# 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 (the Treaty) and the Statute of the European System of Central Banks and the European Central Bank (ECB), EU Member States are required to achieve a high degree of sustainable convergence in order to join the euro area.

The degree of sustainable convergence is assessed according to the Maastricht convergence criteria. These comprise a criterion on price stability, a criterion on the government financial position, a criterion on participation in the exchange rate mechanism and a criterion on the convergence of interest rates. The criteria are set out in Article 140 of the Treaty and detailed in the Protocol on the Convergence Criteria annexed to the Treaty. The related excessive deficit procedure is referred to in Article 126 of the Treaty and Protocol No. 13 on the Excessive Deficit Procedure annexed to it, and in the relevant Council regulations.

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. This preparedness can be assessed from the perspective of the economic alignment and structural similarity of the Czech economy and the euro area economy, and from the point of view of the economy's ability to absorb shocks and adjust flexibly to them, for example via effective fiscal policy, a flexible labour market and a sound financial sector.

The view on the economic benefits and costs of joining the euro area has also changed in recent years as a result of ongoing fundamental changes in the institutional architecture of the EMU in response to the debt problems of some of its member countries. Changes in the economic and political framework of the EMU and in the functioning of rescue mechanisms may imply new and unforeseen obligations for accession countries. Owing to the ongoing changes, the present and planned future shape of the framework for the functioning of the euro area is moving further and further away from the situation that existed when the Czech Republic entered the EU and committed to adopt the euro.

#### 1.1 Assessment of Fulfilment of the Convergence Criteria

The Czech Republic is currently compliant with the **criterion on price stability** despite an increase in both VAT rates at the beginning of 2013. It is also expected to record only modest inflation in 2014–2016, which means it should fulfil the price stability criterion. The CNB's inflation target (for the national consumer price index) has been set at 2% since the start of 2010. The CNB seeks to ensure that actual inflation does not deviate from the target by more than one percentage point. Given the ECB's definition of price stability and the inflation targets of the non-euro area EU Member States, this target creates good conditions for future fulfilment of the price stability criterion.

The **criterion on the government financial position** sets conditions for the levels of the government deficit and government debt. The Czech Republic is not currently compliant with this criterion, as it has been in an excessive deficit procedure (EDP) since 2009. Renewed compliance with this criterion is expected in 2014, based on the assumption that the government deficit will fall below 3% of GDP in 2013 and stay below the reference value in the following years, which should result in abrogation of the EDP. The general government

deficit for 2013 is expected to reach 2.9% of GDP, compliant with the Maastricht convergence criterion. Given the expected macroeconomic developments, the current fiscal policy plan is to continue satisfying this Maastricht criterion in the future. Specifically, the government fiscal strategy aims to reduce the deficit to 2.9% of GDP in 2014 and 2015, and then to 2.8% of GDP in 2016. The persisting euro area debt crisis and its potential macroeconomic and fiscal impacts on the Czech economy represent the main risk to this plan.

The government debt-to-GDP ratio has long been below the 60% level in the Czech Republic. Given its relatively low level of government debt on entering the EU, the Czech Republic has had no problems fulfilling this criterion so far, although the debt rose sharply in 2009–2012. A debt of 46.1% of GDP is expected for 2013, i.e. 0.1 percentage point lower than in 2012. Owing to the expected annual government sector deficits, the government debt level will further increase in the medium term, reaching 49.9% of GDP in 2016. The year-on-year growth in the relative debt should slow down, however. The major long-term risk going forward is the expected adverse effect of population ageing. Unless structural changes are made to the pension and health care systems, a further increase in the debt-to-GDP ratio is to be expected in the long run (other things being equal).

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. Assessment of the fulfilment of the **criterion on participation in the exchange rate mechanism** will only be possible after the Czech Republic joins ERM II and the central rate of the koruna against the euro is set. The Czech currency has not entered this system yet, hence it does not have a central parity vis-àvis the euro against which exchange rate fluctuations and thus also the fulfilment of this criterion can be monitored. The regime of using exchange rate interventions as another tool of monetary policy cannot be viewed as setting central parity towards euro adoption.

The koruna's exchange rate against the euro had shown a long-term appreciation trend in the pre-crisis period. However, this trend came to a halt in 2008. Since then, the exchange rate has recorded fluctuations reflecting the various phases of the economic and debt crisis, generally with a stabilising effect on domestic economic activity. Further exchange rate depreciation was a result of the CNB exchange rate interventions aimed at easing monetary conditions. The policy of using exchange rate as monetary policy tool is expected to end by the time when monetary policy will need to be significantly restricted as a result of very significant inflationary pressures. This monetary restriction would be delivered via an exit from the foreign exchange interventions regime and subsequently via raising interest rates above (technically) zero level. After that, the exchange rate can be expected to start appreciating again, albeit at a more modest pace.

Overall, it can be seen that exchange rate deviations can approach or even exceed the set fluctuation band in turbulent times. The appropriate timing of ERM II entry will thus be of key importance for successful fulfilment of the exchange rate stability criterion going forward. The Czech Republic should enter ERM II amid a stable situation in the domestic economy, stable global financial markets and positive investment sentiment towards the Czech Republic and the whole Central European region.

The Czech Republic is currently comfortably compliant with the **criterion on the convergence of interest rates**, and, in spite of certain risks (a new escalation of the euro area debt crisis), the pressures are not expected to be significant enough to prevent fulfilment of this convergence criterion in the coming years. However, it is important to maintain the confidence of the financial markets in the medium-term consolidation and long-term sustainability of Czech public finance.

#### 1.2 Assessment of Economic Alignment Analyses

The situation in recent years has been strongly affected by the impacts of the global financial, economic and subsequently European debt crisis. At the same time, the Czech economy has stopped catching up with the euro area economic level. On the other hand, though, it is now showing increased business cycle alignment with the euro area. As a consequence of the euro area economic crisis, the other EU countries, including the Czech Republic, went into recession and then recorded a considerable deterioration in public finance. The fiscal consolidation undertaken in response to this situation by EU countries, including the Czech Republic, has meanwhile delayed the economic recovery.

