# **Ministry of Finance**

**Financial Policy Department** 

# Macroeconomic Forecast Czech Republic

**July 2012** 

## **Macroeconomic Forecast of the Czech Republic**

July 2012

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The Macroeconomic Forecast is prepared by the Financial Policy Department of the Czech Ministry of Finance on a quarterly basis. It contains a forecast for the current and following years (i.e. until 2013) and for certain indicators an outlook for another 2 years (i.e. until 2015). As a rule, it is published in the second half of the first month of each quarter and is also available on the Ministry of Finance website at:

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Any comments or suggestions that would help us to improve the quality of our publication and closer satisfy the needs of its users are welcome. Please direct any comments to the following email address:

macroeconomic.forecast@mfcr.cz

#### **List of Abbreviations:**

const.pr. constant prices

CNB Czech National Bank

CPI consumer price index

curr.pr current prices

CZSO Czech Statistical Office

EA12 euro zone consisting of 12 countries

EFSF European Financial Stability Facility

EMU Economic and Monetary Union

ESM European Stability Mechanism

EU27 ...... EU consisting of 27 countries GDP..... gross domestic product

HICP ...... harmonised index of consumer prices

IMF ...... International Monetary Fund

LFS ...... Labour Force Survey

OECD ....... Organisation for Economic Co-operation and Development

p.p. ..... percentage point prelim. ...... preliminarily

#### **Basic Terms:**

Prelim. (preliminary data) data from quarterly national accounts, released by the CZSO, as yet unverified

by annual national accounts

Estimate estimate of past numbers which for various reasons were not available at the

time of preparing the publication, e.g. previous quarter's GDP

Forecast forecast of future numbers, using expert and mathematical methods

Outlook projection of more distant future numbers, using mainly extrapolation methods

#### **Symbols Used in Tables:**

- A dash in place of a number indicates that the phenomenon did not occur.

. A dot in place of a number indicates that we do not forecast that variable, or the

figure is unavailable or unreliable.

x, (space) A cross or space in place of a number indicates that no entry is possible for

logical reasons.

## **Cut-off Date for Data Sources:**

The forecast was made on the basis of data known as of **June 28**, 2012. No political decisions, newly released statistics, or world financial or commodity market developments could be taken into account after this date.

#### Notes:

In some cases, published aggregate data do not match sums of individual items to the last decimal place due to rounding.

Data from the previous forecast of April 2012 are indicated by italics. Data in the tables relating to the years 2014 and 2015 are calculated by extrapolation, indicating only the direction of possible developments, and as such are not commented upon in the following text.

# **Summary of the Forecast**

The Czech economy continues to be stuck in stagnation. In Q1 2012, the relatively deep decline in GDP of 0.8% on QoQ basis was due to accounting and methodical factors (for differing development of gross value added and taxes on products, see Box C.1), and thus it does not reflect the course of the business cycle. Given the unresolved euro zone debt crisis, it can be assumed that economic stagnation will more or less linger up to 2013.

We expect that a 0.5% decrease in GDP will be reported this year (due to the Q1 data). In 2013, however, the economy should grow by ca 1.0%.

From an expenditure perspective, the economy should continue to be driven by significant foreign trade surpluses, while all components of gross domestic expenditures will be either decreasing or stable.

We expect consumer prices to rise by around 3.2% in 2012, while in 2013 the average inflation rate should reach 2.2%. Inflation is and will be determined predominantly by the increases in VAT and in energy

prices, while growth in market prices should remain very moderate.

The labour market will likely be influenced negatively by the unfavourable economic situation and heightened uncertainty over future development. Employment should decrease by 0.3% this year and by 0.2% in 2013. Unemployment should rise to 7.0% for 2012 from last year's 6.7%, and another slight increase in the unemployment rate may also occur in 2013. The wage bill could grow by 1.9% this year and by 2.5% in 2013.

The current account deficit as a percentage of GDP should remain at a sustainable level.

