

Assessment of the Fulfilment of the Maastricht Convergence Criteria and the Degree of Economic Alignment of the Czech Republic with the Euro Area

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1 Summary and Recommendations Regarding the Czech Republic's Preparedness for Joining ERM II and the Euro Area

Besides being required to harmonise their legislation with Articles 108 and 109 of the Treaty establishing the European Community and the Statute of the ESCB, EU Member States are required to achieve a high degree of sustainable convergence in order to join the euro area.

This is measured by the fulfilment of four convergence criteria: a high degree of price stability, as apparent from the rate of inflation; sustainability of the government financial position, as measured by the government deficit and government debt; exchange rate stability, as measured by movements in the exchange rate within the normal fluctuation margins of the ERM II system for two years without devaluation; and durability of convergence, as reflected in long-term interest rate levels.

The Czech Republic is obliged to take steps to be prepared to join the euro area as soon as possible. However, setting the date for joining the euro area is within the competence of the Member State and depends on its preparedness. Potential non-fulfilment of the convergence criteria has no direct consequences for the Czech Republic at present. The only exception is the criterion on the sustainability of public finances. The result of the failure to meet this criterion is that the Czech Republic has been in the excessive deficit procedure since 2004. Under the procedure, the European Commission regularly examines the fiscal development in the Czech Republic. In July 2007, it proposed that the EU Council in its ECOFIN formation should decide that the Czech Republic is failing to take sufficient steps to correct its excessive public finance deficit within the agreed time limit of 2008. As a result of this decision, a second recommendation was issued stating what steps the Czech Republic should take to meet this objective. The assessment also takes into account the preparedness of the Czech Republic to fulfil this recommendation.

1.1 Assessment of Fulfilment of the Convergence Criteria

The Czech Republic will very probably not fulfil **the criterion on price stability** in 2008. Inflationary shocks, in particular changes to indirect taxes connected with the reform of public finances and with harmonisation with EU law (a rise in the lower VAT rate, excise duty on cigarettes and the environmental tax), temporarily shift inflation above the likely future reference value of the criterion. After this one-off shock stemming from administrative measures subsidies, inflation will return to the lower level observed in previous years.

The announced reduction of the CNB's inflation target for the national consumer price index (CPI) to 2.0%, with a tolerance band of ± 1.0 p.p., from 1 January 2010 creates better conditions for the fulfilment of the price stability criterion beyond this horizon. At the same time it is desirable that no substantial inflationary changes hindering the fulfilment of the criterion be made to indirect taxes during ERM II participation.

The Czech Republic is not compliant with **the criterion on the sustainability of the government financial position**. The path of fiscal consolidation, which forms the basis of the updated Convergence Programme of the Czech Republic approved by the Government

on 28 November 2007¹, will stabilise public finances and maintain the government deficit below 3% of GDP. However, it does not ensure a sufficient improvement in the structural characteristics of the budget, nor does it improve the sustainability of public finances. A sustainable reduction of the general government deficit below 3% will require not only adherence to the already approved fiscal rules (the fiscal targeting regime) and fulfilment of the medium-term spending frameworks, but also further reforms. Such reforms must prepare Czech public finances for the future challenges associated with the negative demographic changes. Therefore, the current period of favourable economic growth should be used to launch reforms addressing the long-term fiscal pressures, i.e. in those areas which will be hit hardest by the demographic changes, in particular reforms of the pension and health care systems.

The ratio of government debt to GDP has been stabilised for the near future, thanks mainly to rapid economic growth. However, if the necessary reforms fail to be implemented, the ratio can be expected to rise gradually in the long term. Not even a successful medium-term fiscal consolidation will be able to stabilise the government debt level in a sustainable manner if the fiscal system is not prepared for the expected effects of population ageing.

Formal assessment of **the exchange rate criterion** will only be possible after the Czech Republic joins ERM II and the related central parity for the koruna's exchange rate is announced. The fluctuations in the CZK/EUR exchange rate over the last few years have been smaller than the hypothetical band of $\pm 15\%$. Nonetheless, the deviations from the average rate have been quite significant and the koruna has been showing an appreciation trend for some time. The definition of the criterion implies that its interpretation is not entirely clear. One can say, however, that the criterion should be satisfied in the future.

The Czech Republic is currently compliant with **the criterion on long-term interest rates** and no problems are expected in this area in the future.

1.2 Assessment of Economic Analyses

Some improvements have occurred recently in the functioning of Czech economy. However, some of them are linked with the Czech economic cycle. No major changes have yet occurred in the functioning of fiscal policy and in the institutional setup on the labour market leading to a long-term improvement in the flexibility of the Czech economy. However, it is also fair to say that none of the areas under review saw a significant deterioration last year. In terms of the current preparedness to adopt the euro, the characteristics of the Czech economy can be divided into three groups.

First, **numerous economic indicators speak in favour of the Czech Republic adopting the euro, and some of them have done so for quite some time.** This group includes the high degree of openness of the Czech economy, its close trade and ownership links with the euro area, and the achievement of convergence of the inflation rate and nominal interest rates.

The second group includes **areas which, in terms of euro adoption in the Czech Republic, continue to pose a risk of macroeconomic costs, but which have shown some improvement in recent years.** The positive developments include accelerating real economic

¹ *The Convergence Programme is based on the draft state budget for 2008 and the medium-term outlook for the state budget of the Czech Republic for 2009–2010, which the government has submitted to the Chamber of Deputies (the lower house of the Czech Parliament).*

convergence in the Czech Republic, including further modest convergence of the price level towards that in the euro area, even though a significant difference in the price level persists. According to analyses conducted, the alignment of economic activity between the Czech Republic and the euro area appears to have recently slightly increased. However, these results are not yet sufficiently robust. In terms of alignment, the shift in the characteristics of the financial market closer to the euro area conditions, coupled with a high degree of banking system stability and a further partial improvement in the conditions for doing business, are also good things.

The third group contains the **areas which continue to be bottlenecks as regards the economy's flexibility and ability to adjust to shocks**. This group includes an insufficient stabilising role of public finances and a limited capacity for flexible adjustment in the labour market and partly also in the product market. The current public finance deficits are largely structural in nature and do not provide sufficient room for the possible stabilising effect of fiscal policy. Adoption of the euro will require changes on the expenditure side of public finances leading to a substantial reduction in the deficit. In the long run, it will also be necessary to ensure that demographic changes do not adversely affect fiscal policy effectiveness and the sustainability of public budgets. The ability of the Czech labour market to absorb shocks is essentially unchanged from last year and remains average by European comparison. The recent improvement in its performance is largely associated with the high rate of economic growth, but long-term and structural unemployment remain relatively high, while regional mobility and wage elasticity are on the low side. Recent positive developments include a halt in the growth in overall labour taxation and in the growth in the ratio of the minimum wage to the average wage. The tax and benefit system, however, continues to create a demotivating environment for the long-term unemployed in low-income families with children. Another problem is that the skills of the long-term unemployed do not meet the current needs of the corporate sector. The costs of terminating an open-ended employment contract after a short period of employment remain very high by international comparison.