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 and its close trade and ownership links with the euro area. These factors provide for the existence of microeconomic benefits of euro adoption, such as a reduction in transaction costs and the elimination of exchange rate risk. Strong trade links with the euro area are also reflected in a high correlation between the exchange rates of the koruna and euro against the dollar and are also fostering alignment of the business cycle with the euro area. This alignment has increased markedly in recent years, although it is not certain that the increased level will persist once the current crisis is over. Another favourable factor is the achievement of long-term convergence of the inflation rate and nominal interest rates, as this reduces the macrofinancial risks associated with euro adoption. The Czech banking sector is not a barrier to joining the euro area either, as it can help absorb economic shocks.

The second group contains areas where convergence was disrupted by the crisis but which have been returning to a trend of rising alignment in recent years. The increased volatility of the koruna's exchange rate against the euro has recently been replaced by stabilisation, thanks, among other things, to the CNB's previous communication. After rising substantially, risk premia on the Czech financial market have decreased again and the standard transmission of monetary policy rates to client rates has thus been renewed. The global financial crisis also caused a temporary interruption of the integration of Czech financial markets with markets in the euro area. This was a result of fragmentation in euro area financial markets owing to increased risk aversion. In recent years, however, market synchronisation has been renewed. This group of features of the Czech economy also includes fiscal policy, where structural general government deficits have decreased. However, fiscal policy has so far been mostly procyclical and, in addition, is not heading towards the medium-term objective (MTO), fulfilment of which is a condition for fiscal policy to have a stabilising function following the loss of independent monetary policy.

The third group consists of areas where positive trends were disrupted by the global crisis and a return to the convergence path has yet to occur. The real economic convergence of the Czech Republic to the euro area observed until 2008 has halted since then. As measured by GDP per capita (converted using purchasing power parity), the Czech Republic is at a higher absolute level than the least developed euro area countries, but this is evidently no guarantee of future smooth functioning of the economy in the EMU. The long-term price level convergence trend has also been interrupted. The previous convergence of the price level to the euro area halted in 2008. Since then, the Czech price level has been flat on average relative to that in the euro area. This is due to a halt in the trend of nominal appreciation of the koruna against the euro, and its depreciation at the time when the crisis was escalating.

The fourth group contains areas which are showing long-term problems or misalignment and which, moreover, are not showing any significant improvement. This group includes the still insufficient flexibility of the Czech labour market, whose weak points include relatively low labour mobility and relatively high implicit labour taxation. On the other hand, the labour market is showing signs of greater flexibility in some aspects that were problematic until recently, for example in the form of rising use of part-time work and some increase in the financial incentives for the unemployed to seek a job. Persisting administrative barriers to starting and closing a business have long hampered the flexibility of the Czech product market. Significant differences vis-à-vis the euro area still exist in the structure of the Czech economy, which is characterised by a high share of industry and a low share of services. Differences also persist in the structure of financial assets and in the relatively low depth of financial intermediation in the Czech Republic. These factors may cause the single monetary policy to have a different effect or may be a source of asymmetric shocks.

#### 1.3 Situation in the Euro Area

Developments in the euro area in recent years are on the one hand pointing to differences between the countries of the EMU, and, on the other hand, are leading to a change in its institutional architecture, which may significantly alter the benefits and costs of euro adoption. Although economic alignment of EMU countries is a basic prerequisite for the EMU to function smoothly, euro area countries are showing divergent trends in many indicators.

This indicates **problems in the initial institutional architecture of the euro area**. At the same time, it seems that the euro area is not an optimum currency area. Moreover, the euro area has failed to move closer towards being an optimum currency area over time. By contrast, exchange rate fixing, sharp interest rate cuts on the periphery of the euro area and the absence of a system of fiscal transfers have resulted in a systematic accumulation of major imbalances in the euro area. With no option of exchange rate depreciation, and in a situation of low inflation, the single monetary policy now seems too restrictive for the less competitive countries. Conversely, the monetary conditions may be too easy for the countries with rising competitiveness. These factors, combined with other effects, have in recent years been reflected in rising misalignment in a whole range of indicators, for example long-term interest rates, unemployment and GDP growth.

In response to the above situation, the euro area has made progress towards significantly strengthening economic policy coordination and integration. The elements of a new **future architecture in the euro area** are gradually being prepared and implemented. The euro area is heading towards the establishment of a banking union and indirectly also a fiscal, transfer and debt union. As a result, the future shape of the framework for the functioning of the euro area is moving further and further away from the situation that existed when the Czech Republic entered the EU and committed to adopt the euro.

#### 1.4 Conclusions and Recommendations

The fiscal problems in some euro area countries have led to proposals for significant institutional changes in the functioning of the monetary union and to the gradual implementation of such changes. These changes are fundamentally changing the conditions and obligations arising from the Czech Republic's potential membership of the euro area. This is increasing the financial and other costs of joining the euro area. Owing to the ongoing changes, the present and planned future shape of the framework for the functioning of the euro area is moving further and further away from the situation that existed when the Czech

Republic entered the EU and committed to adopt the euro. In addition, the present situation in the euro area can be assessed as a calming of the acute manifestations of the debt crisis on financial markets, but not as a definitive resolution of its causes. In light of these facts, and given the persisting uncertainty surrounding the future form of the monetary union, the current situation does not seem conducive to euro adoption in the Czech Republic. As regards the preparedness of the Czech Republic itself to adopt the euro, it is necessary in particular to increase the flexibility of the labour market, to remove some persisting administrative barriers to entrepreneurship and, after economic activity recovers, to complete the process of reducing general government deficits towards the MTO together with ensuring the long-term sustainability of public budgets.