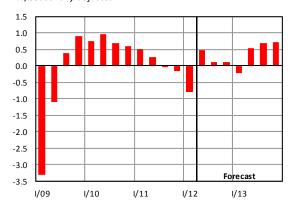
The crisis in the euro zone has intensified once again especially due to speculation concerning Greece's remaining in the currency union and the state of the Spanish banking sector. Its further escalation cannot be entirely ruled out, nor can be the possibility that the contagion will spread to other countries of the EU, including the Czech Republic.

Table: Main Macroeconomic Indicators

		2009	2010	2011	2012	2013	2011	2012	2013
					Current fo	orecast	Previ	ous foreca	st
Gross domestic product	growth in %, const.pr.	-4.7	2.7	1.7	-0.5	1.0	1.7	0.2	1.3
Consumption of households	growth in %, const.pr.	-0.4	0.6	-0.6	-2.2	0.1	-0.5	-0.4	0.2
Consumption of government	growth in %, const.pr.	3.8	0.6	-1.7	-2.8	-0.8	-1.4	-3.7	-0.5
Gross fixed capital formation	growth in %, const.pr.	-11.5	0.1	-0.9	-1.0	2.0	-1.2	-0.5	2.1
Cont. of foreign trade to GDP growth	p.p., const.pr.	0.8	0.9	2.7	1.2	0.7	2.6	1.0	0.8
GDP deflator	growth in %	1.9	-1.7	-0.8	1.5	1.1	-0.7	2.0	1.4
Average inflation rate	%	1.0	1.5	1.9	3.2	2.2	1.9	3.3	2.3
Employment (LFS)	growth in %	-1.4	-1.0	0.4	-0.3	-0.2	0.4	-0.5	0.1
Unemployment rate (LFS)	average in %	6.7	7.3	6.7	7.0	7.2	6.7	7.0	7.2
Wage bill (domestic concept)	growth in %, curr.pr.	-2.1	-0.4	2.3	1.9	2.5	1.1	1.5	2.6
Current account / GDP	%	-2.4	-3.9	-2.9	-2.2	-2.6	-2.9	-2.4	-2.3
Assumptions:									
Exchange rate CZK/EUR		26.4	25.3	24.6	25.3	25.2	24.6	25.1	24.9
Long-term interest rates	% p.a.	4.7	3.7	3.7	3.4	3.5	3.7	3.4	3.5
Crude oil Brent	USD/barrel	62	80	111	112	108	111	115	113
GDP in Eurozone (EA-12)	growth in %, const.pr.	-4.2	1.9	1.5	-0.3	0.6	1.4	-0.3	0.7

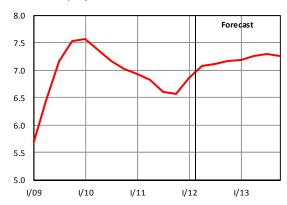
## Graph 1: QoQ growth in real GDP

in %, seasonally adjusted



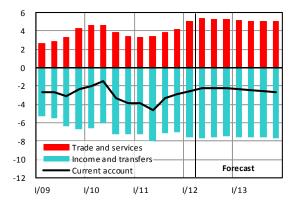
Graph 3: Unemployment rate (LFS)

in %, seasonally adjusted



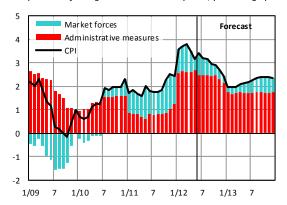
Graph 5: Current account

in % of GDP (moving sums of the latest 4 quarters)

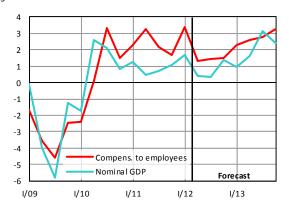


## Graph 2: Consumer prices

decomposition of YoY growth in consumer prices, percentage points

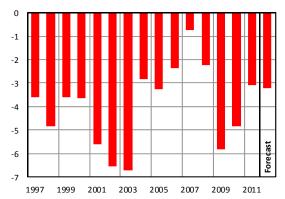


Graph 4: Compensation to employees, nominal GDP growth in %



Graph 6: General government balance

in % of GDP



## Risks to the Forecast

The Macroeconomic Forecast is based on a "no-event" scenario. On the one hand, this scenario anticipates no escalation of the euro zone's debt and banking crises or any other geopolitical event having a significant impact on the Czech economy during the forecast horizon. On the other hand, neither does it expect any crucial breakthrough in resolving the euro zone's problems.

