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 130 and 131 of the Treaty on the Functioning of the European Union and the Statute of the European System of Central Banks, EU Member States are required to achieve a high degree of sustainable convergence in order to join the euro area.

As regards European structures, 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 nominal convergence, as reflected in the long-term interest rate level.

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. The only exception is the criterion on the sustainability of public finance. If a country fails to meet this criterion it is subject to the excessive deficit procedure (EDP). This procedure was re-opened against the Czech Republic in December 2009 because it was expected to exceed the government deficit reference value in 2009. The Council recommended that the Czech Republic should reduce its government deficit in a sustainable manner to below 3% of GDP by 2013.

1.1 Assessment of Fulfilment of the Convergence Criteria

The Czech Republic is currently compliant with **the criterion on price stability**. The Czech Republic is expected to record modest inflation 2011–2012, which means it should fulfil the price stability criterion over this entire period. This will be true only if no significant changes are made to indirect taxes and no other inflationary administrative measures are taken in the consumer prices area. The conditions defined for excluding countries from the calculation of the reference value are a source of uncertainty as regards fulfilment of the price stability criterion, as they may lead to an unexpectedly low criterion value.

The CNB's inflation target (for the national consumer price index) has been set at 2% since the start of 2010. As with the previous target, the CNB seeks to ensure that actual inflation stays no more than one percentage point higher or lower than the target. Given the ECB's definition of price stability and the inflation targets of the non-euro area EU Member States, this target creates relatively good conditions for the future fulfilment of the criterion price stability.

The Czech Republic is not compliant with **the criterion on the sustainability of the government financial position** at present. Given the expected macroeconomic developments, however, the current fiscal policy plans should lead over the medium term (i.e. up to and including 2013) to a government debt level of 2.9% of GDP, i.e. below the Maastricht criterion.

The general government deficit for 2010 is notified at 5.1% of GDP. The government's fiscal strategy aims to reduce the deficit to 4.6% of GDP in 2011, 3.5% of GDP in 2012, and 2.9%

of GDP in 2013. In order to achieve balanced government finances by 2016, the government plans to further consolidate public finance in subsequent years.

The Czech Republic has long been compliant with the government debt-to-GDP ratio criterion. Given its relatively low initial level of government debt, the Czech Republic currently has no problems fulfilling this criterion, although the rate of growth of the debt started rising sharply in 2009. A debt of 39.3% of GDP is expected for 2010, i.e. 9.3 percentage points higher than in 2008. Owing to the expected annual government sector deficits, the government debt level will increase sharply in the medium term, reaching 44% of GDP in 2013. The debt-to-GDP ratio should start falling in subsequent years. A risk going forward is the expected adverse effect of population ageing. Unless the necessary reforms of the pension and health care systems are implemented, a further marked increase in the debt-to-GDP ratio is to be expected in the long run.

Assessment of the fulfilment of **the criterion on exchange rate stability** will only be possible after the Czech currency joins ERM II and the central rate of the koruna against the euro is set. The koruna has been recording a long-term appreciation trend against the euro and its movements have been mostly smooth since the Czech Republic joined the EU, with the exception of the crisis-hit years 2008 and 2009. The situation in early 2009, when the global financial market crisis was abating but foreign investors' negative view of countries in the Central European region was still unchanged, demonstrated that the volatility of the koruna-euro exchange rate may – given an unfavourable combination of exogenous factors – reach or even exceed the band of ±15% around the hypothetical central parity. However, the definition of the criterion is such that its interpretation is not entirely clear and so the assessment cannot be clear either. The appropriate timing of ERM II entry, which should be preceded by a stable situation on global financial markets, as well as by consolidation of domestic public finance and stabilisation of the domestic economy, will be of key importance for successful fulfilment of the exchange rate stability criterion going forward. The correct setting of the central rate of the koruna against the euro will be no less important.

The Czech Republic is currently compliant with **the criterion on long-term interest rates**, and provided that the public finance consolidation plans are implemented, no significant risks to the fulfilment of this convergence criterion are expected in the future either.

1.2 Assessment of Economic Alignment Analyses

Since the Czech Republic's first Euro-area Accession Strategy was adopted (i.e. since 2003),[1] the Czech economy had gradually been catching up with the average euro area economic level and had also been showing some signs of alignment with the euro area over the business cycle. In the last two years, however, this trend has been strongly affected by the global financial and economic crisis. As a consequence, the Czech and euro area economies have gone into recession and recorded a considerable deterioration in public finance. Interest rate differentials and exchange rate volatility have increased and financial market integration has loosened. The convergence trend of the domestic price level towards the euro area has been interrupted and cyclical and structural unemployment has risen.

[1] An updated strategy for the accession of the Czech Republic to the euro area was adopted by the government in 2007. This stated, among other things, that the CNB would continue to draw up an analytical document every year assessing the Czech Republic's economic alignment with the euro area.

In the light of domestic developments, and taking into account the fiscal problems in the euro area over the last year and the persisting elevated financial market volatility, the current situation does not seem conducive to future euro adoption in the Czech Republic or to taking steps towards it.

At present, the characteristics of the Czech economy as regards its preparedness to adopt the euro can be divided into four groups.

The first group consists of economic indicators that speak in the long run in favour of the Czech Republic adopting the euro. These include the high degree of openness of the Czech economy, its close trade and ownership links with the euro area, and the achievement of long-term convergence of the inflation rate. The recession caused a temporary increase in the level and volatility of nominal interest rate differentials vis-à-vis the euro area. However, the convergence of nominal interest rates can be regarded as sufficient, based on fundamentals, and therefore sustainable.

The second group comprises **areas which, in terms of euro adoption in the Czech Republic, pose a risk of macroeconomic costs, but which have shown some improvement in recent years.** The positive developments include the fact that until 2008 the Czech Republic was showing real economic convergence to the euro area. This convergence will probably resume as soon as the domestic economy recovers from the recent economic contraction and the consequences of the planned consolidation of public finance. As measured by GDP per capita, the Czech Republic is more advanced than some euro area countries although this is evidently no guarantee of future smooth functioning of the economy in the monetary union. Compared to the euro area average, moreover, a clear difference persists in the price level. The previous price level convergence trend was interrupted (probably only temporarily) in 2009 as a result of a sharp depreciation of the koruna. The cyclical alignment of economic activity between the Czech Republic and the euro area has recently increased significantly, but this reflects the recent extreme global developments and has probably not increased the probability of greater future alignment of the business cycle in normal global economic conditions. The favourable developments also include a halt in growth in overall labour taxation and in the last few years also a rise in the ratio of the minimum wage to the average wage. In 2009, corporations responded to the sharp fall in demand by freezing or cutting nominal wages to a larger extent. This indicates an ability to adjust nominal wages, but in real terms there has been no increase in wage flexibility so far. The business environment is also showing some gradual improvement. In terms of labour market flexibility, the positive developments also include an ability to make use of inflows of foreign labour at times of economic growth and, conversely, to reduce the number of foreign workers during the current economic downturn.