In view of the above facts, the Ministry of Finance and the Czech National Bank, in line with the Czech Republic's Updated Euro-area Accession Strategy, recommend that the Czech government should not set a target date for euro area entry for the time being. The recommendation not to set a target date for euro area entry for the time being implies a recommendation that the Czech Republic should not attempt to enter ERM II during 2014.

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

The degree of sustainable convergence is assessed according to the Maastricht convergence criteria, i.e. the criterion on price stability, the criterion on the government financial position, the criterion on participation in the exchange rate mechanism and the criterion on long-term interest rates.<sup>1</sup>

#### 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 Protocol No. 13 on the Convergence Criteria also 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, provided that this rate 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 (the European Commission and European Central Bank). Therefore, when assessing the fulfilment of the criteria one should also take into account the specific way in which these institutions implement the criterion. Previous practice shows that countries with low or negative inflation rates are not automatically excluded as reference countries. Only countries that record significant deviations in inflation from the other EU countries owing to extraordinary or specific factors are excluded. Examples include the exclusion of Ireland from the calculation of the criterion in Convergence Report 2010 and that of Greece in 2013. The resulting reference value may thus be very low, especially in the current context of subdued economic activity.

The Czech Republic was compliant with the criterion on price stability in 2010 and 2011. In 2012 it failed to fulfil the price stability criterion, but since August 2013 it has been compliant with it again.

The elevated inflation and non-compliance with the criterion in 2012 were due to administrative measures and adverse supply shocks in the form of high oil and food prices. The administrative measures included an increase in the reduced VAT rate of 4 percentage points to 14% and a rise in excise duties. Inflation pressures from the domestic economy, by contrast, were not and are still not apparent owing to the size of the negative output gap. For

<sup>&</sup>lt;sup>1</sup> Prepared on the basis of macroeconomic data known as of August 2013 and the autumn government deficit and debt notifications.

the same reason, consumer price inflation was only modest in August 2013 despite an increase in both VAT rates of 1 percentage point to 15% and 21% in January.

**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 %)

	2010	2011	2012	8/2013	2013	2014	2015	2016
Average for 3 EU countries with lowest inflation	0.9	1.6	1.6	8.0	0.8	1.1	1.4	1.4
Reference value	2.4	3.1	3.1	2.3	2.3	2.6	2.9	2.9
Czech Republic (convergence programme)	1.2	2.1	3.5	2.0	2.1	1.7	1.9	1.1
Czech Republic (macroeconomic forecast 10/2013)					1.4	0.7	1.9	0.9

<sup>\*</sup> More precisely, the three best performing member countries in terms of price stability (see Box 2.1).

Note: The outlook for 2013–2016 was taken from the Convergence Programmes and Stability Programmes of the individual Member States except Greece and Cyprus, whose Stability Programmes are not available, and from Croatia's Economic Programme. Owing to the unavailability of average HICP inflation rates, the private consumption deflator was used for Germany and average CPI inflation rates were used for Croatia, France and Slovenia. The outlook for the Czech Republic is additionally based on the October 2013 Macroeconomic Forecast published by the Czech Ministry of Finance. In the assessment of inflation for 2012 and August 2013 we excluded Greece from the calculation of the criteria. We thus adopted an approach similar to that used by the European Commission and the European Central Bank in their June 2013 Convergence Reports, which, among other things, cited extraordinary factors as justification for excluding Greece.

Source: Eurostat, Convergence Programmes and Stability Programmes of EU Member States and Croatia's Economic Programme.

In 2014–2016, prices in the Czech Republic will probably still be affected, in addition to standard factors, by only a modest contribution of administrative measures. In 2014, domestic inflation will be very low due to weak administered price inflation and only slowly recovering economic activity. The price stability criterion will thus be fulfilled (see the current prediction of October 2013 in Table 2.1) even given the probable decrease in the reference value reflecting the fact that EU countries have recently also seen disinflation. Very low inflation is also forecasted for 2016, when, in line with the legislation in force, VAT rates are expected to be unified to 17.5% (with an estimated downward impact on consumer price inflation of about 1.0 percentage point). Overall, the Czech Republic should be comfortably compliant with the price stability criterion in 2014–2016. However, fulfilment of the criterion is conditional on no other changes except those planned being made to indirect taxes and no other significantly inflationary administrative measures being taken in the consumer price area during the reference period for the assessment of this criterion.

#### 2.2 Criterion on the Government Financial Position

The criterion on the government financial position is satisfied only when both components of the fiscal criterion, i.e. the general government deficit and debt, are fulfilled in a sustainable manner.

#### 2.2.1 General government deficit

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

#### **Treaty provisions**

The second indent of Article 140(2) 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 Protocol No. 13 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(3) 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 Protocol No. 12 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 government financial position was not fulfilled in 2009–2013. The excessive deficit procedure was opened against the Czech Republic at the end of 2009 for the second time (the first time having been in 2004–2008) based on an expected exceeding of the reference value for the general government deficit-to-GDP ratio. As a result of a recession in late 2008 and early 2009, the general government balance saw a marked deterioration. In addition to unresolved structural problems, the general government sector faced an unprecedented shortfall in tax revenues owing to the highly unfavourable economic situation and to legislative changes. Expenditure on mitigating the effects of the recession was increased at the same time.

In 2010–2013, the government implemented a consolidation of public budgets, thanks to which the general government deficit fell gradually. The only exception was a widening of the deficit in 2012, which reflected strong one-off effects, particularly property settlement between the state and churches. The measures on the revenue side of the public budgets for 2013 include an increase in both VAT rates and temporary adjustments to personal income tax (up to the end of 2015). On the expenditure side, the measures include a reduction of monetary social benefits due to a change in the indexation equation (again a temporary measure up to the end of 2015). These measures should help the government achieve a deficit of 2.9% of GDP in 2013. The draft state budget for 2014 and the medium-term outlook for the state budget and the state funds budgets for 2015–2016 then expect the general government balance to stabilise just below 3% of GDP. Based on this outlook, the government deficit is expected to decline below the reference value in a sustainable manner. This should be followed by termination of the excessive deficit procedure and renewed compliance with the criterion on the government financial position as from 2014.