From this perspective, the accepted scenario may seem considerably improbable. In any other scenario, however, it would be necessary to make speculative assumptions about specific events and their timing and extent. We consider such assumptions not to be useful and essentially impossible to formulate.

In comparison to the Forecast from April 2012, the presumed "no-event" scenario yields lower macroeconomic dynamics with even more significant downside risks.

The situation eased following the ECB's extraordinary liquidity operations in December 2011 and February 2012 and the "voluntary" write-off of part of the Greek debt, but this was only temporary. As from May 2012, financial markets refocused their attention on the problematic countries at the euro zone's periphery. Nevertheless, from a short-term perspective, the risk that a country or systematically important institution might collapse due to insufficient liquidity is relatively low.

From a medium-term perspective, however, the situation is much more serious. The euro zone as a whole is teetering on the edge of recession, peripheral countries are already in recession, and there are no serious expectations for the situation to improve in the near future. The situation in Greece clearly fits the definition of depression (total decrease in GDP by more than 10%). GDP has so far decreased by 3.3% versus

the previous peak in Portugal, by 1.7% in Italy, and by 1.5% in Cyprus.

Proclamations as to the necessity of supporting growth are not likely to change the situation, as there is no room for fiscal stimulus and the structural policies that could improve the insufficient levels of these countries' competitiveness are all for the long haul.

This reinforces anxiety concerning the economic and political sustainability of, for example, the Greek consolidation strategy. We therefore do not consider it very probable that Greece would be able to repay the provided loans under current conditions. Moreover, developments in Spain confirm that besides the debt crisis of public finances there is also risk of a banking crisis.

The extent of loans provided by the EFSF or the newly forming ESM also increases the risk that the crisis could unfavourably affect creditor countries. The possibility that sooner or later the crisis will escalate is therefore entirely realistic.

Although the Czech Republic shows a roughly similar intensity of fiscal consolidation in comparison with neighbouring countries, it has markedly poorer macroeconomic results. This demonstrates **internal risks within the Czech economy**, and especially the very low, and in most cases still deteriorating, level of confidence in further economic advancement. This concerns not only consumers, but also many segments of the business sector (see Chapter B.2). The low level of confidence leads to more cautious microeconomic decisions and is probably one of the causes for the Czech economy's lagging.

Overall, it can be stated that in the medium term the significant downside risks to the scenario under consideration have again increased.

# **A Forecast Assumptions**

Sources of tables and graphs: CNB, CZSO, ECB, Eurostat, Ministry of Finance of the Czech Republic, IMF, OECD, The Economist, own calculations.

## A.1 External Environment

#### **Economic output**

The outlook for the world economy has deteriorated since the April Forecast. There are now even fears of a possible second round of global recession. The main source of uncertainty is development in the euro zone, though unconvincing growth of the US economy and the current slowdown in China and other major economies, such as Brazil and India, also give rise to concerns.

The **US economy** grew by 0.5% QoQ (as forecast) in Q1 2012. This growth, founded especially on increasing household consumption, is not strong enough, however, to create a sufficient number of new jobs. Gains in jobs gradually declined, and in May unemployment again rose to 8.2%. The prospects for the economy are uncertain, and consumer confidence diminished at the end of May after several months of improvement. Stock markets, too, were ruled by anxiety. The Dow Jones Index, which had passed the 13,000 points mark in April, dropped by as much as 900 points in May and is ranging around 12,500 points. The negative situation on the real estate market continues to be a factor in the unstable recovery (according to the Federal Reserve, household assets decreased by 39% between 2007 and 2010 especially due to the decrease in real estate values). Moreover, growth in consumer expenditures among less-indebted households is due in part to higher prices for oil and other energy.