1.3 Conclusions and Recommendations

Based on the aforementioned analyses, the Ministry of Finance and the Czech National Bank agree that sufficient progress has yet to be made in laying the groundwork for euro adoption in order to allow a target date to be set for entry into the euro area. Therefore, in line with the Czech Republic's Updated Euro-area Accession Strategy (the "Strategy"), they recommend that the Czech Government should not set such a date for the time being.

The draft state budget for 2008 and the medium-term budget outlook for 2009–2010, which are based on the already passed Public Budgets Stabilisation Act, do not create conditions for a sustainable reduction of the general government deficit and for ensuring the long-term soundness of public budgets. No significant progress has been made either in the area of increasing the flexibility of the Czech economy, and in particular the labour market.

Setting the target date for entry into the euro area is thus subject to the implementation of further reforms of public finances, mainly in the area of mandatory expenditures, which will be hardest hit by the consequences of demographic changes. In line with the Strategy, it is necessary to continue with further reform efforts so that the public finance deficits decline by at least 0.5% GDP a year, well below the value of the Maastricht convergence criterion, in a verifiable and sustainable manner. The target for the Czech Republic under the Stability and

Growth Pact over the medium term is to achieve a structural general government deficit of no more than 1% of GDP by 2012. Further reforms are also necessary to increase the flexibility of the Czech economy, and in particular the labour market.

The recommendation not to set a target date for euro area entry yet simultaneously implies a recommendation that the Czech Republic **should not attempt to enter the ERM II during 2008**. In line with the Strategy, the length of stay in ERM II should be as short as possible. Consequently, the decision to join the mechanism cannot be made before the target date for euro adoption has been set.

2 Assessment of the Current and Expected Fulfilment of the Maastricht Convergence Criteria

The convergence criteria (price stability, public finance sustainability as measured by the government deficit and government debt, exchange rate stability, and convergence of long-term interest rates) are defined in the EC Treaty (the “Treaty”) and specified in the Protocol on the Convergence Criteria and the Protocol on the Excessive Deficit Procedure annexed to the Treaty. Fulfilment of the convergence criteria in a sustainable manner is a necessary condition for adoption of the single currency by a Member State with a derogation.

2.1 Criterion on Price Stability

Box 2.1: Definition of the criterion on price stability

Treaty provisions

The first indent of Article 121 (1) of the Treaty requires: “the achievement of a high degree of price stability; this will be apparent from a rate of inflation which is close to that of, at most, the three best performing Member States in terms of price stability”.

Article 1 of the Protocol on the Convergence Criteria referred to in Article 121 of the Treaty stipulates that: “the criterion on price stability referred to in the first indent of Article 121 (1) of this Treaty shall mean that a Member State has a price performance that is sustainable and an average rate of inflation, observed over a period of one year before the examination, that does not exceed by more than 1½ percentage points that of, at most, the three best performing Member States in terms of price stability. Inflation shall be measured by means of the consumer price index on a comparable basis, taking into account differences in national definitions.”

Application of Treaty provisions in ECB and EC Convergence Reports

With regard to “an average rate of inflation, observed over a period of one year before the examination”, the inflation rate is calculated using the increase in the latest available 12-month average of the Harmonised Index of Consumer Prices (HICP) over the previous 12-month average.

The reference value relating to the values of “at most, the three best performing Member States in terms of price stability” is calculated in practice as the unweighted arithmetic average of the rate of inflation in the three countries with the lowest inflation rates, provided that this rate of inflation is compatible with price stability.

Implementation of the price stability criterion – current practice

Both the Treaty and the Protocol in some areas leave scope for interpretation by the institutions that assess the fulfilment of the criteria. Therefore, when assessing the fulfilment of the criteria one should also take into account the specific way in which these institutions apply the criterion.

As the Convergence Reports published in 2004 have shown, the EC and the ECB somewhat differ in their specific interpretations of the phrase “best performing Member States in terms of price stability”. Both institutions in these reports worked with the three countries with the lowest inflation (Finland, Denmark and Sweden) excluding Lithuania, which recorded an inflation rate of -0.2% in the reference period. However, the decision to exclude Lithuania was justified in slightly different ways in the two reports. For the Commission the reason was that Lithuania had shown negative inflation, whereas for the ECB it was that inflation in Lithuania over the reference period was judged to have been due to “the accumulation of specific factors”; in the ECB’s opinion, including such factors in the calculation of the reference value might have distorted the reference value and reduced its usefulness as an economically meaningful benchmark.

Lithuania’s application to enter the euro area, submitted in 2006, was rejected on the grounds that the country had narrowly failed to fulfil the inflation criterion and had an adverse inflation outlook. This example shows that

the European authorities (the European Commission, the EU Council in its ECOFIN formation, and the ECB) apply a strict interpretation of the Maastricht convergence criteria and other conditions for the adoption of the euro when examining countries that have applied for the entry into the euro area. Their interpretation emphasises sustainable fulfilment of the economic criteria after euro adoption, above and beyond a purely legal view of the matter. If the outlook for the months immediately following the compilation of the Convergence Report foresees inflation rising above the reference value, the conclusion may be that the country is failing to satisfy the criterion in a sustainable manner. The fact that greater account of the sustainability of fulfilment of the criterion will be taken in the examination is also evidenced by recent statements made by the ECB and the Commission regarding the sustainability of the price developments in Slovakia.

If one bases the calculation of the reference value on the three EU countries with the lowest positive inflation (see Box 2.1), the Czech Republic has been compliant with the criterion on price stability since 2005. The criterion is also likely to be fulfilled for 2007 as a whole.

Table 2.1: Harmonised index of consumer prices

(average for last 12 months vs. average for previous 12 months, growth in %)

	2004	2005	2006	08/07	2007	2008	2009	2010
Average for 3 EU countries with lowest inflation*	0.7	1.0	1.4	1.0	1.3	1.7	1.6	1.6
Reference value (1st line +1.5 p.p.)	2.2	2.5	2.9	2.5	2.8	3.2	3.1	3.1
Czech Republic	2.6	1.6	2.1	2.0	2.4	3.9	2.3	2.1

Source: Eurostat, European Commission, Convergence Programmes and Stability Programmes of Member States (2006), Convergence Programme of the Czech Republic (November 2007).

Note: The outlook for EU countries for 2007–2008 is taken from the European Commission's spring 2007 economic forecast.

* The three EU countries with the lowest positive inflation – see Box 2.1.

For 2008, however, it must be expected that the criterion will very probably not be fulfilled. Expected inflationary shocks will shift inflation temporarily above the CNB's current inflation target of 3% and will thus probably cause the reference value to be exceeded. In the current outlook, such shocks include changes to indirect taxes connected with the reform of public finances and with harmonisation with EU law, whose effect on consumer prices (as measured by the HICP) will exceed 1.6 percentage points next year² (a rise in the reduced VAT rate, excise duty on cigarettes and the environmental tax).