Table 2.2: General government balance

(ESA 1995 methodology, in % of GDP)

	2010	2011	2012	2013	2014	2015	2016
Reference value	-3.0	-3.0	-3.0	-3.0		-3.0	-3.0
Czech Republic	-4.7	-3.2	-4.4	-2.9		-2.9	-2.8

Source: 2010–2012: CZSO: Government Deficit and Debt Notifications. 2013–2016: Czech MoF: Fiscal Outlook (November 2013).

As regards the alignment of the Czech economy with the euro area economy and the sustainability of public finance, it remains essential to address the structural problems of the general government sector. Under the Stability and Growth Pact, the Czech Republic in 2005 was set a medium-term objective (MTO) of achieving a structural general government deficit of 1% of GDP in the medium term. Given the current fiscal policy settings, this objective will not be fulfilled during the outlook period. The structural deficit is expected to be 1.5% of GDP in 2013 and to widen in the following years to 2.4% of GDP in 2016.

The risk of a fragile recovery of the Czech economy and a deterioration in the economic outlook for euro area countries persists. A slowdown in economic growth would in turn affect tax revenues in particular, as well as some social benefits, and consequently the general government balance.

#### 2.2.2 General Government Debt

Given the low initial level of government debt, the Czech Republic has had no problem fulfilling this item of the criterion so far. In 2007–2008, the government debt stabilised around 30% of GDP, following a substantial increase (due mainly to the inclusion of government guarantees and the debt of the Czech Consolidation Agency) in 2001–2003. Since 2009, however, owing to recession, the debt has increased sharply, having been affected to a large extent by general government budget deficits, with the state budget having the largest effect. A marked increase in the debt in 2012 was due to the creation of a government debt financing reserve, whose gradual dissolution is moderating debt growth in 2013 and partly also in the period ahead. Although the total general government debt in the Czech Republic is low relative to the EU average, the room for the fulfilment of the debt criterion has shrunk significantly in recent years. Given the fiscal policy settings, the debt ratio is expected to increase throughout the outlook period, and is likely to reach 49.9% of GDP in 2016.

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

	2010	2011	2012	2013	2014	2015	2016
Reference value	60.0	60.0		60.0	60.0	60.0	60.0
Czech Republic	38.4	41.4		46.1	47.9	49.0	49.9

Source: 2010–2012: CZSO: Government Deficit and Debt Notifications. 2013–2016: Czech MoF: Fiscal Outlook (November 2013).

The adverse effects of population ageing pose a risk to the long-term evolution of general government finance. Although quite significant measures have been taken in the area of public pensions (parametric changes to the current pay-as-you-go system), the reforms must go on.

#### 2.3 Criterion on Participation in the Exchange Rate Mechanism

#### Box 2.3: Definition of the criterion on participation in the exchange rate mechanism

#### **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 referred to in the third indent of Article 140(1) of the 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 the euro 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 "Progress towards Convergence" report 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 fluctuation 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.

Formal fulfilment of the criterion on exchange rate stability will only be possible after the Czech Republic joins ERM II, so the assessment of fulfilment of this criterion can be made only at an analytical level. For the purposes of such assessment, the hypothetical CZK/EUR central parity is set as the average exchange rate in 2011 Q1, i.e. the quarter preceding hypothetical ERM II entry at the start of 2011 Q2, which would have allowed euro adoption on 1 January 2014.<sup>2</sup> With the aid of this parity it is theoretically possible to monitor whether the Czech Republic would have fulfilled the exchange rate stability criterion in the given time period. The chart below shows that the exchange rate was relatively stable in the period under review, with fluctuations on the weaker side of the hypothetical fluctuation band. The exchange rate level has been during 2013 affected by communication by the CNB signalling its preparedness to use the exchange rate if further easing of the monetary conditions becomes necessary after the lower bound on interest rates is reached. In November 2013, the CNB started to intervene on foreign exchange market to deliver further easing of monetary conditions, which led to a weakening of domestic exchange rate to values close to 27 CZK/EUR.<sup>3</sup> This value stays inside the hypothetical fluctuation band. The regime of using exchange rate interventions as another tool of monetary policy cannot be viewed as setting central parity towards euro adoption. The exchange rate commitment has a long-term nature. and will hold as long as the CNB becomes certain that the risk of undershooting the 2%

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<sup>&</sup>lt;sup>2</sup> The hypothetical adoption of the euro in early 2014 would have been preceded by an assessment of all the convergence criteria in 2013 Q2.

<sup>&</sup>lt;sup>3</sup> The CNB regards the commitment as asymmetric, i.e. one-sided in the sense that it will not allow the koruna to appreciate to levels it would no longer be possible to interpret as "close to 27 CZK/EUR". The CNB has undertaken to prevent excessive appreciation of the koruna below 27 CZK/EUR. On the stronger side of the 27 CZK/EUR level, the CNB is preventing the koruna from appreciating further by intervening on the foreign exchange market, i.e. by selling koruna and buying euro. On the weaker side of the 27 CZK/EUR level, the CNB is allowing the koruna exchange rate to float. The exchange rate will be close to CZK 27 to the euro or even weaker in the period ahead. Potential fluctuations to levels weaker than 27 CZK/EUR will be determined by supply and demand on the interbank foreign exchange market.

inflation target is significantly low.<sup>4</sup> The use of the exchange rate as a monetary policy instrument will be discontinued when it becomes necessary to tighten monetary policy significantly as a result of very substantial inflation pressures. This will be achieved by discontinuing the interventions and then raising interest above (technical) zero.

