're not zero. Edit text as required] according to the Commission services' autumn forecast.

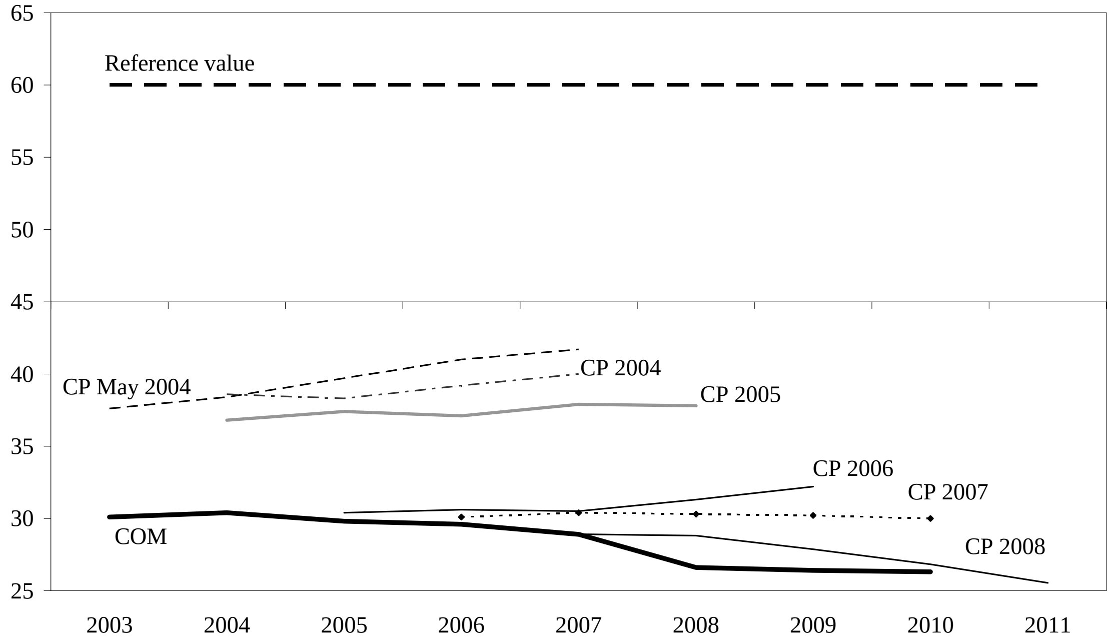
Source :
Convergence programmes (CP); Commission services' January 2009 Interim economic forecasts (COM)

Figure 2: Government balance projections in successive programmes (% of GDP)



Source: Commission services' January 2009 interim forecast (COM) and successive convergence programmes

Figure 3: Debt projections in successive programmes (% of GDP)



Source: Commission services' January 2009 interim forecast (COM) and successive convergence programmes

Table 3: Long-term age-related expenditure: main projections

(% of GDP)	2004	2010	2020	2030	2040	2050	Change 2010- 50
Total age-related spending	**19.3**	**18.8**	**19.2**	**21.0**	**24.1**	**26.4**	**7.6**
- Pensions	8.5	8.2	8.4	9.6	12.2	14.0	5.8
- Healthcare	6.4	6.8	7.4	7.8	8.1	8.4	1.6
- Long-term care	0.3	0.3	0.4	0.5	0.6	0.7	0.4
- Education	3.8	3.3	2.8	3.0	3.0	3.1	-0.2
- Unemployment benefits	0.2	0.2	0.2	0.2	0.2	0.2	0.0
Property income received	**0.7**	**0.7**	**0.6**	**0.5**	**0.5**	**0.4**	**-0.3**