One also needs to take account of the possibility of higher inflation than forecasted by the Ministry of Finance of the Czech Republic. The current economic growth and the tax changes are generating increased uncertainty as regards the inflation forecasts and their spread. The CNB's outlook foresees HICP inflation around 5% in 2008 and roughly 3.5% in 2009. This implies that the criterion on price stability will very probably not be fulfilled in 2008, and fulfilment in 2009 is uncertain. However, after the one-off shock stemming from administrative measures and their secondary effects subsides, inflation should return to the lower level observed in previous years.

When assessing the future ability to maintain inflation below the reference value, one also needs to take into account that the individual countries' inflation forecasts, with few exceptions, do not deviate far from the ECB's definition of price stability, whereas actual developments have deviated from it significantly more in the past. This may mean a lower inflation level in the countries that form the basis for calculating the criterion, and thus a lower reference value. This was reflected in the criterion in previous years, when it was lower than in the outlook for the criterion given in Table 2.1. Moreover, the probability of a low

² The total contribution of administrative effects (i.e. changes to indirect taxes and regulated prices) to HICP growth in 2008 is estimated at 3.0 percentage points.

reference value is higher than in the past, owing to the larger number of EU Member States, among which three countries with very low inflation will probably be found.

By contrast, a greater degree of certainty of future fulfilment of the criterion will be fostered by the announced reduction of the inflation target for the national CPI to 2.0%, with a tolerance band of ± 1.0 p.p., from 1 January 2010. It is desirable, however, that no substantial inflationary changes hindering the fulfilment of the criterion be made to indirect taxes during the future participation of the Czech Republic in the ERM II.

2.2 Criterion on the Sustainability of Public Finances³

Government deficit criterion

The excessive deficit procedure against the Czech Republic was opened in 2004. On the commencement of the procedure by the ECOFIN Council, the Czech Republic agreed that it would bring its government deficit below 3% of GDP in a credible and sustainable manner by 2008. The Czech Republic's current public finance parameters prevent it from satisfying the government deficit criterion in a sustainable manner and ensuring the anti-cyclical operation of automatic fiscal stabilisers. The fiscal developments confirm that the decline in the deficit to, or just below, 3% GDP in 2004 and 2006 was largely due to higher-than-expected tax revenues. Moreover, given the fiscal expansion in 2007, the deficit is very likely to be higher this year (see Table 2.2).

Box 2.2: Definition of the criterion on the sustainability of the government financial position

Treaty provisions

The second indent of Article 121 (1) of the Treaty requires: "the sustainability of the government financial position; this will be apparent from having achieved a government budgetary position without a deficit that is excessive, as determined in accordance with Article 104 of the Treaty".

Article 2 of the Protocol on the Convergence Criteria referred to in Article 121 of the Treaty stipulates that this criterion "shall mean that at the time of the examination the Member State is not the subject of a Council Decision under Article 104 (6) of this Treaty that an excessive deficit exists".

Article 104 of the Treaty sets out the excessive deficit procedure. According to Article 104 (2) and (3), the European Commission prepares a report if a Member State does not fulfil the requirements for fiscal discipline, in particular if:

1. the ratio of the planned or actual government deficit to GDP exceeds a reference value (defined in the Protocol on the Excessive Deficit Procedure as 3% of GDP), unless:
 - either the ratio has declined substantially and continuously and reached a level that comes close to the reference value;
 - the excess over the reference value is only exceptional and temporary and the ratio remains close to the reference value.

³ The criterion on the sustainability of public finances is satisfied only when both components of the fiscal criterion, i.e. the government deficit and government debt, are fulfilled in a sustainable manner.

2. the ratio of government debt to GDP exceeds a reference value (defined in the Protocol on the Excessive Deficit Procedure as 60% of GDP), unless the ratio is sufficiently diminishing and approaching the reference value at a satisfactory pace.

Being aware of the obligation to end the excessive deficit procedure in 2008, the government has pledged in its Programme Declaration to reduce the public finance deficit to 3.0% of GDP in 2008, 2.6% of GDP in 2009 and 2.3% of GDP in 2010 in order to meet the set time limit. The Public Budgets Stabilisation Act⁴, involving amendments to 49 laws, is the first step. In addition to significant changes to the tax system, changes are being made to mandatory expenditures to reverse their current rising trend, to create room for a change in the structure of public expenditure and to stabilise public finances. This, along with other steps, has allowed the government to prepare and submit to the Chamber of Deputies (the lower house of the Czech Parliament) a draft state budget for 2008, which has been compiled in such a way as to reduce the total government deficit below 3% of GDP in 2008.

Table 2.2: General government balance
(ESA 1995 methodology, in % of GDP)

	2004	2005	2006	2007	2008	2009	2010
Reference value	-3.0	-3.0	-3.0	-3.0	-3.0	-3.0	-3.0
Czech Republic	-3.0	-3.5	-2.9	-3.4	-2.9	-2.6	-2.3

Source: CZSO, *Government Deficit and Government Debt Notifications (October 2007)*, *Convergence Programme of the Czech Republic (November 2007)*.

The draft medium-term budget outlook for 2009–2010 is also in line with the government's fiscal targets as set out in its Programme Declaration. The proposed path of fiscal consolidation will stabilise public finances and maintain the government deficit below 3% of GDP, although only provided that the current high economic growth rates are maintained and further cutbacks are implemented. However, it does not ensure a sufficient improvement in the structural characteristics of the budget such that there is no risk of exceeding the 3% threshold again in the event of a cyclical slowdown in growth, nor does it improve the sustainability of public finances. Consequently, it does not necessarily ensure that the excessive deficit procedure will be terminated in 2008. A sustainable reduction of the general government deficit below 3% will require not only adherence to the approved fiscal rules (the fiscal targeting regime and the medium-term expenditure frameworks), but also the adoption of further steps with regard to the Council's recommendations issued repeatedly for the Czech Republic (see Box 2.3).

⁴ Act No 261 Coll. on the Stabilisation of Public Budgets, passed in the lower house of the Czech Parliament on 19 October 2007.

Box 2.3: ECOFIN Council Recommendation to the Czech Republic with a view to reducing the excessive deficit, adopted on 9 October 2007⁵

When examining the Convergence Programme of the Czech Republic in July 2007, the ECOFIN Council concluded that the action taken by the Czech Republic was proving to be inadequate to correct the excessive budget deficit by 2008. Subsequently, on 9 October 2007, the ECOFIN Council adopted new recommendations for the Czech Republic, namely that:

1) The Czech Republic should further contain the budgetary deterioration in 2007 and put an end to the excessive deficit situation as rapidly as possible and by 2008 at the latest.