18
20
+ 15 %
22
24
26
28
30
32
2009
2010
2011
2012
2013

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 2011 Q1.

Source: CNB, Czech MoF calculations. Data up to 30 August 2013.

The length of stay of an EU Member State in ERM II is set by the Treaty at a minimum of two years before the assessment of preparedness to adopt the euro. 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 for the minimum required period only. This implies that the Czech Republic should enter the ERM II only after it has achieved a high degree of economic alignment and after conditions have been established which enable it to introduce the euro shortly after the assessment of the exchange rate criterion. In addition, the Czech Republic should enter ERM II amid a stable situation in the domestic economy, stable global financial markets and positive investment sentiment towards the Czech Republic and the whole Central European region.

#### 2.4 Criterion on the Convergence of Interest Rates

#### Box 2.4: Definition of the criterion on the convergence of interest rates

#### **Treaty provisions**

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".

<sup>&</sup>lt;sup>4</sup> The exact duration of the foreign exchange intervention regime is not known at this moment. At present, the CNB assumes that the exit from the regime will come during 2015 at the earliest. As in the case of interest rates in the past, the Bank Board may decide to change this level at a monetary policy meeting – either in light of the message of the new macroeconomic forecast or based on an assessment of the balance of risks to the (current) forecast. It can be expected, however, that any change in this level would need a much stronger impulse than in the case of interest rates.

Article 4 of Protocol No. 13 on the Convergence Criteria specifies 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."

#### Implementation of the criterion on the convergence of interest rates

As in the case of the price stability criterion, the Treaty and the Protocol provide scope for a looser interpretation of the specific value of the criterion. It is within the competence of the assessing institutions to decide whether the calculation of the interest rate criterion will include all three countries used for the calculation of the price stability criterion or whether certain countries will be excluded for the calculation of the interest rate criterion. One example is the exclusion of the high value of Irish interest rates from the calculation of the relevant criterion in Convergence Report 2012.

The annual average long-term interest rates in the Czech Republic for convergence purposes showed a continuous downward trend during 2010–2013. The Czech Republic constantly fulfilled the interest rate criterion by a considerable margin in the period under review.

Table 2.4: Long-term interest rates for convergence purposes

(average for the last 12 months, in %)

	2010	2011	2012	8/2013	2013	2014	2015	2016
Average for 3 EU countries with lowest inflation *	4.0	3.3	3.1	2.2	2.9	3.5	3.1	3.3
Reference value	6.0	5.3	5.1	4.2	4.9	5.5	5.1	5.3
Czech Republic	4.2	3.7	2.8	2.2	2.2	2.3	2.7	3.1

<sup>\*</sup> More precisely, the three best performing countries in terms of price stability (see Box 2.1, Box 2.4)

Note: The outlook for 2013–2016 was taken from the Convergence Programmes and Stability Programmes of the individual Member States except Greece and Cyprus, whose Stability Programmes are not available, and from Croatia's Economic Programme. The data for August 2013 were calculated on the basis of monthly data as the averages for the last 12 months were unavailable.

Source: Eurostat, Convergence Programmes and Stability Programmes of EU Member States.

The Czech Republic's adherence to fiscal consolidation is reflected in its stable and high sovereign rating and in the smooth subscription of Czech government bonds, which is fostering stability of Czech government bond yields.

Given the still existing and not fully resolved debt problems in the euro area, the forecast for 2014–2016 is subject to certain risks. Based on developments to date, one can say that the Czech Republic should have no problems fulfilling this convergence criterion in the future. However, maintaining the confidence of the financial markets in the medium-term consolidation and long-term sustainability of Czech public finance is an important condition.

## 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. Adoption of the single European currency should lead to the elimination of exchange rate risk in relation to the euro area and to a related reduction in the costs of foreign trade and investment. This should further increase the benefits accruing to the Czech Republic from its intense involvement in international economic relations. Besides the aforementioned benefits, however, adoption of the euro will simultaneously imply costs and risks arising from the loss of independent monetary policy and exchange rate flexibility vis-à-vis major trading partners. The benefits and costs stemming from euro adoption will be affected by the characteristics and situation in both the Czech economy and the euro area economy. These factors will influence whether adoption of the euro by the Czech Republic will lead to an increase in the country's economic stability and performance.

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 developments being different in the Czech Republic compared to the euro area and hence the risk of the single monetary policy being highly suboptimal for the Czech economy. 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 using its own adjustment mechanisms. 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.

#### 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. Otherwise, the costs arising from the loss of the Czech Republic's own monetary policy (assuming a stable and sustainable economic situation in the euro area) may be relatively small.

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 reduce the potential future pressures for growth of the price level and equilibrium appreciation of the real exchange rate. The Czech economy had been gradually converging towards the euro area in real terms before the crisis broke out. However, this trend halted in 2009, and the Czech Republic's economic level relative to that of the euro area has been flat since then. In

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<sup>&</sup>lt;sup>5</sup> These analyses are presented in detail in a document entitled "Analyses of the Czech Republic's Current Economic Alignment with the Euro Area in 2013", which was prepared by the CNB and will be published on its website. The above document compares developments in the Czech Republic with those in Austria, Germany, Portugal, Hungary, Poland, Slovenia and Slovakia (the "countries under comparison").

recent years, GDP per capita has been about three-quarters of the euro area average. Owing to the crisis, the convergence process was also interrupted in the case of the price level of GDP, which has halted at around 70% of the euro area average. The price level thus remains slightly below the level corresponding to the performance of the economy. The wage level in the Czech Republic in 2012 was roughly 40% of the average euro area level when converted using the exchange rate and about 60% when converted using purchasing power parity. The real exchange rate of the koruna (on an HICP basis) appreciated on average by 3% a year between 2003 and 2012, but is displaying significant fluctuations around its long-run trend. These fluctuations have been helping to absorb macroeconomic shocks in recent years. According to the analyses, equilibrium real appreciation of the koruna against the euro, albeit at a lower rate than in the past, can be expected over the next five years provided that real GDP convergence is renewed. Continuing real appreciation of the exchange rate following euro area entry would mean an inflation differential vis-à-vis the euro area and related lower (or even negative) real interest rates.