In the pre-election political context, potential further stimulation of the economy can be expected – mainly from the Federal Reserve. Basic interest rates remain unchanged, and the Fed had previously announced that it will keep them "at zero" until the end of 2014. While it had been expected that the Fed could bolster the slowing economy with another round of quantitative easing, at its meeting on 20 June it decided in favour of more modest support. The Fed will prolong the so-called Operation Twist programme by six months (originally it should have ended in June), the goal of which is to achieve a flatter yield curve. It is debatable, however, whether such action will suffice in mitigating the negative tendencies in the US economy.

Further uncertainty looms at the end of the year, when temporary tax relief will expire, and thus automatic cuts in state expenditures should be initiated. The term "fiscal cliff" has come into use for such situation, and it is presumed that this could significantly reduce growth in 2013. To make a change, however, would require Congressional consensus, which is not very probable before the November elections.

For 2012, we retain the growth estimate for the US economy at 2.2%. For 2013, we estimate growth of 2.4% (*versus 2.5%*).

After a QoQ decrease of 0.3% in Q4 2011, the **euro zone** remained flat QoQ in Q1 2012 (*versus a decrease* of 0.2%). The economy was, in effect, driven only by exports, while the positive contribution of household consumption was negated by the impacts of restrictive fiscal policy. Marked differences exist between the performances of individual economies. Germany remains the driving force, and in many EA countries growth is weak. The French economy is stagnating, and seven EA countries, including the large economies of Italy and Spain, are in recession.

The German economy delivered a positive surprise in Q1 with QoQ growth of 0.5% (versus a decrease of 0.1%). Growth was driven not only by exports, but household consumption also contributed significantly. The decline in the leading indicators (ZEW and Ifo indices) and drop in industrial production in April indicate, however, that German growth could be moderated to a certain degree.

The rise in unemployment in the EA offers a grim perspective, increasing to 11.0% in April. At the same time, the distribution is very uneven: On one end of the scale is Spain (24.3%), followed by Greece (21.7% in February), Portugal (15.2%), Ireland (14.2%) and Slovakia (13.7%). In Germany, on the other hand, the unemployment rate gradually fell to 5.4%. In certain euro zone countries, the high rate of unemployment among people under 24 is a particular problem (especially in Spain).

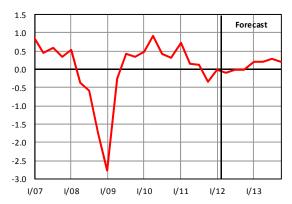
The **Polish economy** continues to grow dynamically, recording a 0.8% QoQ gain (*versus 0.5%*) in Q1 2012. The unemployment rate remained at 9.9% level in April. Growth is currently driven mainly by infrastructure investments and strong domestic consumption. For 2012, in connection with decreased

government spending we expect a more significant slowdown of economic growth, which should not exceed 3%.

The **Slovak economy** expanded by 0.7% QoQ (*versus 0.2%*) in Q1 2012. Growth is driven almost exclusively by exports, especially of automobiles. In the past two quarters, household consumption switched from decline to stagnation. The unemployment rate remains high (currently the fifth highest in the euro zone). Growth in 2012 will likely depend strongly on the situation in Germany and also will be influenced by the new government's fiscal policy.

We have maintained the estimate of economic decline for the EA12 in 2012 at 0.3%. For 2013, we have adjusted the growth estimate to 0.6% (*versus 0.7%*).