The third group consists of **areas which have recently recorded adverse developments in terms of future euro adoption**. The public finance deficit has deteriorated markedly as a result of the economic slump and the anti-crisis fiscal measures adopted. The overall fiscal deficit was 5.8% of GDP in 2009 and the structural deficit increased substantially. Austerity measures adopted for 2010 and planned for 2011 are likely to lead to a fall in the government deficit in the near future, but without fundamental reforms in subsequent years their impact will be of limited duration. Rapid growth in government debt servicing costs and long-term challenges associated with population ageing pose significant risks to the evolution and sustainability of public finance in the longer run. The impacts of the economic downturn are starting to be felt in a rise in long-term unemployment. A new adverse factor in terms of future euro adoption is the fiscal and economic problems in the euro area, which are fostering financial market uncertainty and higher volatility. A renewed lack of financial market confidence in the euro on the one hand would increase the costs incurred by the Czech

economy in satisfying the Maastricht exchange rate criterion and on the other hand would reduce the economic benefits of introducing the single currency. The activities of European institutions in reaction to the current problems are intended to strengthen the fiscal discipline rules in the euro area and limit the risk of similar situations arising in the future. However, they are still the subject of political negotiations.

The fourth group contains **areas which are showing long-term problems in terms of the economy's flexibility and ability to adjust to shocks and which are not showing any significant improvements**. Structural problems in the labour market ensuing from the configuration of taxes and benefits and from labour legislation are leading to relatively high labour market rigidity, low incentives to work among part of the population and to employment inflexibility. The low or unsuitable skills of the long-term unemployed are also a persisting problem.

1.3 Conclusions and Recommendations

The Czech Republic is non-compliant with the Maastricht convergence criteria mainly because of its fiscal indiscipline, which is repeatedly preventing fulfilment of the public finance sustainability criterion. The excessive deficit procedure was therefore opened against the Czech Republic at the end of 2009. The proposed fiscal strategy should enable the government sector deficit to be reduced below 3% of GDP in the medium term. The government debt criterion has always been fulfilled in the past, thanks mainly to the Czech Republic's low initial level of debt. Looking ahead, a problem might arise as regards meeting this criterion owing to the relatively high rate of growth of debt and insufficient implementation of pension and health system reforms. Thanks to external factors and the fading effect of previous administrative measures, the Czech Republic experienced significant disinflation in 2009 and started fulfilling the price stability criterion again in September 2009. Increases in indirect taxes and rising commodity prices have been fostering moderate price growth since 2010, but the Czech Republic is still compliant with the price criterion. In 2011–2013, the Czech Republic is expected to continue to fulfil the criterion provided that no one-off external shocks and significant tax changes deviate inflation upwards. The Czech Republic is compliant with the related criterion on long-term interest rates and is highly likely to remain so in the future. This compliance should be supported by the CNB's new lower inflation target and the preparation of fiscal consolidation measures. The Czech Republic does not currently fulfil the exchange rate criterion because it does not participate in ERM II. Fulfilment of this criterion in the future will be heavily dependent on the timing of ERM II entry and on financial market stability. On the basis of the convergence scenario it can also be expected that the long-term nominal and real appreciation against the euro will be renewed.

In the area of economic alignment, the preparedness of the Czech Republic for euro adoption has worsened, mainly as a result of the recession. Although the Czech Republic has long been gradually catching up with the euro area economic and price level, this trend was interrupted – probably temporarily – during the economic downturn. Interest rate differentials and exchange rate volatility have also increased in the last two years. Public finance has deteriorated substantially. Its long-term sustainability and the insufficient room for it to have a stabilisation effect in the event of strongly adverse developments are among the key challenges facing the Czech Republic. On the labour market, there has been no great structural improvement and problems persist in the institutional set-up. The persisting major uncertainty on financial markets, intensified among other things by investors' concerns about fiscal sustainability in some euro area countries, is not creating a favourable environment for the Czech Republic to join ERM II, since ERM II is potentially vulnerable to changes in financial market sentiment and in short-term capital flows. Any adverse developments during

the Czech koruna's stay in this mechanism could generate macroeconomic costs and reduce the Czech economy's alignment with the euro area.

In the current circumstances it is very unlikely that the Czech Republic will be able to fulfil all the Maastricht convergence criteria in the medium term. A general government deficit of above 3% will be the principal barrier to joining the monetary union. Maintaining and further increasing the degree of alignment of the Czech economy with the euro area in the next few years is equally uncertain. **In this situation, therefore, it is impossible to conclude that the Czech Republic has made sufficient progress in laying the groundwork for euro adoption to allow it to set a target date for entry into the euro area. Therefore, in line with the Czech Republic's Updated Euro-area Accession Strategy, the Ministry of Finance and the Czech National Bank recommend that the Czech government should not set a target date for the time being. The recommendation not to set a target date for euro area entry for the time being simultaneously implies a recommendation that the Czech Republic should not attempt to enter ERM II during 2011.**

2 ASSESSMENT OF THE CURRENT AND EXPECTED FULFILMENT OF THE MAASTRICHT CONVERGENCE CRITERIA

The achievement of a high degree of sustainable convergence, which is one of the prerequisites for euro adoption defined in the Treaty on the Functioning of the European Union, is assessed according to the Maastricht convergence criteria. These comprise a criterion on price stability, a criterion on sustainability of the government financial position, a criterion on exchange rate stability and a criterion on long-term interest rates. The criteria are specified in more detail in the Protocol on the Convergence Criteria referred to in Article 140 of the Treaty. The excessive deficit procedure is referred to in Article 126 of the Treaty and in the related Protocol on the Excessive Deficit Procedure and Council Regulation (EC) No. 1467/97.

2.1 Criterion on Price Stability

Box 2.1: Definition of the criterion on price stability

Treaty provisions

The first indent of Article 140(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 stipulates that "the criterion on price stability 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 1.5 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 of the price criterion is calculated as 1.5 percentage points plus the simple arithmetic average of the rate of inflation in the three countries with the lowest inflation rates, given that these rates are 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 (the European Commission and the European Central Bank) 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.

In the Convergence Report 2010 the EC and ECB state that the reference value of the price criterion may be linked to the overall economic situation at the time of the assessment. Between 2004 and 2009, the EU countries recorded mostly positive rates of inflation, hence the countries with the lowest positive rates of inflation were chosen as the best performers in terms of price stability in the Convergence Reports. In the economic circumstances at the time the Convergence Report 2010 was prepared, most countries were facing negative rates of inflation, so Portugal (-0.8%), Estonia (-0.7%) and Belgium (-0.1%) were included in the calculation of the price stability criterion. However, Ireland (-2.3%), which, according to the EC and the ECB, had a markedly lower inflation rate than the other Member States, was excluded from the calculation of the criterion. The choice of countries to be included in the calculation of the price criterion therefore depends fully on the arbitrary decision of the assessing institutions. Based on the experience to date, a very low value cannot be ruled out.