(EA-17=100)120 100 80 60 40 20 0 Portugal Czech Germany Austria Slovakia Slovenia Republic ■GDP per capita in purchasing power parity ■GDP average price level

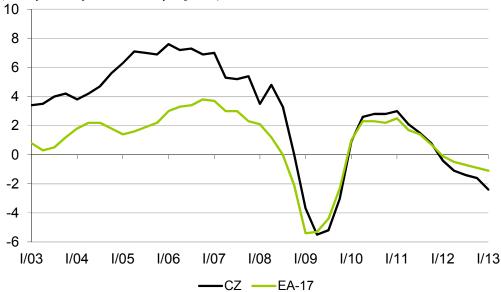
Chart 3.1: Real economic convergence of selected states towards the euro area in 2012

Source: Eurostat, CNB calculations.

Sufficient **alignment of economic activity** increases 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 in recent years; the same goes for activity in industry and export activity. The increase in correlations can be attributed partly to a greater significance of common extraordinary shocks in the form of the global economic crisis, the subsequent temporary recovery in economic activity and later the real economic impacts of the euro area debt crisis. Owing to the above events, it is not clear whether the increased business cycle alignment will persist in conditions of normal growth in European economies.

Chart 3.2: GDP growth in the Czech Republic and the euro area

(in %, year-on-year, seasonally adjusted)



Source: Eurostat, CNB calculations.

Similarity of the **structure of economic activity** with the euro area should reduce the risk of asymmetric economic shocks. The persisting relatively high share of industry (moreover with an exceptionally significant share of the procyclical car industry) and a lower share of services compared to the euro area may mean a higher risk of asymmetric shocks for the Czech economy, to which a potential single monetary policy is unable to respond. In addition, the differences in structure are widening further and structural misalignment thus remains one of the risks of adopting the single currency.

Fast convergence of **nominal interest rates** in connection with 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 interest rates was very low for a long time is favourable from this perspective. Three-month interbank market rates showed a slightly positive interest rate differential in 2009 and 2010, but this closed gradually, temporarily turning negative in 2011 H2. Government bond yield differentials against Germany grew temporarily in early 2009 and again in 2012 H1, also due to increased financial market tensions linked with the further escalation of the euro area debt crisis. However, the interest rate differential between Czech and German long-term interest rates has long been much lower than in the other noneuro area countries under review.

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 has been relatively high and stable. The exchange rate volatility of the koruna vis-à-vis the euro saw a temporary increase due to the global financial crisis and then also the European debt crisis. However, the correlation of koruna and euro rates against the dollar has remained high (the correlation coefficient is about 90%) and is still higher than that for the Polish zloty and the Hungarian forint. This indicates that the Czech currency responds to changes in the external environment similarly to the euro, suggesting a high degree of alignment.

The Czech economy's strong **trade and ownership links** with the euro area increase the benefits arising from the elimination of potential fluctuations in the exchange rate and the reduction in transaction costs. The euro area is currently (i.e. based on the data for January–July 2013) the partner for 63% of Czech exports and 61% of Czech imports, a level comparable to, or even higher than, that in the other non-euro area countries under review. The share of intra-industry trade is relatively high as well. Despite declining modestly in 2011, the degree of ownership links in the Czech economy, as measured by direct investment from the euro area, is still higher than in Slovakia, Poland, Hungary and Slovenia.

80

60

40

Czech Germany Portugal Austria Slovakia Slovenia Republic

export import

Chart 3.3: Share of exports to the euro area in total exports and share of imports from the euro area in total imports in 2013 H1

Source: Eurostat, IMF, CNB calculations.

The **financial sector** in the Czech Republic is still much smaller in size than that in the euro area. The depth of financial intermediation, as measured by the ratio of financial institutions' assets to GDP, is roughly one-quarter of the value for the euro area. In 2012, the ratio of bank loans to the private sector to GDP was 57% in the Czech Republic, less than half that in the euro area. However, the current level of the aforementioned indicators in the euro area is not necessarily optimal. On the contrary, in many countries it may reflect private and 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. For corporations, the difference is particularly visible in a lower weight of loans (at the expense of shares) in their net debtor position. Corporations in the Czech Republic are showing higher liquidity, although liquidity growth has also been visible in the core euro area countries under review in recent years. The share of Czech corporations' short-term liabilities in the total debt is much lower than that in the euro area. The Czech corporate debt to equity ratio has been rising since 2007. In 2012, this indicator was higher than the euro area average and comparable with Germany. Czech households have a lower debt ratio than euro area households and also a lower value of financial assets, which, moreover, have a different structure. Compared to euro area households, Czech households hold a larger proportion of their financial assets as currency and deposits. Overall, the household sector's net creditor position is about half that in the euro area.

In the past, the **effect of monetary policy rates on client rates** in the Czech Republic was roughly the same as in the euro area. Rate transmission is fast, taking place within one month for most types of loans. The global financial and economic crisis led to a temporary slowdown and weakening of the transmission of monetary policy interest rates in the Czech economy as a result of rising client risk premia. However, this increase was comparable to that in the euro area core countries. The structure of initial interest rate fixations on new loans to non-financial corporations is similar to that in the euro area. Mortgages in the Czech Republic are dominated by loans with shorter fixations (mostly of up to five years) than in the euro area, where longer fixations are more common.