Graph A.1.1: **Growth of GDP in EA12**QoQ growth in % (adjusted for seasonal and working day effects)

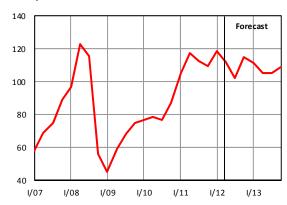


### **Commodity prices**

The price of Brent crude oil reached USD 111.0 per barrel in 2011 and USD 118.5 in Q1 2012 (*versus USD 117*). In the course of Q2, the price fell significantly to approximately USD 90 (*versus USD 115*). Contrary to the previous forecast, pressure for a drop in prices increased. In addition to slowing in a number of economies (China, India, Brazil) and global stagnation, arguments for a decrease also include the possible end of the commodity cycle. With the closing of positions on derivatives markets, it is also apparent that the impact of price speculation is diminishing. Together with the strengthening of the dollar, record high oil reserves in the US added to the pressure for decrease in oil prices.

The possibility of a price increase is supported in particular by lingering concerns regarding future production in a number of countries. Although anxiety concerning the geopolitical unrest in the Near East (such as the sanctions against Iran) has temporarily eased, we still face the risk of escalation.

Graph A.1.2: **Dollar Prices of Brent Crude Oil** in USD per barrel



We have decreased the forecast for the price of Brent crude oil to USD 112 per barrel for 2012 (*versus USD 115*). There are significant risks to the forecast towards further decline in prices.

#### Debt crisis in the euro zone

The moderate alleviation of tensions in the euro zone brought about by successful completion of the "voluntary" write-off of part of the Greek debt (i.e. the private sector involvement) and massive liquidity injection provided to banks by the ECB through two extraordinary longer-term refinancing operations (LTROs) unfortunately proved to be temporary. Among the main factors behind the repeated escalation of the crisis in the euro zone can be included the political uncertainty regarding the future direction of Greece as well as the condition and prospects of the Spanish banking sector.

Questions related to the future direction of Greece, or, more precisely, whether or not it will remain in the euro zone (the term "grexit" has been coined to denote Greece's possible departure from the euro zone), were raised by the results of the early parliamentary elections held 6 May. In fact, the post-election distribution of power resulted in the gradual collapse of all attempts to assemble a government that would have a sufficient mandate to carry out austerity measures and reforms, the implementation of which requires an emergency programme. The appointed caretaker government at least led the country to the next elections, which took place on 17 June.

An important aspect of the May elections was the very strong position of parties rejecting the previous policy of austerity measures and structural reforms (in particular, SYRIZA – the Coalition of the Radical Left). At the same time, international creditors sent a clear message that the provision of further financial assistance will be dependent on fulfilment of the

conditions of the emergency programme (in that respect, Greece already received on 10 May a definite warning from the EFSF, which of the initially planned financial injection of over EUR 5.2 billion has released only 4.2 billion). The situation literally created a breeding ground for speculation about Greece's subsequent continuance in the monetary union. Moreover, a number of polls prior to the June elections had predicted victory for SYRIZA. Considering the bonus of 50 parliamentary seats for the winner of the elections (from a total of 300 Members of Parliament), such polls only intensified speculation about a possible "grexit".

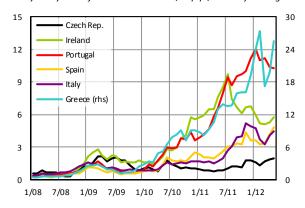
The June elections, however, were won by New Democracy, whose leader, A. Samaras, in the process of negotiating the formation of a government managed to secure the support of PASOK and the Democratic Left (these parties have a combined 179 seats). The new Greek government is apparently attempting to negotiate a slight relaxation of the conditions of the current emergency programme with the "Troika" (i.e. representatives of the IMF, ECB and European Commission). Given the current situation (in Q1 2012, GDP recorded a YoY drop of more than 6% and the unemployment rate surpassed 20%), rigorous implementation of the planned austerity measures would intensify the Greek economic slump. From that perspective, at minimum spreading the fiscal tightening over a longer time horizon appears desirable. European leaders are divided on this issue. From Germany, however, a rather unequivocal "nein" may be heard towards any proposals for relaxing the conditions for providing financial assistance. Regardless of how the new Greek government's negotiations with international creditors turn out, from this point Greece will constitute one of the main risks to further developments in the euro zone and for the entire EU.