2) The Czech authorities should bring the general government deficit below 3% of GDP in a credible and sustainable manner. To this end, they should ensure an improvement in the structural balance (i.e. the cyclically-adjusted balance net of one-off and other temporary measures) of at least 0.75% of GDP in 2008 compared to 2007.*

In addition, the Council invited the Czech Republic to ensure that after the excessive deficit has been corrected, budget consolidation towards its medium-term objective for the budgetary position of a structural deficit of 1% of GDP is achieved by 2012 at the latest.

The Council gave the Czech Republic a deadline of 9 April 2008 to take effective corrective action to reduce the deficit below 3% of GDP in a credible and sustainable manner in 2008.

** According to the calculations of the Czech Ministry of Finance, the structural deficit amounted to 3% of GDP in 2006 and increased to 3.7% of GDP the following year.*

In the medium run, the Stability and Growth Pact implies that the Czech Republic should target a structural general government deficit of no more than 1% of GDP by 2012. However, given the current course for reducing the general government deficits, this target will not be hit until some later date. Therefore, the current period of favourable economic growth should be used to reduce the deficits more quickly. At the same time, reforms addressing the long-term fiscal pressures, i.e. in those areas which will be hit hardest by the demographic changes, in particular reforms of the pension and health care systems, should be launched without delay.

⁵ *Treaty provisions – Excessive deficit procedure*

The report prepared by the European Commission under Article 104 (3) of the Treaty should also take into account whether the government deficit exceeds government investment expenditure and all other relevant indicators, including the medium-term economic and budgetary position of the Member State.

The Commission may prepare a report if, notwithstanding the fulfilment of the requirements under the criteria, it is of the opinion that there is a risk of an excessive deficit in a Member State. The Economic and Financial Committee formulates an opinion on the Commission's report.

In accordance with Article 104 (6) of the Treaty, the EU Council, on the basis of a recommendation from the Commission and having considered any observations which the Member State concerned may wish to make, decides, acting by qualified majority and following an overall assessment, whether an excessive deficit exists in a Member State. Under Article 104 (7) of the Treaty, the EU Council then makes recommendations to the Member State concerned with a view to bringing the deficit below the 3% level within a given period. If the Council, on a proposal from the Commission, decides that the respective Member State is failing to take action to correct the excessive deficit within the agreed time limit, the procedure is repeated.

Government debt criterion

Given its low initial level of government debt, the Czech Republic has no problem fulfilling this criterion. The ratio of government debt to GDP has recently been stabilised successfully, thanks mainly to rapid economic growth (see Table 2.3). However, if the necessary reforms – particularly of the pension and health care systems – fail to be implemented, the ratio of government debt to GDP can be expected to rise gradually in the long term. Not even a successful medium-term fiscal consolidation will be able to stabilise the government debt level in a sustainable manner if the fiscal system is not prepared for the expected effects of population ageing.

Table 2.3: General government debt
(ESA 1995 methodology, in % of GDP)

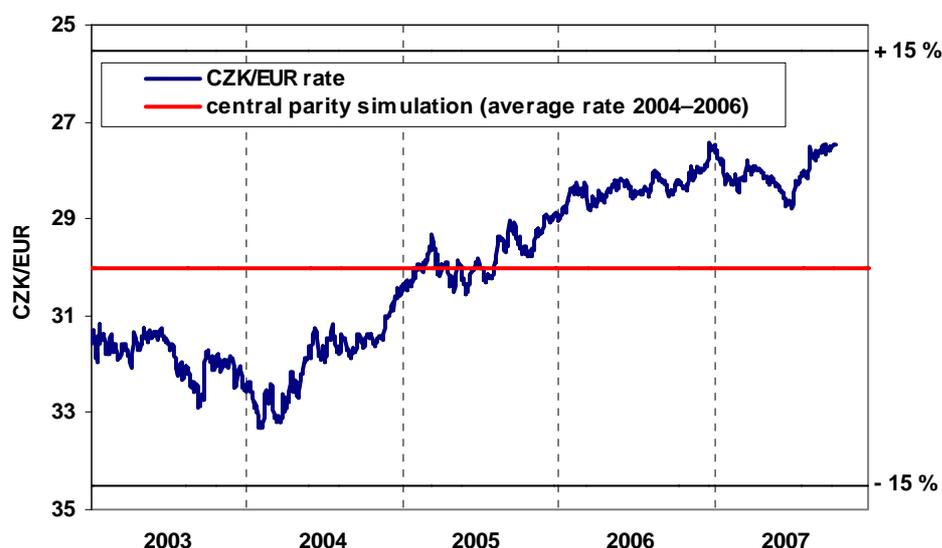
	2004	2005	2006	2007	2008	2009	2010
Reference value	60.0	60.0	60.0	60.0	60.0	60.0	60.0
Czech Republic	30.4	30.2	30.2	30.4	30.3	30.2	30.0

Source: CZSO, *Government Deficit and Government Debt Notifications* (October 2007), *Convergence Programme of the Czech Republic* (November 2007).

2.3 Criterion on Exchange Rate Stability

The Czech Republic does not participate in ERM II, so the central parity of the CZK/EUR rate has not been set yet. For this reason, the exchange rate criterion cannot be formally assessed. In Chart 2.1, the hypothetical central parity is, for illustration, assumed to be the average of the daily rates for 2004–2006.

Chart 2.1: Nominal CZK/EUR rate



Source: CNB, Ministry of Finance calculations

Notes: In the chart, an upward movement in the exchange rate means an appreciation of the koruna
The hypothetical central parity is simulated by the average rate for 2004-2006.

The fluctuations in the CZK/EUR exchange rate over the last few years have been smaller than the hypothetical band of $\pm 15\%$. Nonetheless, the deviations from the average rate have been quite significant and the koruna has been showing an appreciation trend for some time.

The definition of the criterion implies that its interpretation is not entirely clear. In an attempt to reduce this ambiguity, the ECB published a statement in 2003 stating that the assessment of the fulfilment of this criterion would take into account also other factors than the exchange rate level alone (see Box 2.4). However, the assessment is not unambiguous even in the light of this statement. One can say, however, that the criterion on exchange rate stability should be satisfied in the future.

Box 2.4: Definition of the criterion on exchange rate stability

Treaty provisions

The third indent of Article 121 (1) of the Treaty requires: “the observance of the normal fluctuation margins provided for by the exchange-rate mechanism of the European Monetary System, for at least two years, without devaluing against the currency of any other Member State”.

Article 3 of the Protocol on the Convergence Criteria referred to in Article 121 (1) of the Treaty stipulates that: “the criterion on participation in the exchange-rate mechanism of the European Monetary System referred to in the third indent of Article 121 (1) of this Treaty shall mean that a Member State has respected the normal fluctuation margins provided for by the exchange-rate mechanism of the European Monetary System without severe tensions for at least the last two years before the examination. In particular, the Member State shall not have devalued its currency’s bilateral central rate against any other Member State’s currency on its own initiative for the same period.”