Differences in **inflation persistence** in the monetary union countries could lead to the single monetary policy having different impacts. However, inflation persistence in the Czech Republic is average among the countries under comparison. The difference is not significant even compared to the euro area core countries. Inflation persistence thus does not pose a significant risk to the symmetric effect of the single monetary policy in the Czech Republic.

The analysis of **integration of financial markets** (the money, foreign exchange, bond and stock markets) with the euro area reveals that synchronisation in the individual segments of the Czech financial market has long been mostly high and comparable with the euro area countries. A natural exception is still 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 in the Czech Republic compared to other countries. The global crisis and its impacts resulted in an increase in financial market misalignment in all the countries compared. The situation on the Czech financial market started to improve in 2009 H2, and 2010 saw a return to the pre-crisis degree of integration on all markets under review.

The degree of **euroisation** in the Czech Republic has long been low and is due to economic agents' high trust in the domestic currency and to sustained low and stable inflation, a floating exchange rate and low interest rates. The use of foreign currency is concentrated primarily in the sector of corporations involved in foreign trade.

#### 3.2 Adjustment Mechanisms

If set appropriately, fiscal policy can have a countercyclical effect and be a stabilising element for the economy. Otherwise it may itself be a source of economic shocks. The closer the structural part of the general government balance is to zero and the lower is the accumulated government debt, the more room there will be at a time of economic downturn for automatic stabilisers to function and countercyclical discretionary measures to be implemented. Czech budget policy was characterised by chronic deficits and a procyclical effect for most of the period under review. Windfall tax revenues in 2006-2008 were not 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 accompanied by corresponding austerity measures on the public expenditure side, even during years of rapid economic growth. Fiscal policy had the desirable countercyclical nature in 2009, when government anti-crisis and other measures were adopted. In 2010, fiscal consolidation was commenced, albeit at the cost of a strong procyclical restrictive effect of fiscal policy in 2010-2013. In addition, the fall of the economy into recession in 2012-2013 made the government abandon its originally declared intention to comply with the medium-term objective (MTO) in 2015. Meeting this objective is a precondition for fiscal policy to be ready to fulfil its macroeconomic stabilisation role effectively after the loss of independent monetary policy. By contrast, the structural component of the public finance deficit is expected to increase again and is thus moving away from the MTO. Although the Czech Republic's total general government debt is lower than that of many EU countries, it has been showing very fast growth in recent years. The high and rising share of mandatory expenditure combined with the expected effect of demographic changes on pension system expenditures (this effect is mitigated by an increase in the retirement age adopted as part of parametric changes to the current pay-as-you-go system) and health care system expenditures also poses a risk to public finance sustainability. However, the related risks are smaller than in the other countries under review.

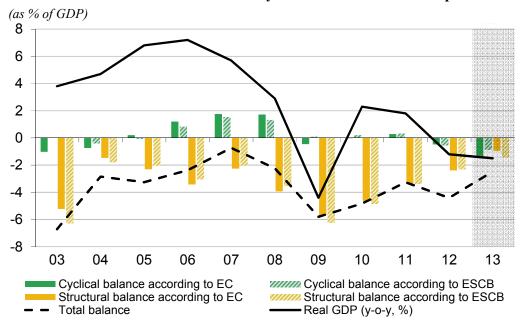


Chart 3.4: The fiscal balance and its cyclical and structural components

Note: Positive values represent a public budget surplus and negative values a public budget deficit. The sum of the cyclical and structural balance does not equal the total balance since the structural balance is adjusted for extraordinary one-off fiscal measures in addition to the effect of the cycle.

Source: CZSO, CNB calculations.

The **labour market** is another important mechanism through which the economy can cope with asymmetric shocks in the absence of an independent monetary policy. Although labour market flexibility is average compared to the other European economies, the situation cannot be assessed as sufficient from the perspective of adjustment capacity following euro adoption. The weak points still include persisting relatively high implicit labour taxation and relatively low labour mobility. Internal mobility in the Czech Republic is among the lowest. The total share of foreign nationals in the population was increasing until 2008 but then halted at lower levels than those typical of the advanced euro area countries owing to lower demand for foreign labour at a time of subdued economic activity. The Czech Republic still has large differences in unemployment across regions. On the other hand, the labour market is showing signs of greater flexibility, with part-time work recently being used to a larger extent instead of dismissals and wage cuts in response to the economic contraction. Both long-term unemployment and structural unemployment have thus increased slightly in the Czech Republic, but are still among the lowest in the countries under comparison.

The **institutional rules on the labour market** have a strong effect on its flexibility. The effect of collective bargaining on wage setting in the Czech Republic is not much higher than in the current euro area members. The ratio of the minimum wage to the average wage has

been falling since 2006.<sup>6</sup> This is important above all in low-skilled jobs, for which the negative impact of a high minimum wage on wage flexibility can be greater. By contrast, overall labour taxation in the Czech Republic is relatively high, and has increased slightly further in recent years. The implicit taxation rate, expressing the average effective tax burden, remains one of the highest among the countries under comparison. The financial incentives to seek and accept a job increased somewhat in 2012 due to parametric changes made to taxes and benefits. However, this increase was from a relatively low base, particularly in the case of the short-term unemployed.

The response of wages to the business cycle can enhance the economy's ability to absorb shocks to which the single monetary policy cannot respond. From the longer-term perspective, the Czech Republic shows a relatively strong response of unemployment to the phase of the business cycle and a weak or lagged response of real wages to unemployment. This suggests that economic shocks were in the past reflected in unemployment instead of being absorbed by real wages, which are not sufficiently flexible. Recently, however, the Czech Republic has seen labour market adjustment through the aforementioned use of part-time work and a concurrent decline in real wages.