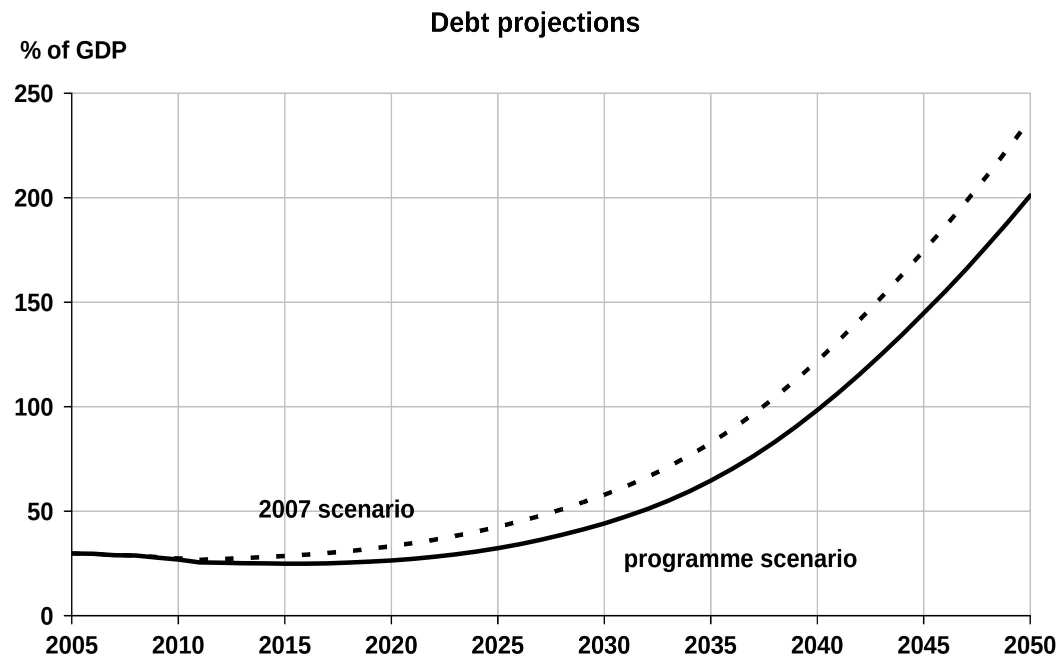
Source: Economic Policy Committee and Commission services.

Table 4: Sustainability indicators and the required primary balance

	2008 scenario			Programme scenario		
	S1	**S2**	**RPB**	**S1**	**S2**	**RPB**
Value	3.1	6.1	5.6	2.5	5.5	5.6
of which:						
Initial budgetary position (IBP)	1.1	1.2	-	0.5	0.6	-
Debt requirement in 2050 (DR)	-0.6	-	-	-0.6	-	-
Long-term change in the primary balance (LTC)	2.7	4.9	-	2.7	4.9	-

Source: Commission services.

Figure 4: Long-term projections for the government debt ratio



Annex 3: Code of conduct compliance and standard tables from the programme

The update adheres to the code of conduct with respect to its table of contents. With respect to optional data, the following were not provided: COFOG data for 2011, liquid financial assets and net financial debt with respect to government debt.

The tables on the following pages show the data presented in the November 2008 update of the convergence programme, following the structure of the tables in Annex 2 of the code of conduct. Compulsory data are in bold, missing data are indicated with grey-shading.

Table 1a. Macroeconomic prospects

	ESA Code	2007	2007	2008	2009	2010	2011
		Level	rate of change	rate of change	rate of change	rate of change	rate of change
1. Real GDP	B1*g	*3427.0*	6.6	4.4	3.7	4.4	5.2
2. Nominal GDP	B1*g	*3551.4*	10.4	6.9	5.8	7.4	7.7
Components of real GDP							
3. Private consumption expenditure	P.3	*1659.8*	5.9	3.3	3.9	4.2	4.2
4. Government consumption expenditure	P.3	*687.9*	0.5	1.1	0.5	0.0	0.0
5. Gross fixed capital formation	P.51	*838.2*	5.8	5.1	4.5	6.2	7.0
6. Changes in inventories and net acquisition of valuables (% of GDP)	P.52 + P.53	*95.5*	2.7	1.6	1.9	1.7	1.7
7. Exports of goods and services	P.6	*2821.8*	14.6	11.6	7.1	9.3	10.7
8. Imports of goods and services	P.7	*2676.1*	13.8	9.3	7.1	8.8	9.7
Contributions to real GDP growth							
9. Final domestic demand		-	4.4	3.0	3.1	3.6	3.7
10. Changes in inventories and net acquisition of valuables	P.52 + P.53	-	1.1	-0.9	0.2	0.0	0.0
11. External balance of goods and services	B.11	-	1.1	2.2	0.4	0.9	1.5