Moreover, the negative verdict for Lithuania[2] in the May 2006 Convergence Reports indicated that a very strict assessment can be expected as regards sustainable fulfilment of the criterion. If the outlook for the coming months foresees inflation rising above the reference value, the conclusion may be that the country is failing to satisfy the criterion in a sustainable manner. A similar signal has been sent out in the relatively strict assessment of the risks to the sustainable fulfilment of this criterion by, respectively, Slovakia and Estonia in the ECB's 2008 and 2010 Convergence Reports, despite the fact that both countries were ultimately accepted into the euro area.

According to the calculation of the reference value for the three best performing countries in terms of price stability, the Czech Republic did not fulfil this criterion in 2007 and 2008, unlike in previous years (see Table 2.1). The main exogenous factors in 2008 were a surge in prices of food and energy (most notably oil) and a wave of administrative measures (an increase in the lower VAT rate from 5% to 9%, the introduction of environmental taxes and health care fees, and further increases in excise duties). 2009 saw much lower energy and food prices compared to the previous year amid a global recession which, together with a fall in the domestic economy, manifested itself in sharp disinflation. The disinflation process peaked in 2010 Q2. Since then, prices have been gradually increasing because of administrative measures (increases in both VAT rates of 1 percentage point and a rise in excise duties on tobacco products, alcohol and beer and fuels) and rising oil and food prices and in Q2 also because of year-on-year depreciation of the koruna-dollar exchange rate. The Czech Republic has been compliant with the price stability criterion since September 2009.

Table 2.1: Harmonised index of consumer prices

(average for last 12 months vs. average for previous 12 months as of end of period, growth in %)

	2007	2008	2009	8/2010	2010	2011	2012	2013
Average for 3 EU countries with lowest inflation*	1.3	2.6	0.0	0.4	0.7	1.2	1.2	1.2
Reference value	2.8	4.1	1.5	1.9	2.2	2.7	2.7	2.7
Czech Republic	3.0	6.3	0.6	0.6	1.4	2.3	1.7	1.7

* More precisely, the three best performing countries in terms of price stability (see Box 2.1).

Sources: Eurostat, European Commission – Economic Forecast (spring 2010). The forecast for the Czech Republic is taken from the Czech Republic's Macroeconomic Forecast (July 2010).

Note: The outlook for EU countries for 2010–2011 is taken from the European Commission's Economic Forecast (spring 2010).

In 2011–2013, prices in the Czech Republic will still be affected, in addition to standard factors, by a significant contribution of administrative measures. However, the Czech Republic should fulfil the price stability criterion in 2011–2013 provided that there are no unexpected one-off shocks. Sustainable fulfilment of this criterion in the future period will be aided by the CNB's new inflation target. It is desirable, however, that no substantial inflationary changes to indirect taxes or other administrative measures in the consumer price area be made during the reference period for the assessment of this criterion (i.e. the ERM II participation period). Such measures would hinder fulfilment of the criterion.

[2] During the spring 2006 assessment, inflation in Lithuania exceeded the reference value for the price stability criterion by 0.1 percentage point.

2.2 Criterion on the Sustainability of Public Finance[3]

2.2.1 Government deficit criterion

Box 2 Chyba! Nebyl zadán název stylu.**.2: Definition of the criterion on the sustainability of the government financial position**

Treaty provisions

The second indent of Article 140(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 126(6) of the Treaty".

Article 2 of the Protocol on the Convergence Criteria 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 126(6) of this Treaty that an excessive deficit exists".

Article 126 of the Treaty sets out the excessive deficit procedure, which is specified in more detail in the Stability and Growth Pact. According to Article 126(2) of the Treaty, 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, or

- the excess over the reference value is only exceptional and temporary and the ratio remains close to the reference value.

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.

The criterion on the sustainability of public finance is again[4] not being fulfilled, so the excessive deficit procedure was opened for the second time against the Czech Republic at the end of 2009 based on an expected exceeding of the reference value for the government deficit-to-GDP ratio in 2009 (see Table 2.2). As a result of a sharp slowdown in economic growth in 2008 and economic recession in 2009, the general government balance saw a marked deterioration after 2007. In addition to the unresolved structural problems of Czech public finance, the government sector was facing an unprecedented shortfall in tax revenues owing to the extraordinarily unfavourable economic situation and to legislative changes approved mainly on the revenue side of the public budgets. These legislative changes were made, among other things, in an effort to soften the impacts of the recession. Expenditure on mitigating the effects of the recession on economic agents was increased at the same time. By contrast, the consolidation measures prepared by the government for 2010 will ensure a sizeable reduction in the general government deficit compared to the previous year.

[3] The criterion on the sustainability of public finance is satisfied only when both components of the fiscal criterion, i.e. the government deficit and government debt, are fulfilled in a sustainable manner.
[4] The Czech Republic was previously in the excessive deficit procedure between 2004 and June 2008.

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

	2007	2008	2009	2010	2011	2012	2013
Reference value	-3.0	-3.0	-3.0	-3.0	-3.0	-3.0	-3.0
Czech Republic	-0.7	-2.7	-5.8	-5.1	-4.6	-3.5	-2.9

Sources: CZSO, Government Deficit and Government Debt Notifications (October 2010), Fiscal Outlook of the Czech Ministry of Finance.

The draft state budget for 2011 and the medium-term outlook for the state budget in 2011–2013 assume a further gradual improvement in the general government balance to 2.9% of GDP in 2013, in line with the requirements of the excessive deficit procedure. The government resulting from the spring 2010 elections has thus tightened the fiscal objectives for the coming years compared to the Czech Republic's January 2010 Convergence Programme. It has also set the objective of achieving balanced general government accounts in 2016 provided that there is economic growth in the period under consideration. The current fiscal policy settings are based on the expenditure frameworks approved by the government. However, conceptual structural reforms will have to be made for 2012 and 2013. Those reforms should be prepared in 2011.

As regards the alignment of the Czech economy with the euro area economy and the sustainability of public finance, it is essential to address the structural problems of public finance. The medium-term budgetary objective for the Czech Republic under the Stability and Growth Pact is to achieve a structural general government deficit of 1% of GDP. Given the current fiscal policy settings, this objective will not be fulfilled during the outlook period. The structural deficit is expected to be 4.2% of GDP in 2010 and to decrease gradually thereafter to 2.2% of GDP in 2013. If this trend is maintained in the following years, the medium-term objective (MTO) will probably be achieved only in 2017.

The one-off resolution of environmental obligations and the potential adoption of a law to rectify some property injustices against churches could also widen the deficit in the short run. The potential impacts on public finance will depend on the exact form of the relevant measures.

2.2.2 Government debt criterion

Given the low initial level of government debt, the Czech Republic has had no problem fulfilling this criterion so far (see Table 2.3). In 2007–2008, the government debt stabilised around 30% of GDP, following a substantial increase (due mainly to government guarantees) in 2001–2003. Since 2009, however, the debt has increased sharply, as the amount of debt is being affected to a large extent by the public budget deficit, the largest component of which is the greatly elevated state budget deficit. Compared to the EU or euro area average, however, the overall debt is not high.