In the area of **product market flexibility** the situation has showed some positive changes since 2010, as the administrative burden of closing a business has decreased compared to the other countries. Nonetheless, the domestic business environment remains in some respects (starting a business in particular) more burdened with administrative obstacles than in the countries under comparison. Although the Czech corporate tax rate, as measured by the statutory tax rate, is one of the lowest among the countries monitored, the implicit taxation of corporations in the Czech Republic is one of the highest.

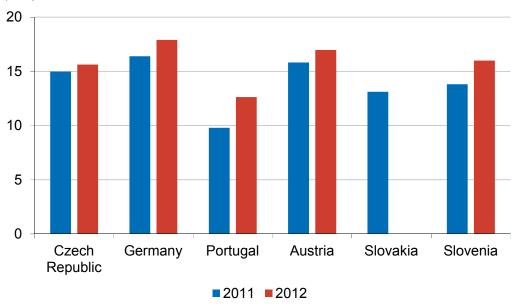
Stability and effectiveness of the **banking sector** is a necessary condition for the sector to be able to absorb shocks. By contrast, an unsound banking sector (or financial sector in general) can create shocks and propagate them to the real economy. It can also cause problems in the fiscal area, as the recent experience of some euro area countries shows. The Czech banking sector displays very good macroprudential indicators such as profitability, capital adequacy, balance-sheet liquidity, a stable and still relatively low NPL ratio and limited dependence on other countries. It is therefore not a source of shocks and should be able to absorb fluctuations emanating from the domestic economy or from abroad.

<sup>&</sup>lt;sup>6</sup> With effect from 1 August 2013, however, the minimum wage was increased from CZK 8,000 to CZK 8,500.

<sup>&</sup>lt;sup>7</sup> The Act on Commercial Companies and Cooperatives should take effect on 1 January 2014. This act regulates, among other things, processes relating to the creation, liquidation and management of commercial companies and cooperatives and should help to increase product market flexibility.

**Chart 3.5: Capital adequacy ratio** 

(in %)



Note: The capital adequacy ratio is the ratio of a bank's capital to its risk-weighted assets. It thus expresses the bank's financial strength and measures its ability to cover any future losses with capital.

Source: IMF FSI.

## 4 SITUATION IN THE EURO AREA AND NEW OBLIGATIONS FOR ACCESSION COUNTRIES

Developments in the euro area in recent years deserve increased attention. On the one hand they are pointing to differences between the countries of the EMU, and on the other hand they are leading to a change in its institutional architecture and may therefore significantly alter the benefits and costs of euro adoption.

Economic alignment of euro area countries is a basic prerequisite for the EMU to function smoothly. However, recent developments point to shortcomings in this area. The persisting differences in year-on-year growth rates across euro area economies indicate that their business cycles are displaying no major change in alignment. These differences widened in 2008–2009 and again in 2011, as the economies were hit by recession in different quarters and to different extents. By contrast, the unemployment rate was initially converging, but since 2009 has been rising much more strongly in some countries. The financial and economic crisis was accompanied by rising misalignment in the inflation rate. In recent years, however, this misalignment has decreased again. In 2010–2012, very large divergence can be seen for long-term interest rates, which reflect the different magnitudes of the debt problems across euro area countries. This misalignment has decreased over the last year due to the calming of the market situation and owing to the measures adopted by the ECB, but is still much higher than in the pre-crisis period. The public finance situation in many euro area members is still putting the functioning of the euro area under strong pressure. At present, only three countries meet the fiscal criteria laid down in the Treaty on the Functioning of the EU.

0 30 60 90 120 150 180 3 Govt budget balance (% GDP) EE 0 DE LU -3 ▶ IT BE **FR** SK -6 PT CY ΙE -9 GR ES -12 Govt debt (% GDP)

Chart 4.1: Euro area fiscal positions in 2012

Source: Eurostat.

In addition to the objective of fiscal consolidation, EU economic policies have recently been aimed more intensively at fostering a recovery in economic growth. Major changes are being made to the **institutional framework** in response to the euro area's problems. Last year, the euro area accelerated its progress towards significantly stronger economic policy coordination and integration, particularly as regards the creation of the banking union. This is significantly changing the view of the economic benefits and costs of euro adoption in the Czech Republic.

The European Stability Mechanism (ESM), has been in operation since last autumn and will be able to recapitalise banks directly once the single supervisory mechanism (SSM) is established. Although the Czech Republic may theoretically adopt the euro without becoming a contracting party to the ESM, euro area members can their consent to euro adoption in the Czech Republic conditional on ESM entry. If it joined the ESM, the Czech Republic would immediately have to pay about CZK 40 billion into the capital of the ESM. This estimate was calculated by the Czech Ministry of Finance on the basis of the ECB's capital subscription key, which is applied in this case. In addition, in the event of non-repayment of loans provided by the ESM or a large decrease in the contracting parties' solvency, the Czech Republic could be obliged to provide additional capital to the ESM up to an amount equal to the Czech Republic's total share in the member countries' liabilities to the ESM, which currently stand at EUR 109 billion, about CZK 44 billion of which would fall to the Czech Republic. Should the ESM's lending capacity be used in full in the future, this contingent liability of the Czech Republic could climb to around CZK 310 billion.

Further expenses in the form of financial penalties could apply to the Czech Republic after it joins the euro area if a macroeconomic imbalance is identified and the Czech Republic fails to prove that it has made sufficient efforts to eliminate it. However, no such imbalances have been identified so far in the Czech Republic.

Moreover, other initiatives are being prepared at the European level, particularly regarding the creation of the **banking union**, which implies an indirect shift towards a **fiscal, transfer and debt union**. Owing to the ongoing changes, the present and planned future shape of the framework for the functioning of the euro area is moving further and further away from the situation that existed when the Czech Republic entered the EU and committed to adopt the euro. The considerable uncertainty about the future form of the basic economic, political and institutional architecture of the euro area is still a major obstacle to reliably assessing the benefits and costs to the Czech Republic of joining the euro area.