Table 1b. Price developments

	ESA Code	2007	2007	2008	2009	2010	2011
		Level	rate of change	rate of change	rate of change	rate of change	rate of change
1. GDP deflator		*118.6*	3.6	2.4	2.1	2.9	2.4
2. Private consumption deflator		*114.0*	2.8	5.8	2.5	2.8	2.2
3. HICP[1]		*105.1*	3.0	6.4	2.9	3.0	2.5
4. Public consumption deflator		*131.9*	3.7	3.7	2.7	3.0	3.0
5. Investment deflator		*104.3*	2.2	1.9	0.7	0.7	0.7
6. Export price deflator (goods and services)		*93.6*	0.2	-5.6	1.2	3.3	2.0
7. Import price deflator (goods and services)		*88.6*	-1.0	-4.3	1.4	2.5	1.6

[1] Optional for stability programmes.

Table 1c. Labour market developments

	ESA Code	2007	2007	2008	2009	2010	2011
		Level	rate of change	rate of change	rate of change	rate of change	rate of change
1. Employment, persons[1]		*5161.7*	1.8	1.7	0.7	0.3	0.3
2. Employment, hours worked[2]		*10.1*	1.0	0.8	0.2	0.2	0.2
3. Unemployment rate (%)[3]		*5.3*	5.3	4.4	4.4	4.6	4.7
4. Labour productivity, persons[4]		*663.9*	4.7	2.6	2.9	4.1	4.9
5. Labour productivity, hours worked[5]		*340.7*	5.5	3.6	3.5	4.3	5.0
6. Compensation of employees	D.1	*1512.7*	9.1	9.1	8.0	6.9	7.5
7. Compensation per employee		*358.1*	7.1	7.3	7.3	6.7	7.3

[1]Occupied population, domestic concept national accounts definition.

[2]National accounts definition.

[3]Harmonised definition, Eurostat; levels.

[4]Real GDP per person employed.

[5]Real GDP per hour worked.

Table 1d. Sectoral balances

% of GDP	ESA Code	2007	2008	2009	2010	2011
1. Net lending/borrowing vis-à-vis the rest of the world	B.9	-0.8	-1.0	-0.5	0.4	1.2
of which : - Balance on goods and services		5.0	5.4	5.4	6.7	8.1
- Balance of primary incomes and transfers		-6.5	-7.8	-7.5	-8.0	-8.6
- Capital account		0.7	1.3	1.6	1.7	1.6
2. Net lending/borrowing of the private sector	B.9	0.2	0.2	1.1	1.9	2.4
3. Net lending/borrowing of general government	EDP B.9	-1.0	-1.2	-1.6	-1.5	-1.2
4. Statistical discrepancy		0.0	0.0	0.0	0.0	0.0