Given the fiscal policy settings and the assumptions of further consolidation, the debt should peak at around 43% of GDP in 2013 and decrease gradually in the years that follow. The debt could be positively affected by potential privatisation revenues, which, however, will probably be lower than in the past. It is therefore clear that the period of comfortable fulfilment of the government debt criterion is ending and that increased attention will have to be paid to the sustainability of fulfilment of this criterion in the future.

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

	2007	2008	2009	2010	2011	2012	2013
Reference value	60.0	60.0	60.0	60.0	60.0	60.0	60.0
Czech Republic	29.0	30.0	35.3	39.3	42.1	42.9	43.3

Sources: CZSO, Government Deficit and Government Debt Notifications (October 2010), Fiscal Outlook of the Czech Ministry of Finance.

Another risk is the adverse effect of population ageing. Unless the necessary reforms are implemented to mitigate its fiscal impacts, in particular pension system reform and health care reform, a further increase in the debt-to-GDP ratio is to be expected in the long term. These risks will probably (depending on the manner of financing) also affect the general government deficit.

2.3 Criterion on Exchange Rate Stability

Box 2.3: Definition of the criterion on exchange rate stability

Treaty provisions

The third indent of Article 140(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 stipulates that "the criterion on participation in the exchange rate mechanism of the European Monetary System 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 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 and the EC assess 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 140(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 ±2.25% around bilateral central parities, whereas a ±6% band was a derogation from the rule. In August 1993 the decision was taken to widen the fluctuation margins to ±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.

The example of the assessment of sustainability of fulfilment of the exchange rate stability criterion for Slovakia in the 2008 ECB Convergence Report recalls that some European authorities currently tend to take a stricter view in the interpretation of the convergence criteria and their fulfilment.

The admission of an EU Member State into the euro area is conditional on a successful, at least two-year stay of the national currency in ERM II. The Czech currency has not entered this system yet, hence it does not have a fixed central parity vis-à-vis the euro against which exchange rate fluctuations and thus also the fulfilment of this criterion can be monitored. The timing of ERM II entry and the appropriate selection of the central parity will be of key importance for fulfilment of the criterion.

For the purposes of this assessment of exchange rate stability, the hypothetical CZK/EUR central parity is set as the average exchange rate in 2008 Q1, i.e. the quarter preceding hypothetical ERM II entry at the start of 2008 Q2, which would allow euro adoption on 1 January 2011.[5] With the aid of this parity (see Chart 2.1) it is theoretically possible to monitor whether the Czech Republic would have fulfilled the exchange rate stability criterion in the given time period.

The exchange rate of the koruna against the euro is showing a long-term appreciation trend. However, this trend was interrupted in the second half of 2008 and in early 2009 by a sizeable depreciation due to deteriorating foreign investor sentiment about the Central European region. The magnitude of the depreciation (23%) between July 2008 and February 2009 indicates potential risks to the fulfilment of the exchange rate criterion. In March 2009 the koruna started appreciating again, and this trend is continuing in 2010. Overall, it can be seen that exchange rate deviations can in turbulent times exceed the set fluctuation band even if the parity is set on the basis of the current exchange rate, i.e. the quarterly average before hypothetical ERM II entry. The appropriate timing of ERM II entry, which should be preceded by prospects of a stable situation in the domestic economy, in global financial markets and in investment sentiment towards the Czech Republic and the whole region, will therefore be of key importance for successful fulfilment of the exchange rate stability criterion going forward.

[5] The hypothetical adoption of the euro in 2011 would have been preceded by an assessment of all the convergence criteria in 2010 Q2.

Chart 2.1: Nominal CZK/EUR exchange rate

Note: In the chart, an upward movement of the exchange rate means appreciation of the koruna vis-à-vis the euro. The hypothetical central parity is simulated by the average exchange rate for 2008 Q1.

Sources: CNB, Ministry of Finance calculations. Data up to 30 September 2010.

The minimum length of stay of an EU Member State in ERM II is set by the Treaty at two years. The Czech Republic's September 2003 Euro-area Accession Strategy and its August 2007 update state that the Government and the CNB agree on a stay in ERM II that does not greatly exceed the minimum required period. 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 and then to benefit from its introduction without experiencing any problems.[6] The timing of ERM II entry depends to a large extent on the speed of the real and nominal convergence process in the Czech Republic. A successful stay of the Czech currency in the mechanism is closely related to the country's alignment with the euro area economy, the consistency of economic and budgetary policies and to the setting of an appropriate and sustainable central parity.

2.4 Criterion on Long-term Interest Rates

Box 2.4: Definition of the criterion on long-term interest rates

Treaty provisions

[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.

The fourth indent of Article 140(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 stipulates that "the criterion on the convergence of interest rates means 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 two 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

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

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 at most the three countries which are used for the calculation of the criterion on price stability. Interest rates have been measured on the basis of harmonised long-term interest rates, which were developed for the purpose of assessing convergence.

The annual average long-term interest rates for convergence purposes showed an upward trend during 2007–2009. Despite this, the Czech Republic always fulfilled the interest rate criterion with 1 percentage point to spare over the period under review.

The average level of long-term interest rates for convergence purposes for the last twelve months was 4.2% in the Czech Republic in August 2010 (see Table 2.4). The successful preparation of government reforms, the positive outlooks of rating agencies (Standard & Poor's, Fitch) for the Czech Republic, and the interest in Czech government bonds (denominated in both the koruna and the euro) on the part of residents and non-residents will probably contribute to a further decrease in average yields in 2010 to 3.7% on average. At the same time, we expect that Czech government bond yields will continue moving in the same direction as EU/German government bond yields and that the spread between them will not increase. The predicted rise in yields in 2011 should be gradual and reflect financial market developments and the recovery of the domestic economy. In 2011–2013, however, we do not identify any significant impulses fostering high growth in government bond yields, provided that the fiscal consolidation objectives are fulfilled. Given these facts, along with the expected low and stable future domestic inflation and slightly rising values of the convergence criterion (which reflects, among other things, increased risk related to the fiscal indiscipline of some euro area countries and a potential increase in inflationary pressures in response to the financial stimuli and measures supporting economic growth in the euro area), we do not expect the Czech Republic to have any problems fulfilling this convergence criterion in the future.

Table 2.4: Long-term interest rates for convergence purposes
(average for the last 12 months, in %)

	2007	2008	2009	8/2010	2010	2011	2012	2013
Average for 3 EU countries with lowest inflation*	4.4	4.2	3.9	4.0	4.3	4.8	4.8	4.8
Reference value	6.4	6.2	5.9	6.0	6.3	6.8	6.8	6.8
Czech Republic	4.3	4.6	4.8	4.2	3.7	3.9	3.9	3.9

* More precisely, the three best performing countries in terms of price stability (see Box 2.1).

Sources: European Commission, Ministry of Finance calculations.

Note: When calculating the interest rate criterion for August 2010, a different country with the lowest rate of inflation was chosen from the best performing countries in terms of price stability – the Netherlands – instead of Estonia. The reason for excluding Estonia from our calculation was an absence of adequate data, as Estonia has currently a very limited debt and there are no adequate long-term government bonds on the financial market.