Further developments in Spain constitute a no less significant risk factor (with high potential for the contagion to spread to the EA/EU). This fourth-largest economy in the euro zone is facing a technical recession (QoQ decline in GDP of 0.3% in Q4 2011 and in Q1 2012), which probably will be deepened by efforts to reduce the general government deficit from an estimated 8.9% of GDP in 2011 to 5.3% of GDP this year and then to 3% in 2013. Even more alarming is the situation on the labour market (see above), which poses a considerable danger not only for the real economy, but also for the banking sector. The high rate of unemployment may lead to further decline in the quality of banks' credit portfolios. At present, the ratio

of loans in default (EUR 153 billion) to total loans is rising sharply and already reached 8.7% in April – the highest it has been since 1994.

Rating agencies did not help the situation in Spain either. Since release of the last Macroeconomic Forecast, Spain has been awaiting rating cuts from all three major agencies. The first came at the end of April from S&P, which reduced Spain's credit rating by two grades (from A to BBB+) with negative outlook. Next followed Fitch, which on 7 June cut Spain's rating by three grades (from A to BBB, negative outlook). Moody's then did the same just under a week later (from A3 to Baa3).

Graph A.1.3: **Spreads over German Bonds**The difference between yields of 10Y gov. bonds of the respective country and yields of 10Y German bonds, in p.p., monthly averages



The banking sector is also struggling with profound problems influenced by the burst of the real estate bubble. Despite several attempts, these have yet to be resolved.<sup>1</sup> On Saturday, 9 June, therefore, Spain's government declared its intention to apply to the euro zone for financial assistance to recapitalise banks. On the very same day, the ministers of finance of the euro zone expressed their willingness to provide this financial support. According to current information, which for the time being is relatively incomplete and not very detailed, EFSF/ESM would provide financial assistance (the conditions of which should be agreed within 3–4 weeks from the official request for assistance, which Spain submitted on 25 June) of up to EUR 100 billion to the Spanish Fund for Orderly Bank Restructuring (FROB), which would then use the resources to recapitalise certain banks. This operation would result in growth of Spain's debt by approximately 10% of GDP (if the financial assistance reached EUR 100 billion). Combined with possible senior ESM status, this should in future create pressure on growth in state bond yields. For a short period,

For example, the partial nationalisation of Bankia, one of the largest banks in the country, took place.

yields on 10-year Spanish government bonds exceeded 7% in mid-June, which is unsustainable for Spain from a long-term perspective.

Available estimates as to the costs of recapitalising the Spanish banking sector vary a good deal. According to the IMF, augmenting the capital of Spanish banks will require EUR 37 billion. Moody's, however, estimates the costs of recapitalisation to be EUR 50 billion (up to EUR 100 billion in the adverse scenario), while Fitch estimates EUR 60 billion (in the worst case scenario, it likewise anticipates EUR 100 billion). The amount of financial aid to Spanish banks should be specified based on analyses conducted by strategy consultants Roland Berger and Oliver Wyman. According to findings of top-down stress tests, in a basic scenario recapitalisation of the Spanish banking sector should require EUR 16–26 billion. In a worst case scenario, those costs are estimated at EUR 51–62 billion.

Tensions in the euro zone remain at an uncomfortably high level, despite the relatively positive outcome of the repeated parliamentary elections in Greece. Although the risk of a "grexit" declined (for the next year or two, however, Greece's departure from the euro zone cannot be entirely ruled out), on the other hand Spain's problems in connection with the state of its banking sector have intensified. Furthermore, on 25 June Cyprus, whose financial sector is characterised by high exposure to Greece (for example, Cypriot banks suffered considerable losses due to writing off part of Greece's debt), applied for financial assistance from euro zone bailout funds. The danger of further escalation of the problems in the euro zone thus persists, as does the risk for the spread of contagion to other EA/EU countries - the Czech Republic not excluded. Czech banks' high level of resistance to severely negative (external) shocks, as proven by the findings of stress tests carried out by CNB and published in June 2012 in the Report on Financial Stability 2011/2012, is at least positive news.