Table 2. General government budgetary prospects

	ESA Code	2007 Level	2007 % of GDP	2008 % of GDP	2009 % of GDP	2010 % of GDP	2011 % of GDP
Net lending (EDP B.9) by sub-sector							
1. General government	S.13	*-34.9*	-1.0	-1.2	-1.6	-1.5	-1.2
2. Central government	S.1311	*-69.3*	-2.0	-1.6	-1.7	-1.5	-1.2
3. State government	S.1312	-	-	-	-	-	-
4. Local government	S.1313	*18.3*	0.5	0.0	0.0	0.0	0.0
5. Social security funds	S.1314	*16.1*	0.5	0.3	0.1	0.0	0.0
General government (S13)							
6. Total revenue	TR	*1470.3*	41.7	41.0	40.6	39.6	39.0
7. Total expenditure	TE[1]	*1505.2*	42.6	42.2	42.2	41.1	40.2
8. Net lending/borrowing	EDP B.9	*-34.9*	-1.0	-1.2	-1.6	-1.5	-1.2
9. Interest expenditure	EDP D.41	*40.9*	1.2	1.3	1.3	1.2	1.1
10. Primary balance[2]		*6.1*	0.2	0.0	-0.3	-0.4	-0.1
11. One-off and other temporary measures[3]		*-10.2*	-0.3	-0.1	0.0	0.0	0.0
Selected components of revenue							
12. Total taxes (12=12a+12b+12c)		*714.2*	20.2	19.5	19.4	18.9	18.6
12a. Taxes on production and imports	D.2	*385.4*	10.9	11.2	11.1	10.8	10.4
12b. Current taxes on income, wealth, etc	D.5	*328.0*	9.3	8.3	8.3	8.1	8.2
12c. Capital taxes	D.91	*0.8*	0.0	0.0	0.0	0.0	0.0
13. Social contributions	D.61	*576.7*	16.3	16.2	15.7	15.3	15.1
14. Property income	D.4	*29.1*	0.8	1.0	0.8	0.7	0.5
15. Other [4]		*150.3*	4.3	4.4	4.6	4.7	4.8
16=6. Total revenue	TR	*1470.3*	41.7	41.0	40.6	39.6	39.0
p.m.: Tax burden (D.2+D.5+D.61+D.91-D.995)[5]			36.6	35.7	35.1	34.2	33.7
Selected components of expenditure							
17. Compensation of employees + intermediate consumption	D.1+P.2	*487.7*	13.8	13.3	12.7	12.0	11.5
17a. Compensation of employees	D.1	*268.6*	7.6	7.3	7.1	6.9	6.8
17b. Intermediate consumption	P.2	*219.2*	6.2	6.0	5.6	5.1	4.8
18. Social payments (18=18a+18b)		*640.8*	18.2	17.8	17.9	17.5	17.0
18a. Social transfers in kind supplied via market producers	D.6311, D.63121, D.63131	*187.1*	5.3	5.3	5.4	5.4	5.3
18b. Social transfers other than in kind	D.62	*453.7*	12.9	12.4	12.4	12.1	11.8
19=9. Interest expenditure	EDP D.41	*40.9*	1.2	1.3	1.3	1.2	1.1
20. Subsidies	D.3	*62.5*	1.8	1.8	1.8	1.7	1.7
21. Gross fixed capital formation	P.51	*165.9*	4.7	4.8	5.2	5.3	5.4
22. Other[6]		*107.3*	3.0	3.2	3.4	3.4	3.5
23=7. Total expenditure	TE[1]	*1505.2*	42.6	42.2	42.2	41.1	40.2
p.m.: Government consumption (nominal)	P.3	*718.5*	20.4	19.8	19.4	18.6	17.8

[1]Adjusted for the net flow of swap-related flows, so that TR-TE=EDP B.9.

[2]The primary balance is calculated as (EDP B.9, item 8) plus (EDP D.41, item 9).

[3]A plus sign means deficit-reducing one-off measures.

[4] P.11+P.12+P.131+D.39+D.7+D.9 (other than D.91).

[5]Including those collected by the EU and including an adjustment for uncollected taxes and social contributions (D.995), if appropriate.

[6] D.29+D4 (other than D.41)+ D.5+D.7+D.9+P.52+P.53+K.2+D.8.