2.5 National legislation convergence criterion

Besides fulfilling economic convergence criteria, the countries are required to harmonise their legislation with Articles 130 and 131 of the Treaty on the Functioning of the European Union and the Statute of the European System of Central Banks before they can join the euro area. The compatibility of national legislation with EU law is also assessed in the regular convergence reports of the European Commission and the ECB. In addition to an examination of the compatibility of Czech law based on the standard criteria defined in the aforementioned articles of the Treaty, the latest ECB Convergence Report of 2010 extended the assessment of the CNB's financial independence to include an evaluation of its capital adequacy. The report stated that the CNB *"is faced with accumulated losses…carried over for several years. A negative capital situation may adversely affect an NCB's ability to perform its ESCB-related tasks as well as national tasks. In order to comply with the principle of financial independence and with a view to the future adoption of the euro, Česká národní banka should be provided with an appropriate amount of capital within a reasonable period of time so as to comply with the principle of financial independence."*[7]

The CNB declared its disagreement with this assessment and pointed out *"that the losses that arose in previous years owing to accounting revaluation of its foreign exchange reserves have never undermined its independence and credibility, which are regarded as very high even on the international scale."*[8] The CNB's calculations have shown repeatedly that it is able to cover its accumulated losses from its future profits.

It cannot be ruled out that the negative assessment of the CNB's capital adequacy and financial independence by the European authorities will be repeated in their future convergence reports and that the Czech Republic and the CNB will be asked to resolve the situation relating to the central bank's capital before the country joins the euro area. This could have an adverse effect on the process of euro adoption in the Czech Republic.

[7] http://www.ecb.int/pub/pdf/conrep/cr201005en.pdf
[8] http://www.cnb.cz/en/public/media_service/press_releases_cnb/2010/20100512_convergence.html

3 ASSESSMENT OF THE CZECH REPUBLIC'S CURRENT 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, the fulfilment of which is assessed in the previous part. The Czech Republic's future entry into the euro area ensues from the commitments associated with EU membership. The economic impacts of euro adoption, which will mean a loss of independent monetary policy and exchange rate flexibility vis-à-vis the Czech Republic's major trading partners, will be affected by the characteristics and situation of both the Czech economy and the euro area economy. These factors will influence whether adoption of the euro by the Czech Republic will be perceived as a sensible step towards increasing the country's economic stability and performance. The key factors for the Czech economy will be flexibility and resilience to shocks as well as sufficient overall economic and structural similarity to the euro area.

The analyses are divided into two basic groups according to 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 of 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 alignment indicators over time and in comparison with selected countries. The countries under comparison either are euro area members already (Austria, Germany, Portugal, Slovakia and Slovenia)[9] or aspire to such membership (Poland and Hungary). The individual studies were prepared using the statistical data and information available in July 2010.

3.1 Cyclical and Structural Alignment

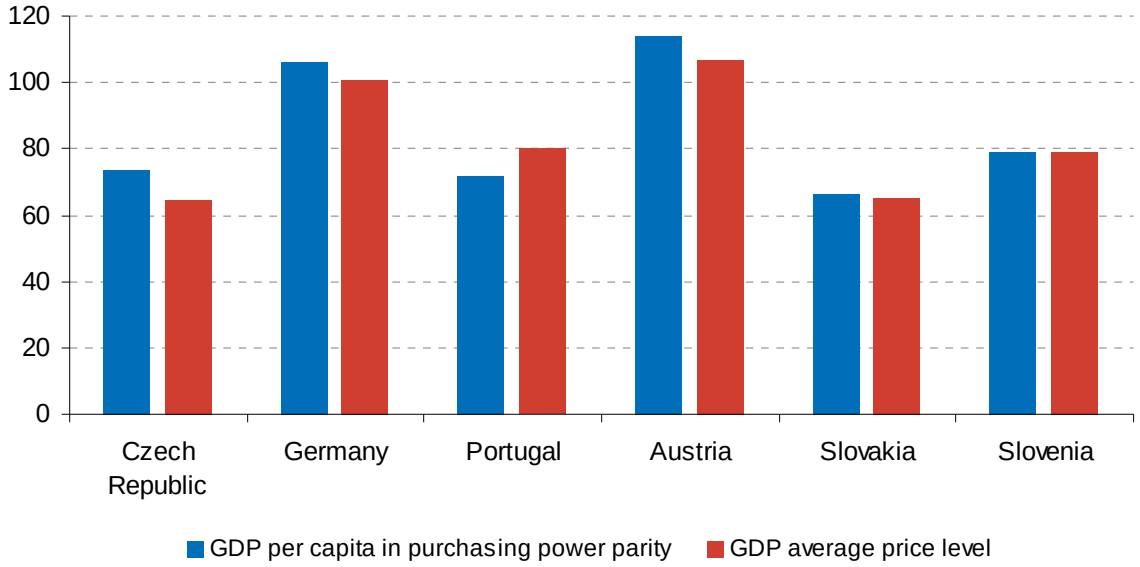
Assuming a stable and sustainable economic situation in the euro area, the costs arising from the loss of the Czech Republic's own monetary policy will be particularly pronounced if the Czech economy is not aligned with the euro area economy. The risks arising from the Czech Republic's accession to the euro area will decrease as the degree of alignment increases.

The degree of real economic convergence is an important indicator of the Czech economy's similarity to the euro area. A higher level of such convergence fosters greater similarity of long-run equilibrium development. Indirectly it can also foster a lower likelihood of misalignment in the shorter run. A higher degree of convergence in the economic level prior to ERM II entry and euro adoption should further 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. From the long-term perspective, the Czech economy is gradually converging towards the euro area in real terms. However, this trend has halted– probably only temporarily – as a result of the financial and economic crisis. In 2009, similarly as in the previous two years, GDP per capita in the Czech Republic was 73% of the euro area average

[9] The selection of euro area countries comprises countries that are comparable in terms of economic level and countries with which the Czech economy has trading links. The values of the indicators for the euro area are defined at the EA-16 level.

(see Chart 3.1). The convergence process was also interrupted in the case of the price level of GDP. In 2009, this dropped to 65% of the euro area price level and it therefore remains below the level corresponding to the performance of the economy. The wage level in the Czech Republic in 2008 was roughly 36% of the average euro area level when converted using the exchange rate and just above 50% when calculated using purchasing power parity data. The real exchange rate of the koruna (on an HICP basis) appreciated on average by 3.3% a year between 1998 and 2009, but is displaying significant fluctuations around its long-run trend. Some of these fluctuations can be sources of macroeconomic shocks, while others can help to absorb them. The koruna's appreciation in 2007 and the first half of 2008 (i.e. in a situation of high inflation and fast economic growth) had a stabilising effect on the Czech economy, as did the subsequent weakening of the Czech currency during the recession. According to the analyses, equilibrium real appreciation of the koruna against the euro at an average rate of 2.0–3.4% a year can be expected over the next five years. Continuing real appreciation of the exchange rate following euro area entry would therefore initially mean an increase in the inflation differential vis-à-vis the euro area and related lower (or even negative) real interest rates.