Application of Treaty provisions in ECB and EC Convergence Reports

The Treaty refers to the criterion of participation in the European exchange-rate mechanism (ERM until December 1998 and ERM II since January 1999).

First, the ECB assesses whether the country has participated in ERM II “for at least the last two years before the examination”, as stated in the Treaty.

Second, as regards the definition of “normal fluctuation margins”, the ECB recalls the formal opinion that was put forward by the EMI Council in October 1994 and its statements in the November 1995 report entitled “Progress towards Convergence”.

The EMI Council’s opinion of October 1994 stated that “the wider band has helped to achieve a sustainable degree of exchange rate stability in the ERM”, that “the EMI Council considers it advisable to maintain the present arrangements”, and that “member countries should continue to aim at avoiding significant exchange rate fluctuations by gearing their policies to the achievement of price stability and the reduction of fiscal deficits, thereby contributing to the fulfilment of the requirements set out in Article 121 (1) of the Treaty and the relevant Protocol”.

In the November 1995 report entitled “Progress towards Convergence” it was stated that “when the Treaty was conceived, the ‘normal fluctuation margins’ were $\pm 2.25\%$ around bilateral central parities, whereas a $\pm 6\%$ band was a derogation from the rule. In August 1993 the decision was taken to widen the fluctuations margins to $\pm 15\%$. The interpretation of the criterion, in particular of the concept of ‘normal fluctuation margins’ became less straightforward”. It was then also proposed that account would need to be taken of “the particular evolution of exchange rates in the European Monetary System (EMS) since 1993 in forming an ex post judgement”.

Against this background, in the assessment of exchange rate developments the emphasis is placed on exchange rates being close to the ERM II central rates.

Third, the issue of the presence of “severe tensions” or “strong pressures” on the exchange rate is addressed by examining the degree of deviation of exchange rates from the ERM II central rates against the euro. Other indicators, such as short-term interest rate differentials vis-à-vis the euro area and their evolution, are used as well. The role played by foreign exchange interventions is also considered.

Successful ERM II participation may be aided in particular by a higher degree of convergence of the Czech economy, alignment of the Czech economy with the euro area economy and

consistency of economic policies. The Strategy recommends participation in ERM II for the minimum required period of two years only. This implies that “the Czech Republic should enter the ERM II only after conditions have been established which enable it to introduce the euro at the time of the assessment of the exchange rate criterion (two years after entering the ERM II) and then to benefit from its introduction without experiencing any problems”.⁶

Compared to the present exchange rate regime of managed floating, ERM II entry will be a new element which might have a substantial effect on the behaviour of the exchange rate. The key issue when switching to the ERM II mechanism would seem to be setting the appropriate (sustainable) central parity.

2.4 Criterion on Long-term Interest Rates

Box 2.5: Definition of the criterion on long-term interest rates

Treaty provisions

The fourth indent of Article 121 (1) of the Treaty requires: “the durability of convergence achieved by the Member State and of its participation in the exchange-rate mechanism of the European Monetary System being reflected in the long-term interest-rate levels”.

Article 4 of the Protocol on the Convergence Criteria referred to in Article 121 (1) of the Treaty stipulates that: “the criterion on the convergence of interest rates referred to in the fourth indent of Article 121 (1) of this Treaty shall mean that, observed over a period of one year before the examination, a Member State has had an average nominal long-term interest rate that does not exceed by more than 2 percentage points that of, at most, the three best performing Member States in terms of price stability. Interest rates shall be measured on the basis of long-term government bonds or comparable securities, taking into account differences in national definitions”.

Application of Treaty provisions in ECB and EC Convergence Reports

First, with regard to “an average nominal long-term interest rate” observed over “a period of one year before the examination”, the long-term interest rate has been calculated as an arithmetic average over the latest 12 months for which HICP data were available.

Second, the notion of “at most, the three best performing Member States in terms of price stability” which is used for the definition of the reference value has been applied by using the unweighted arithmetic average of the long-term interest rates in the three countries with the lowest inflation rates. Interest rates have been measured on the basis of harmonised long-term interest rates, which were developed for the purpose of assessing convergence.

The Czech Republic is currently compliant with the criterion on long-term interest rates and no problems are expected in this area in the future⁷ (see Table 2.4).

⁶ For details, see the joint documents of the Czech Government and the CNB: “The Czech Republic’s Euro-area Accession Strategy” and “The Czech Republic’s Updated Euro-area Accession Strategy” at http://www.mfcr.cz/cps/rde/xchg/mfcr/hs.xsl/eu_acc_stra.html.

⁷ As no forecast for the time horizon under review is available for the long-term interest rates of the countries that should, according to the inflation forecast, form the basis for calculating the criterion, the projection of the reference value in Table 2.4 for 2009 and 2010 is based on the technical assumption that long-term interest rates will move in line with inflation, i.e. real interest rates will not change. The future reference value should therefore be viewed as only tentative.

Table 2.4: 10-year interest rates on government bonds on the secondary market
(average for the last 12 months, in %)

	2004	2005	2006	08/07	2007	2008	2009	2010
Average for 3 EU countries with lowest inflation	4.28	3.37	4.24	4.27	4.2	4.2	4.1	4.1
Reference value (1st line + 2.0 p.p.)	6.28	5.37	6.24	6.27	6.2	6.2	6.1	6.1
Czech Republic	4.75	3.51	3.78	4.03	4.4	5.1	4.5	4.6

Source: Eurostat, European Commission, Convergence Programmes and Stability Programmes of Member States (2006), Convergence Programme of the Czech Republic (November 2007).

Notes: The outlook for EU countries for 2006–2007 is taken from the European Commission’s spring economic forecast.

The forecast for interest rates on government bonds in the Czech Republic is dependent on the outlook for the CNB’s monetary policy rates and particularly on successful implementation of the public finance consolidation. Any loss of financial market confidence in the outcome of the fiscal reform could very quickly lead to a rise in the risk premium on long-term interest rates and endanger the fulfilment of this convergence criterion.

3 Assessment of the Czech Republic's Economic Alignment with the Euro Area

This part summarises the results of a set of analyses directed at assessing the Czech economy's alignment with the euro area over and above the formal criteria, whose fulfilment is assessed in the previous part. Entry into the euro area will fundamentally change the Czech economy's options for adjusting to economic shocks. There will be no possibility of adjusting vis-à-vis the euro area countries, i.e. the Czech Republic's biggest trading partners, through movements in the exchange rate. Monetary policy will be formulated at the euro area level, hence there will be a risk of the monetary conditions not corresponding to the situation in the Czech economy at any given moment. Therefore, it is important to examine how big this risk is and how well the Czech economy will be able to respond if it materialises.