Table 3. General government expenditure by function

% of GDP	COFOG Code	**2006**	**2011**
1. General public services	1	5.0	n.a.
2. Defence	2	1.2	n.a.
3. Public order and safety	3	2.2	n.a.
4. Economic affairs	4	7.0	n.a.
5. Environmental protection	5	1.2	n.a.
6. Housing and community amenities	6	1.2	n.a.
7. Health	7	7.2	n.a.
8. Recreation, culture and religion	8	1.3	n.a.
9. Education	9	5.0	n.a.
10. Social protection	10	12.6	n.a.
11. Total expenditure (=item 7=23 in Table 2)	TE[1]	43.8	n.a.

[1]Adjusted for the net flow of swap-related flows, so that TR-TE=EDP B.9.

Table 4. General government debt developments

% of GDP	ESA Code	**2007**	**2008**	**2009**	**2010**	**2011**
1. Gross debt[1]		28.9	28.8	27.9	26.8	25.5
2. Change in gross debt ratio		-0.7	-0.1	-0.9	-1.0	-1.3
Contributions to changes in gross debt						
3. Primary balance[2]		-0.2	0.0	0.4	0.4	0.1
4. Interest expenditure[3]	EDP D.41	1.1	1.2	1.2	1.1	1.0
5. Stock-flow adjustment		1.0	0.7	-1.0	-0.6	-0.6
of which: - Differences between cash and accruals[4]		-0.4	-0.2	-0.1	-0.1	0.0
- Net accumulation of financial assets[5]		1.5	1.0	-0.9	-0.6	-0.6
of which: *- privatisation proceeds*		0.4	0.7	1.9	0.0	0.0
- Valuation effects and other[6]		-0.1	-0.2	0.0	0.0	0.0
p.m.: Implicit interest rate on debt[7]		3.9	4.2	4.3	4.2	4.1
Other relevant variables						
6. Liquid financial assets[8]		n.a.	n.a.	n.a.	n.a.	n.a.
7. Net financial debt (7=1-6)		n.a.	n.a.	n.a.	n.a.	n.a.

[1]As defined in Regulation 3605/93 (not an ESA concept).

[2]Cf. item 10 in Table 2.

[3]Cf. item 9 in Table 2.

[4]The differences concerning interest expenditure, other expenditure and revenue could be distinguished when relevant.

[5]Liquid assets, assets on third countries, government controlled enterprises and the difference between quoted and non-quoted assets could be distinguished when relevant.

[6]Changes due to exchange rate movements, and operation in secondary market could be distinguished when relevant.

[7]Proxied by interest expenditure divided by the debt level of the previous year.

[8]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	2007	2008	2009	2010	2011
1. Real GDP growth (%)		6.6	4.4	3.7	4.4	5.2
2. Net lending of general government	EDP B.9	-1.0	-1.2	-1.6	-1.5	-1.2
3. Interest expenditure	EDP D.41	1.1	1.2	1.2	1.1	1.0
4. One-off and other temporary measures[1]		-0.3	-0.1	0.0	0.0	0.0
5. Potential GDP growth (%)		5.1	5.2	5.0	4.8	4.8
contributions:						
- labour		0.1	0.4	0.4	0.3	0.1
- capital		1.0	1.1	1.1	1.1	1.2
- total factor productivity		4.0	3.8	3.5	3.4	3.5
6. Output gap		2.0	1.2	-0.1	-0.5	-0.1
7. Cyclical budgetary component		0.6	0.3	0.0	-0.1	0.0
8. Cyclically-adjusted balance (2 - 7)		-1.6	-1.6	-1.6	-1.4	-1.2
9. Cyclically-adjusted primary balance (8 + 3)		-0.4	-0.4	-0.4	-0.3	-0.1
10. Structural balance (8 - 4)		-1.3	-1.5	-1.5	-1.4	-1.1

[1]A plus sign means deficit-reducing one-off measures.