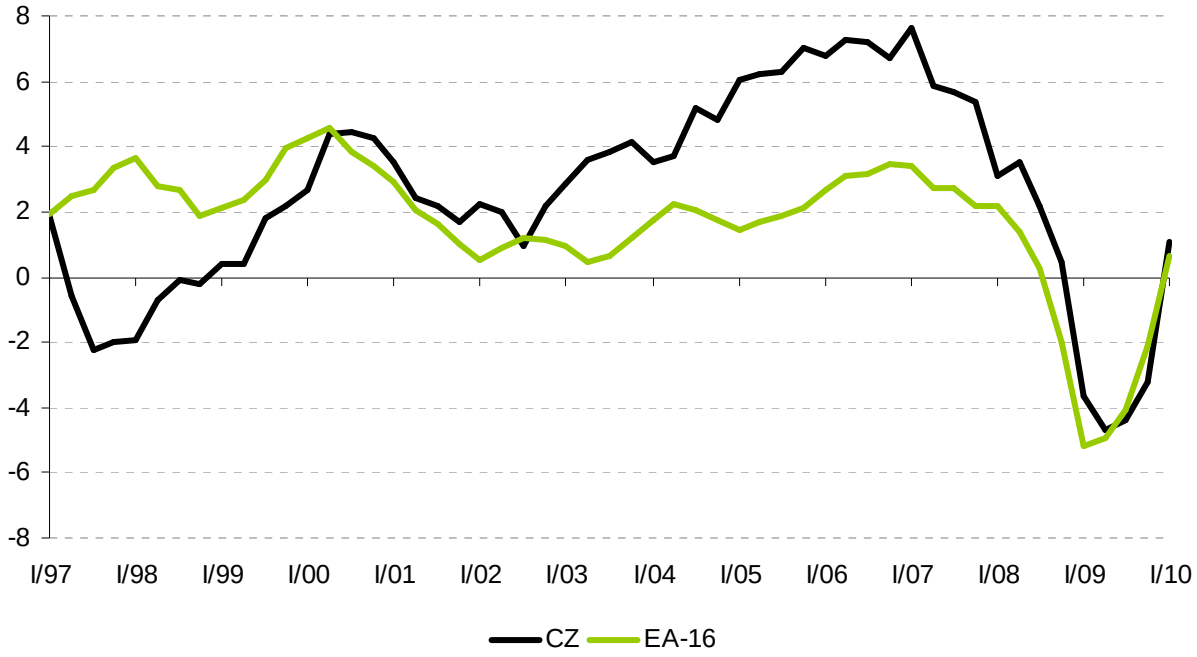
Chart 3.1: Real economic convergence of selected states towards the euro area in 2009
(EA-16 average = 100)



Sources: Eurostat, CNB calculations.

Alignment of economic activity and similarity of economic shocks will increase the likelihood that the single monetary policy in the monetary union will be appropriately configured from the perspective of the Czech economy. The analyses indicate increased correlation of overall economic activity between the Czech Republic and the euro area recently; the same goes for activity in industry and export activity. The significant recent rise in the monitored correlations, including supply shock correlation, should be taken with a large dose of caution, since these indicators have been strongly affected by the global economic downturn and the subsequent gradual recovery in economic activity proceeding in parallel in the Czech Republic and the euro area (see Chart 3.2). The observed increased correlations therefore are not necessarily a good indicator of future developments.

Chart 3.2: GDP growth in the Czech Republic and the euro area
(in %, year-on-year, seasonally adjusted)



Sources: Eurostat, CNB calculations.

Similarity of the **structure of economic activity** with the euro area should decrease the risk of asymmetric economic shocks. In terms of production structure, the Czech economy retains a specific feature in the form of a higher share of industry and a smaller share of services, particularly financial intermediation, compared to the euro area. Of the other countries under review, Slovakia has a comparable economic structure. The above-average share of the car industry in the total output and value added of the Czech economy compared to the euro area is (as in Germany) a possible source of asymmetry.

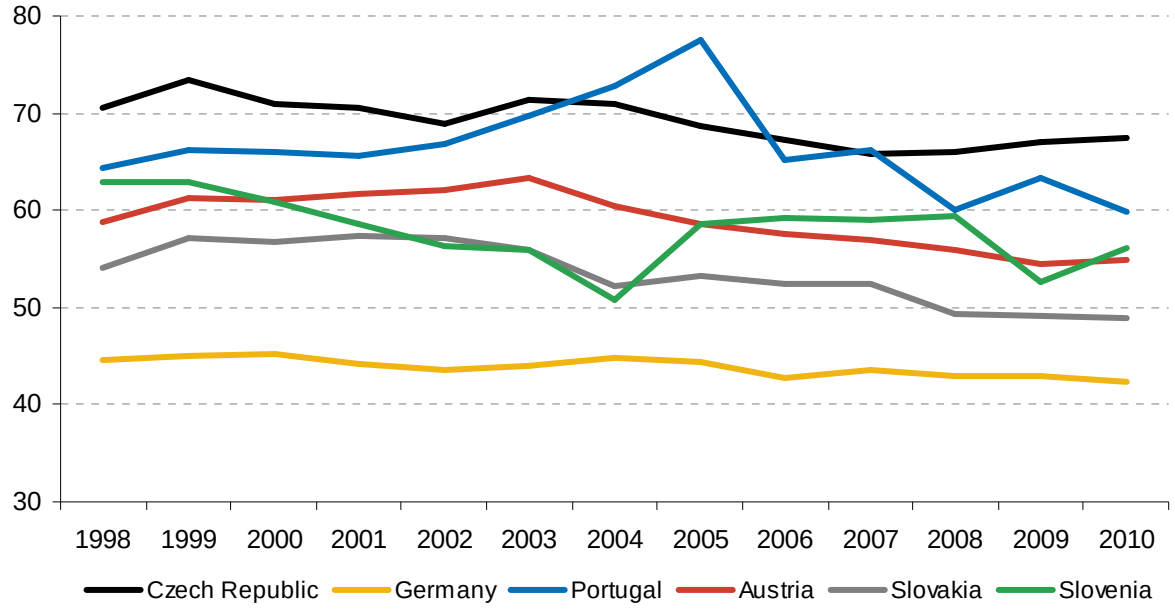
Fast convergence of **nominal interest rates** in the immediate run-up to joining the euro area acted as an asymmetric shock in some economies in the past, generating macroeconomic imbalances and risks to financial stability. For a country planning to enter the monetary union, earlier gradual interest rate convergence is therefore an advantage. The fact that the difference between Czech and euro area short-term market interest rates was close to zero for a long time (i.e. between 2002 and 2007) is favourable from this perspective. However, a modest positive interest rate differential opened up in the second half of 2008. This widened further during 2009 owing to the escalation of the global financial crisis and because the European Central Bank – unlike the CNB – started to use unconventional monetary policy instruments. Government bond yield differentials peaked at the start of 2009 and also increased slightly in connection with the Greek crisis in 2010 Q2.