The analyses are divided into two basic groups by the type of question they try to answer. The section entitled "Cyclical and Structural Alignment" indicates the size of the risk of economic shocks whose impact on the Czech economy will differ from that on the euro area as a whole ("asymmetric shocks"). The section entitled "Adjustment Mechanisms" answers the question to what extent the Czech economy is capable of absorbing the impacts of potential asymmetric shocks. The basic theoretical starting point for the underlying analyses is the theory of optimum currency areas. These analyses are aimed at assessing the evolution of the individual alignment indicators over time and in comparison with selected countries which either are euro area members already (Austria, Germany, Portugal and Slovenia)⁸ or aspire to such membership (Poland, Slovakia and Hungary). The conclusion as to whether the Czech economy is sufficiently prepared for adopting the single currency cannot be made in absolute terms, but can ensue from the aforementioned comparison with other countries and the assessment of developments over time. In general, it can be expected that the benefits of adopting the single currency will grow with greater economic alignment and stronger adjustment mechanisms.

The individual studies were drawn up using the statistical data and information available in September 2007. The analysis of the stabilising function of public budgets thus incorporates the estimated impacts of the fiscal reform approved in September 2007. However, the impacts of this reform on other areas (e.g. the impacts of changes to taxes and benefits on the financial incentive to keep or seek a job) have not been analysed.

3.1 Cyclical and Structural Alignment

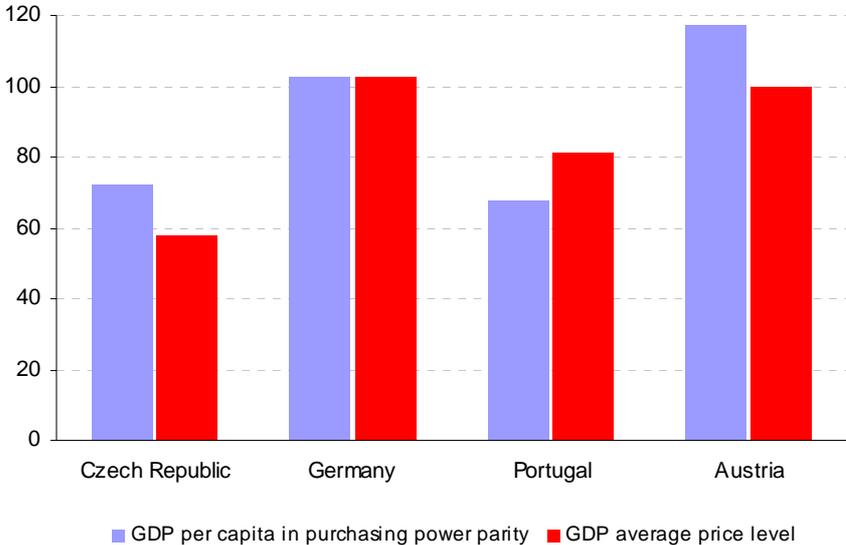
The costs arising from the loss of the Czech Republic's own monetary policy will be particularly pronounced if the Czech economy is not aligned with the euro area economy. The risks arising from the Czech Republic's accession to the euro area will decrease as the degree of alignment increases.

The degree of real economic convergence is an important indicator of similarity. A higher level of such convergence fosters greater similarity of long-run equilibrium development.

⁸ *The selection of euro area countries included in the comparison comprises countries that are comparable in terms of economic level and countries with which the Czech economy has trading links. As in last year's document, the values of the indicators for the euro area are defined at the EA-12 level, since the time coverage of most of the analyses ends with 2006.*

Indirectly, it can also foster a lower likelihood of misalignment in the shorter run. A higher degree of convergence prior to ERM II entry and euro adoption should increase the relative price level, which will decrease potential future pressures for growth of the price level and equilibrium appreciation of the real exchange rate. Thanks to a pick-up in economic growth, GDP per capita in the Czech Republic has recently started to converge more quickly towards the euro area average. Its current level is comparable with the least advanced euro area countries (Portugal and Slovenia) and higher than in the other new EU Member States (see Chart 3.1). The price level also converged further in 2006, owing mainly to nominal appreciation of the exchange rate. However, the difference in the price level relative to the euro area, including its least advanced countries, remains sizeable. Moreover, the price level in the Czech Republic lies below the level which, according to empirical estimates, corresponds to the economic level. Besides a tendency towards a narrowing of this difference, we can also expect a continuing equilibrium trend of real appreciation of the koruna against the euro as a result of the ongoing process of real convergence. As before, prior to euro adoption this process will involve a decline in prices of tradable goods and a rise in prices of non-tradable goods, including regulated prices, amid low inflation overall. The persistence of this trend following accession to the euro area will initially engender a higher rate of inflation in the Czech Republic than in the euro area and, as a result, lower domestic real interest rates (probably even negative in the case of short-term money market rates). If this situation persists in the long term, there would be a risk of an overheating of the economy which could be associated with adverse consequences for macroeconomic and financial stability.

Chart 3.1: Real economic convergence of selected states towards euro area in 2006
(EA-12 average = 100)

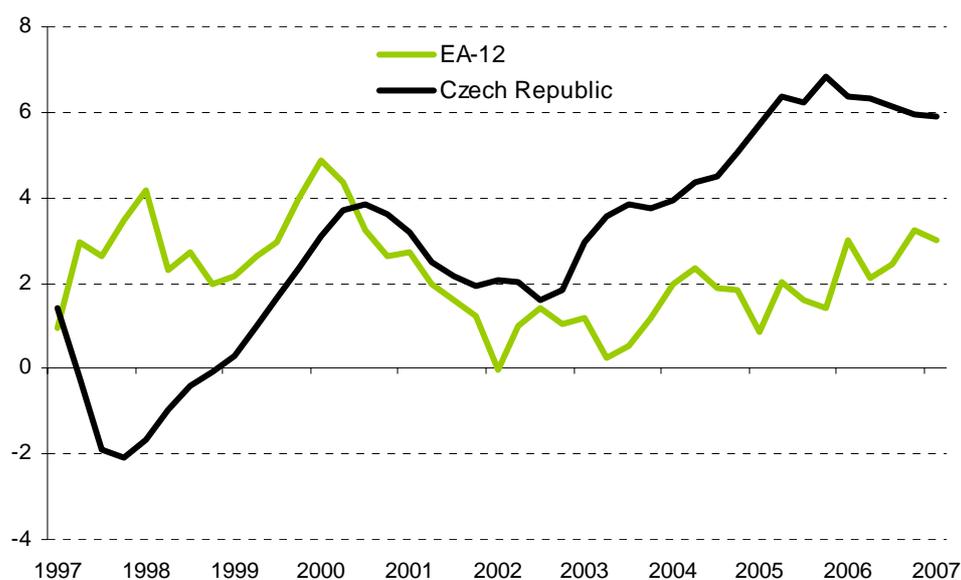


Source: Eurostat, CNB calculation.