Table 6. Divergence from previous update

	ESA Code	2007	2008	2009	2010	2011
Real GDP growth (%)						
Previous update		5.9	5.0	5.1	5.3	n.a.
Current update		6.6	4.4	3.7	4.4	5.2
Difference		0.7	-0.6	-1.4	-0.9	n.a.
General government net lending (% of GDP)	EDP B.9					
Previous update		-3.4	-2.9	-2.6	-2.3	n.a.
Current update		-1.0	-1.2	-1.6	-1.5	-1.2
Difference		2.4	1.7	1.0	0.8	n.a.
General government gross debt (% of GDP)						
Previous update		30.4	30.3	30.2	30.0	n.a.
Current update		28.9	28.8	27.9	26.8	25.5
Difference		-1.5	-1.5	-2.3	-3.2	n.a.

Table 7. Long-term sustainability of public finances

% of GDP	2007	2010	2020	2030	2040	2050
Total expenditure	42.4	41.1	40.1	41.8	44.6	49.5
Of which: age-related expenditures	19.2	18.7	18.8	20.1	21.9	24.8
Pension expenditure	8.2	7.7	7.7	8.1	9.6	11.5
Social security pension	8.2	7.7	7.7	8.1	9.6	11.5
Old-age and early pensions	7.5	7.1	7.1	7.4	9.0	10.9
Other pensions (disability, survivors)	0.7	0.6	0.6	0.7	0.6	0.6
Occupational pensions (if in general government)	0.0	0.0	0.0	0.0	0.0	0.0
Health care	6.3	6.3	6.7	7.3	7.8	8.5
Long-term care *(this was earlier included in the health care)*	0.2	0.3	0.3	0.4	0.5	0.5
Education expenditure	3.6	3.4	3.1	3.3	3.1	3.1
Other age-related expenditures	1.0	1.0	1.0	1.0	1.0	1.1
Interest expenditure	1.1	1.1	0.8	1.2	2.1	4.2
Total revenue	41.4	39.6	39.0	39.0	39.0	39.0
Of which: property income	0.8	0.7	0.5	0.5	0.5	0.5
Of which : from pensions contributions (or social contributions if appropriate)	8.6	8.6	8.6	8.6	8.6	8.6
Pension reserve fund assets	0.4	2.9	13.2	22.9	26.3	9.8
Of which : consolidated public pension fund assets (assets other than government liabilities)	0.0	0.0	0.0	0.0	0.0	0.0
Assumptions						
Labour productivity growth	4.1	3.8	2.9	1.8	1.7	1.7
Real GDP growth	6.6	4.4	2.5	1.4	0.9	0.7
Participation rate males (aged 20-64)	78.3	78.7	81.0	78.8	78.5	79.0
Participation rates females (aged 20-64)	61.6	63.3	66.7	66.0	66.0	67.8
Total participation rates (aged 20-64)	70.0	71.0	73.9	72.5	72.3	73.5
Unemployment rate	5.3	4.6	4.5	4.5	4.5	4.5
Population aged 65+ over total population	14.4	15.4	20.2	22.9	26.3	30.9

Table 8. Basic assumptions

	2007	2008	2009	2010	2011
Short-term interest rate[1] (annual average)	3.1	4.0	3.8	3.7	3.4
Long-term interest rate (annual average)	4.3	4.7	4.4	4.3	4.2
USD/€ exchange rate (annual average) (euro area and ERM II countries)	n.a.	n.a.	n.a.	n.a.	n.a.
Nominal effective exchange rate	106.8	118.8	118.2	120.2	123.0
(for countries not in euro area or ERM II) exchange rate vis-à-vis the € (annual average)	27.8	24.9	24.7	24.2	23.7
World excluding EU, GDP growth	5.0	3.9	3.0	4.0	4.6
EU GDP growth	2.9	1.4	0.9	1.7	2.0
Growth of relevant foreign markets	6.4	4.3	3.1	4.0	4.5
World import volumes, excluding EU	7.2	4.9	4.1	5.0	5.5
Oil prices (Brent, USD/barrel)	72.7	112.6	120.0	115.0	115.0

[1]If necessary, purely technical assumptions.

* * *