Another indicator of the possibility of sharing a single currency is long-term co-movement in the **exchange rates** of two currencies against a reference currency. Compared to the other currencies under review, the correlation between the rates of the Czech koruna and the euro against the dollar was relatively high. Since 2000, this correlation has declined only during the fast appreciation of the koruna in 2001 and 2002 and later on in connection with the general surge in global financial market volatility after the fall of Lehman Brothers in 2008 H2 and 2009 Q1, when the Czech koruna –like the Hungarian forint and the Polish zloty

– came under significant depreciation pressure. In 2010 H1, however, the correlation between the Czech koruna and the euro returned to its pre-crisis level.

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. Following Slovakia's entry, the euro area is the partner for approximately 70% of Czech exports and more than 60% of Czech imports, a level comparable to, or even higher than, in the other countries under review (see Chart 3.3). The high share of trade was maintained despite a decline in the overall volume of Czech foreign trade in 2009. The Czech economy's ownership links with the euro area on the direct investment inflow side are relatively strong and growing apace. In 2009, the inflow of foreign direct investment from the euro area to the Czech Republic fell substantially as a result of the global crisis, but in 2010 it is starting to rise again.

Chart 3.3: Exports to the euro area as a percentage of in total exports
(in %)



Sources: Eurostat, IMF, CNB calculations.

Despite the smaller size of the Czech **financial sector** and its smaller depth of financial intermediation relative to the euro area, it can be expected to have a similar effect on the economy in normal economic conditions. The depth of financial intermediation in the Czech Republic, as measured by the ratio of financial system assets to GDP, is roughly one-quarter of the value for the euro area. The share of bank loans to the private sector in the Czech Republic is roughly 55% of GDP, or approximately one-third of the value for the euro area. However, the current level of the aforementioned indicators in the euro area is not necessarily an ideal worth following, since in many countries it is more a reflection of private (and also public) sector overleveraging.

The structure of the financial assets and liabilities of Czech non-financial corporations and households is gradually converging to that of euro area entities, but still shows differences. The difference is particularly visible in a higher share of trade receivables in corporate assets and a higher share of currency and deposits in household assets. The indebtedness of Czech corporations and households is still significantly lower than in the euro area countries under review. Net financial assets of households represent around 55% of GDP.

In the past, **the effect of money and financial market rates on client rates** in the Czech Republic was roughly the same as in the euro area. According to the current analyses, the global financial and economic crisis has led to slower transmission of monetary policy interest rates to the Czech economy owing to growth in the interbank market premium and some client risk premia. The interest rate sensitivity of new loans to non-financial corporations is similar to that in the euro area. The low degree of **spontaneous euroisation** in the Czech Republic is due to economic entities' confidence in the domestic currency and to sustained low inflation and low interest rates. The use of foreign currency is thus concentrated primarily in the sector of corporations involved in foreign trade.

The analysis of **integration of financial markets** (the money, foreign exchange, bond and stock markets) reveals that the speed of elimination of shocks on the Czech financial markets was increasing in the pre-crisis period and the level of convergence did not differ much from that of the countries under review. The only exception was the money market, which was already showing a lower degree and speed of integration in the pre-crisis period, mainly due to different monetary policy. The global crisis and its impacts led to a decline in the speed of adjustment and to loosening financial market integration in all the countries under comparison. However, a gradual improvement in the situation has been observed since mid-2009, although the pre-crisis integration values on certain markets have not been reached so far.

3.2 Adjustment Mechanisms

As regards the **public finance** of the Czech Republic, its ability to stabilise the economy will be important. This ability is conditional on public finance sustainability and maintenance of fiscal discipline. The closer the structural part of the public budget deficit is to zero, the more room there will be at a time of economic downturn for the functioning of automatic stabilisers and the potential implementation of discretionary measures.

The assessment of the roles of the structural and cyclical components of the total budget balance in the period under review shows that the Czech government sector deficits were due mainly to non-cyclical effects – the total deficit was practically identical to the structural component (see Chart 3.4).

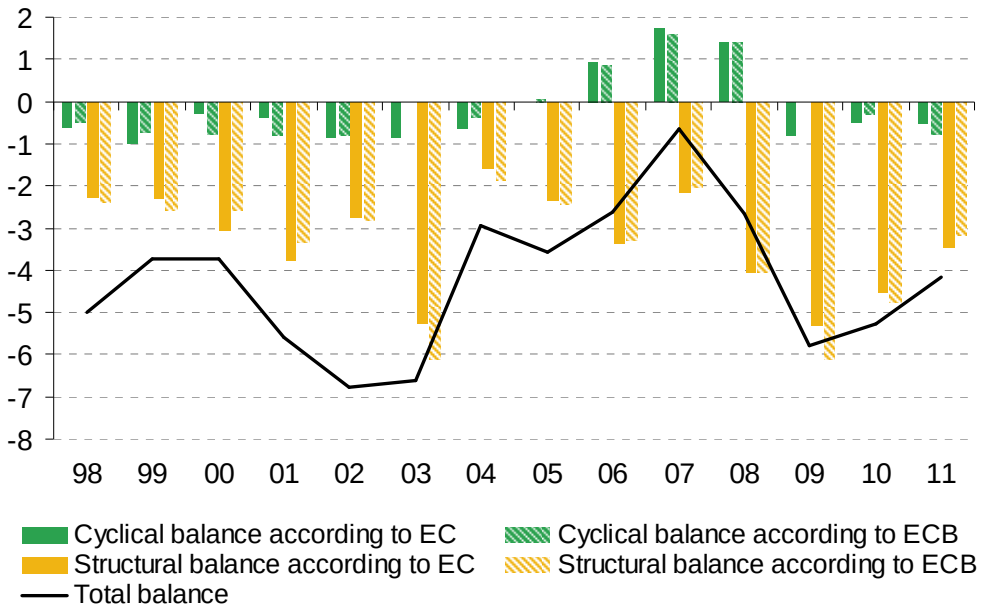
The government's fiscal policy, reflected in the evolution and size of the structural balance, was more often pro-cyclical in the period under review. Additional tax receipts in 2006–2008 were not consistently employed to reduce the fiscal deficit, but instead tended to be used to generate new public expenditures. Similarly, tax cuts affecting the revenue side were not ultimately accompanied by corresponding austerity measures on the public expenditure side, even during years of solid economic growth. The structural deficit recorded a further considerable deterioration in 2009 as a result of government anti-crisis and other measures. The situation improved somewhat in 2010, when the structural deficit was considerably reduced by budget austerity measures, which, however, will be in place for only a limited time. According to the CNB's current estimate for 2011, the government's consolidation measures as set out in the state budget bill for 2011 would lead to a further improvement in the structural deficit, as shown in Chart 3.4.