Alignment of economic activity and similarity of economic shocks help the single monetary policy to have an effective and appropriate effect on an economy in a monetary union. The analyses suggest that the development of overall economic activity in the Czech Republic may be converging towards that in the euro area (see Chart 3.2). However, the results are not unambiguous and this relationship may be partially distorted by the trend of the Czech economy. The observed correlations are meanwhile lower than in the other countries

under review except Hungary. The analysis of the occurrence of demand-side and supply-side macroeconomic shocks does not find any alignment with the euro area. However, a relatively high degree of alignment with the euro area is observed for activity in industry. The results of analyses of export activity suggest the possibility of significant alignment between the Czech Republic and the euro area in this area, although these results are not robust. According to the analyses, however, the recent export activity of the Czech Republic is not statistically significantly correlated with GDP growth in the euro area. This may be linked with the integration of Czech exporters into the production chains of multinational companies.

Chart 3.2: GDP growth in the Czech Republic and the EA-12 (in %, year on year)



Source: Eurostat, CNB calculations.

Increased **drawdown of funds from EU structural funds** is a specific asymmetric shock that might impact on the Czech economy. Given a sufficient absorption capacity of the economy this could act as a considerable economic stimulus, materialising primarily in increased investment activity. However, the financial flows between the Czech Republic and the European Union have been very sluggish so far and the potential economic stimulus to domestic demand in this respect has shifted to 2008–2010 compared to the expectations in last year’s analyses. The results of the analysis, however, indicate that this situation will not require a sizeable monetary policy reaction or a koruna exchange rate adjustment that would endanger the stay in ERM II or any assessment of the Maastricht exchange rate criterion. The financial flows between the Czech Republic and the EU can also be expected to affect the Czech public budgets. Overall, this effect will be slightly negative until 2008 and moderately positive thereafter.

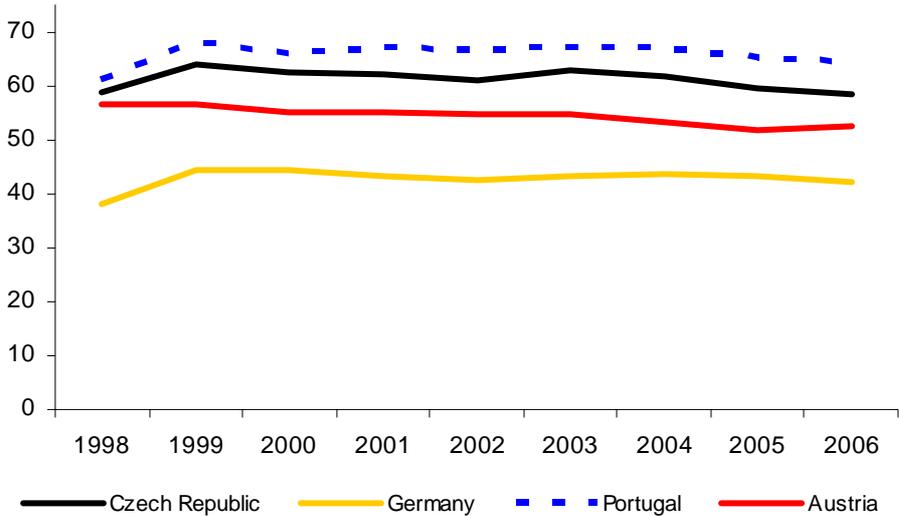
In terms of output generation, the Czech economy retains a specific feature in the form of a higher share of industry and a smaller share of certain services in GDP compared to the euro area.

Another asymmetric shock that has hit some economies in the past is rapid convergence of **nominal interest rates** ahead of entry into the monetary union. For a country planning to enter, earlier gradual convergence of such rates is therefore preferable. The difference between Czech interest rates and euro area interest rates has been zero or negative since 2002.

Although there is no guarantee that this situation will last until euro adoption, the effects of interest rate convergence when the Czech Republic joins the euro area can be expected to be generally small from the current perspective. The Czech koruna’s **exchange rate** against the dollar has been moving very much in line with the euro’s exchange rate against the dollar in recent years. This relationship loosened very slightly in 2007, mainly because of the increased volatility of the dollar’s exchange rate. The macroeconomic characteristics of the Czech economy indicate potential for broadly similar or slightly lower medium-term exchange rate volatility than in the other new EU Member States compared. The observed medium-term volatility of the Czech koruna against the euro is lower than in the other monitored currencies of the new EU Member States in 2007.

The Czech economy’s strong **trade and ownership links** with the euro area magnify the benefits arising from the elimination of potential fluctuations in the exchange rate. The euro area is the partner for approximately 60% of Czech exports and imports. Strong links are also apparent for the other economies under comparison (see Chart 3.3). The Czech economy’s ownership links with the euro area on the direct investment inflow side are slightly stronger than in the other countries compared and are continuing to strengthen. The Czech economy’s strong economic integration with the euro area creates conditions for increasing its economic alignment with this area. Another positive aspect from this perspective is the high intensity of intra-industry trade with the euro area, which is comparable with Austria and Germany.

Chart 3.3: Exports to the EA-12 as a percentage of total exports



Source: IMF, CNB calculations.

The analysis of the Czech **financial sector**, and, within it, the banking sector, reveals that despite its relatively small size by comparison with the euro area, it need not be expected to have a fundamentally different effect on the economy. The monitored indicators have recently recorded further slight convergence towards the euro area. The depth of financial intermediation in the Czech Republic is currently thus roughly one-third of the level in Germany, Austria and the euro area and 40% of that in Portugal. The Czech Republic lags behind these countries in particular in terms of lending. However, as a result of dynamic growth in loans to households and corporations in the Czech Republic, client loans are rising as a percentage of both total loans and GDP. On the one hand this trend represents gradual

convergence towards the corresponding shares in the euro area, but on the other hand it could pose a risk of loan defaults in the event of a further build-up in household debt. The historical experience of some current euro area countries with high growth in household borrowing suggests that such a trend does not necessarily lead to problems in the financial system, but less prudential assessment of client creditworthiness is a potential source of credit risk growth. The transmission of risk from the recent crisis on the US mortgage market has had a minimal effect on the Czech financial sector, thanks to the provision of mortgages on primary deposits, the issuing of mortgage bonds on high-quality claims, good collateralisation of mortgage loans and limited investment in bonds backed by subprime foreign mortgages.

The degree of the **integration of the Czech financial markets** (stock and bond markets) with the euro area markets is at a similar level as in the case of Portugal and Austria. The speed of elimination of shocks on the Czech stock market has recently increased. The degree of integration of the Czech money market with that in the euro area is at the level of Slovenia before it adopted the euro, whereas the degree of integration of the foreign exchange market with the euro area is at a slightly lower level for the Czech Republic than was the case for Slovenia before it joined the euro area.

3.2 Adjustment Mechanisms

In the absence of independent monetary policy, the flexibility of the economy and its ability to adjust to shocks will be particularly important. The stabilisation function of public budgets, labour and product market flexibility and the ability of the financial system to absorb shocks will therefore be vital for smooth economic development.

As regards **the public finances** of the Czech Republic, the effectiveness of the stabilisation function within the European fiscal regulations will be crucial. The Stability and Growth Pact commits the Czech Republic to steer towards achieving a structural (cyclically adjusted) public budgets deficit of no more than 1% of GDP in the medium term. The closer the deficit is to zero in its structural part, the more room there will be at a time of economic weakening for the functioning of automatic stabilisers and, in the extreme case, for the implementation of discretionary measures. The current public finance deficits, however, are largely structural in nature. The public finance deficit will rise again in 2007, at a time of solid economic growth. This is at odds with the effort to pursue anticyclical fiscal policy and with the commitment to consolidate public finances prior to introducing the euro. The adoption of fiscal stabilisation measures in September 2007 and their implementation in 2008, along with some other reform steps, may lead to a gradual improvement in this situation. The consolidation of public finances should also be accelerated in order to curb growth in nominal public debt, which would lead to increasing debt service costs. Another condition for maintaining fiscal policy effectiveness is to ensure public finance sustainability, especially by dealing with the effect of demographic changes on pension and health care system expenditures. The contribution of public finances to the economy's ability to respond flexibly to shocks will clearly be limited until these problems are tackled.

Wage elasticity can enhance the economy's ability to absorb shocks to which the single monetary policy cannot respond. The analyses indicate that real wage elasticity in the Czech Republic is currently low, just like in the other countries under comparison, and has decreased over time. Differences in **inflation persistence** in the countries of the monetary union may also imply different impacts of the single monetary policy. Inflation persistence in the Czech

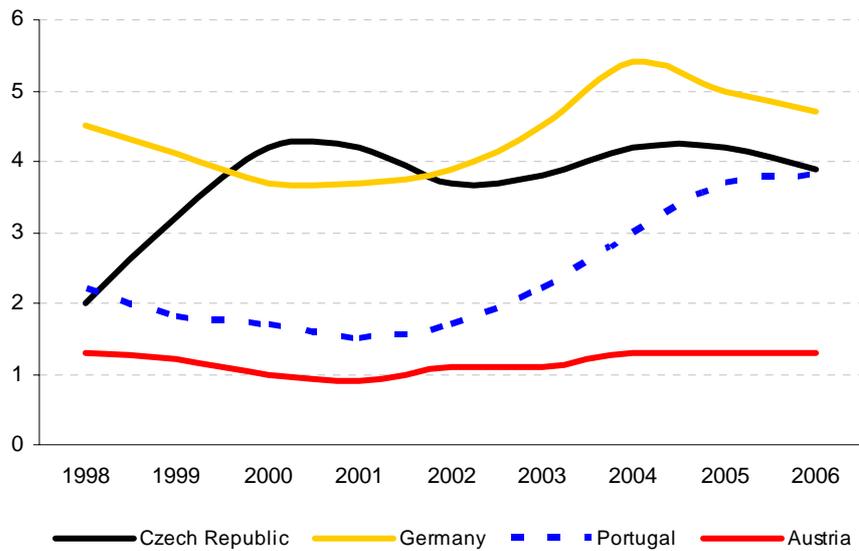
Republic is among the higher of the countries under comparison, but seems to be similar to that in Germany and Austria.

The ability of the Czech **labour market** to absorb shocks is virtually unchanged from last year and remains average by European comparison. The performance of the Czech labour market has recently seen some improvement. However, this improvement is largely associated with the high rate of economic growth observed since 2005. In some respects, though, the labour market is considerably less flexible than in the countries under comparison, and no major improvement is occurring. The institutional rules do not create the right conditions for employment of people with low skills. The main risk factors are the interaction of taxes and social benefits and the costs of terminating open-ended employment contracts.

The Czech labour market is still characterised by relatively high long-term and structural unemployment (see Chart 3.4), although the situation is rather better than in some other countries (Poland and Slovakia in particular). The Czech Republic still also has the largest regional differences in the unemployment rate. This may be due to significant regional gaps between the demand for, and supply of, labour and the low regional, occupational and sectoral mobility of the labour force, exacerbated, among other things, by the dominance of owner-occupied housing. It is thus reasonable to expect that cross-border mobility will probably not be an effective adjustment mechanism in the event of economic imbalances, even after movement of labour between the Czech Republic and all the original EU countries has been fully liberalised by 2011. Conversely, the inflow of foreign labour into the Czech Republic has recently been very dynamic, bearing witness to some degree of flexibility of the Czech labour market. On the other hand, however, it suggests that some serious problems persist in this market (in particular low incentives to seek employment for the long-unemployed with low skills), since the foreigners work mainly in jobs requiring few qualifications. The fact that movements of foreign workers are also going on in the wider context than just the Czech economy may pose some risk to labour supply, and might thus lead to unexpected changes with no links to the business cycle in the Czech Republic.

Labour market flexibility is determined to a great extent by the institutional rules. OECD analyses and some other new studies have revealed that collective bargaining has a fairly small effect on wage setting in the Czech Republic. The impact of the minimum wage on the flexibility of low wages and on job creation is also rather lower on average by international comparison. In addition, the halt in growth of the minimum wage as a percentage of the average wage can be regarded as positive, since high minimum wages coupled with high labour taxation can have an adverse effect on job creation. Overall labour taxation in the Czech Republic decreased slightly in 2006. This decline was more marked in low-income categories. The effect of taxation on long-term unemployment and job creation is roughly the same as in Austria, Hungary and Poland, but higher than in Poland and Slovakia. Compared to other countries, the financial incentives to accept a job given by the combination of taxes and benefits in 2006 were comparable or higher for the short-term unemployed, but average for the long-term unemployed. Simulations showed no improvements associated with the reform of the social benefit system in 2007. The level of social benefits coupled with the tax burden may diminish efforts to seek or keep a job, particularly in households with children. In the area of permanent employment the Czech Republic ranks among the countries with a higher degree of job protection, which may present a risk in particular as regards the entry of young people to the labour market. By contrast, the gradual steps to simplify the procedures for setting up businesses are likely to positively affect job creation. Despite these partial improvements the **regulatory environment for doing business**, by international comparison, remains hampered by major administrative obstacles.

Chart 3.4: Long-term unemployment: ratio of persons unemployed for more than one year to the labour force (%)



Source: Eurostat.

Stability and effectiveness of the banking sector is a precondition for the sector to be able to assist in absorbing the impacts of economic shocks. The percentage of non-performing loans in the Czech Republic has recently recorded an overall decline to a level only just above the euro area average. Capital adequacy is currently at a sufficient level comparable with the other countries monitored, but has been falling slightly over the past five years owing to the growing lending activity and the distribution of profits to bank owners. The sector's resilience is enhanced by its high profitability. Stress test results indicate that the Czech banking sector is stable and resilient to external shocks, although this resilience has yet to be tested by a period of adverse economic developments.