The cyclical component played only a slightly negative role in the total budget balance in 1998–2005. The action of automatic stabilisers, respond to the business cycle and smooth its

fluctuations, was very limited in the Czech Republic in this period.[10] The business cycle did not start to have a major effect until 2006 and 2008, when favourable economic growth gave rise to extraordinary tax revenues. This was reflected in a positive effect of the cyclical component of the budget balance on the total deficit. However, the cyclical component recorded a change of trend in 2009 owing to the economic slump. According to the CNB's current forecast, the cycle will foster a slight deepening in the total deficit in 2010–2011.

Although the Czech Republic's **total government debt** is lower than that of many EU countries, it has started growing significantly because of decline in GDP. In addition to the amount of debt, the high share of mandatory expenditure combined with the expected effect of demographic changes on pension and health care system expenditures poses a risk to public finance sustainability in the context of the current economic slowdown. Besides the Czech Republic, almost all EU countries have faced a dramatically worsening fiscal situation in the wake of the global economic crisis.

Chart 3.4: Decomposition of the fiscal deficit into its cyclical and structural components
(as % of GDP)



Sources: CZSO, CNB calculations.

Wage flexibility 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 was low in the past, as in the other countries under comparison. In 2007–2010, however, nominal wages responded to the evolution of economic activity in the appropriate direction and quite sensitively. Initially, in 2007–2008, the rate of growth of nominal wages rose sharply in a situation of buoyant economic growth. In 2009–2010, conversely, wage growth slowed noticeably, dampening the impact of the recession on the Czech labour market. Differences in **inflation persistence** in the monetary union countries could lead to different

[10] Automatic stabilisers act in the direction of a deterioration in the fiscal balance at a time of economic recession and in the direction of an improvement in years of economic growth.

impacts of the single monetary policy. Inflation persistence in the Czech Republic is medium-low among the countries under comparison.

The Czech **labour market** situation reflects the impacts of the recent economic downturn. As in the other countries under comparison, unemployment is rising. Long-term unemployment has also been rising since 2009 H2 and this process can be expected to continue in 2010 and 2011. Structural unemployment is hovering around 6%. This is one of the lowest figures among the countries under comparison. However, the Czech Republic has persisting relatively large regional differences. A large gap between households' supply of labour and businesses' demand for labour is also apparent for some professions.

Although the **international mobility** of Czech workers is not very high, the increase in foreign employment in the Czech Republic until 2008 H1 and its subsequent decline as a result of the economic slump can be regarded as an ability of economic adjustment. On the other hand, the use of foreign labour in the pre-crisis period indicated the persistence of some serious rigidities in the Czech labour market, as demand for low-skilled labour was not satisfied from domestic sources.

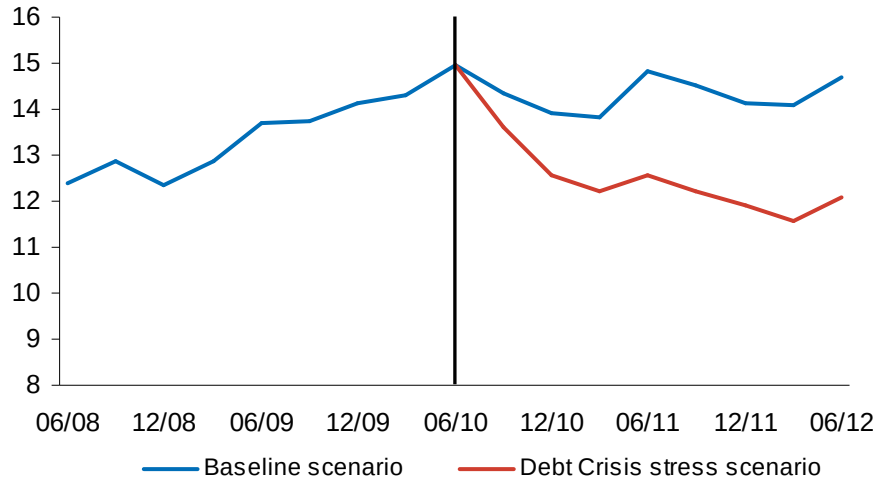
The flexibility of the labour market is determined to a great extent by its **institutional rules**. The effect of collective bargaining on wage setting in the Czech Republic is no higher than in the current euro area members. The ratio of the minimum wage to the average wage was rising until 2006. In the following two years, however, it decreased. This is important above all in low-skilled jobs, for which the negative impact of a high minimal wage on wage flexibility can be greater. The costs of dismissing employees in the Czech Republic are relatively high, particularly for open-ended short-term contracts. In contrast to permanent employment, employment protection is low in the case of temporary employment. Despite a reduction in labour taxation owing to a tax reform introduced in 2008, overall labour taxation remains high in the Czech Republic. Implicit tax rates are affected by health and social insurance contributions more than by income tax. The financial incentives to accept a job in the initial phase of unemployment in the Czech Republic are among the higher ones. However, in the case of long-term unemployment the incentives are small, particularly for low-income households with children. In the last two years, partial legislative changes have been made to taxes and benefits. According to simulations, however, these changes have not resulted in any major improvement in the incentive to work.

In the area of **product market flexibility** the situation is showing a gradual partial improvement. In particular, gradual steps are being taken to simplify the procedures for setting up businesses and carrying on business activities. However, the domestic business environment is still more burdened with administrative obstacles than that in most of the countries under comparison, partly because of a concurrent gradual improvement in the business environments in those countries. As in the other countries under comparison, the corporate taxation rate has been declining recently, but the overall tax burden on Czech corporations is higher than in Portugal, Hungary, Poland and Slovakia.

Stability and effectiveness of the banking sector is a precondition for the sector to be able to assist in absorbing economic shocks. Despite the sharp economic decline and related growth in credit losses, the Czech banking sector was able to generate sufficient operating revenues and achieved high profitability by European comparison again in 2009. Czech banks had created a sufficient capital buffer to deal with potential shocks by retaining a part of their previous earnings. In mid-2010, the aggregate capital adequacy of the banking sector in the Czech Republic was almost 15% (well above the regulatory threshold of 8%) and no bank reported a ratio below 10%. The stability of the domestic banking sector, and hence its ability to absorb external shocks and not generate shocks for the domestic economy, is also being

fostered by high balance sheet liquidity, which is based on an excess of primary deposits over loans, and therefore by minimum dependence on funds raised on foreign markets. The results of stress tests conducted by the Czech National Bank on banks' portfolios as of 30 June 2010 indicate that the Czech banking sector is also sufficiently resilient to extremely adverse macroeconomic and financial developments (see Chart 3.5).

Chart 3.5: Evolution of the capital adequacy ratio according to CNB stress tests
(in %)



Note: The baseline scenario corresponds to the CNB's macroeconomic forecast published in Inflation Report III/2010.

The ***Debt Crisis*** stress scenario captures a combination of weak economic activity in the Czech Republic and abroad and adverse financial market developments. At the same time, a crisis on the government bond markets of the southern EU states is assumed, causing a decline of 50% in the value of the Czech banking sector's exposures to these countries. This scenario is considered very extreme and highly improbable.

Source: CNB,
http://www.cnb.cz/miranda2/export/sites/www.cnb.cz/en/financial_stability/stress_testing/2010/stress_test_results_2010_2q.pdf