Table A.1.1: **Real Gross Domestic Product** – yearly growth in %, seasonally unadjusted data

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
		***************************************	*******************************	*********************	***************************************	******************************	******************************	***************************************	Forecast	Forecast
USA	3.5	3.1	2.7	1.9	-0.3	-3.5	3.0	1.7	2.2	2.4
China	10.1	11.3	12.7	14.2	9.6	9.2	10.4	9.1	8.2	7.8
EU27	2.5	2.0	3.3	3.2	0.3	-4.3	2.0	1.5	-0.2	0.6
EA12	2.2	1.7	3.2	2.9	0.3	-4.2	1.9	1.5	-0.3	0.6
Germany	1.2	0.7	3.7	3.3	1.1	-5.1	3.7	3.1	0.8	1.3
France	2.5	1.8	2.5	2.3	-0.1	-2.7	1.5	1.7	0.2	0.8
United Kingdom	3.0	2.1	2.6	3.5	-1.1	-4.4	2.1	0.7	0.2	1.3
Austria	2.6	2.4	3.7	3.7	1.4	-3.8	2.3	3.1	0.6	1.4
Hungary	4.8	4.0	3.9	0.1	0.9	-6.8	1.3	1.7	-1.3	1.0
Poland	5.3	3.6	6.2	6.8	5.1	1.6	3.9	4.4	2.7	2.9
Slovakia	5.1	6.7	8.3	10.5	5.9	-4.9	4.2	3.3	2.0	2.9
Czech Republic	4.7	6.8	7.0	5.7	3.1	-4.7	2.7	1.7	-0.5	1.0

Graph A.1.4: Real Gross Domestic Product

YoY growth in %, seasonally unadjusted data

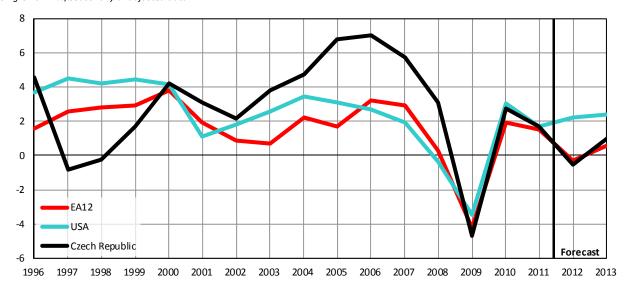


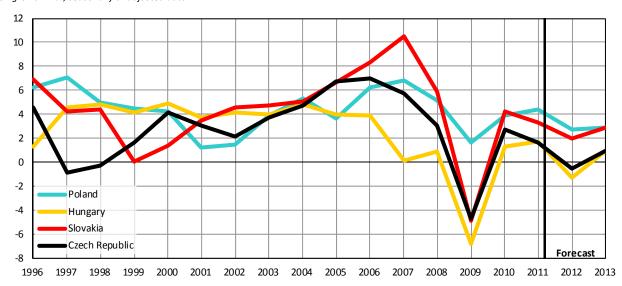
Table A.1.2: **Real Gross Domestic Product** – quarterly

growth in %, seasonally adjusted data

		20:	11			20:	12	
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
						Forecast	Forecast	Forecast
USA Qo	Q <b>0.1</b>	0.3	0.5	0.7	0.5	0.7	0.4	0.5
У	ο <sub>Υ</sub> 2.2	1.6	1.5	1.6	2.0	2.4	2.3	2.1
China	Q <b>2.2</b>	2.3	2.4	1.9	1.8	2.0	2.0	1.9
У	oy .			9.1	8.7	8.3	7.9	7.9
EU27 Qo	Q <b>0.7</b>	0.2	0.2	-0.3	0.0	-0.1	0.0	0.1
У	2.5	1.6	1.4	0.8	0.1	-0.2	-0.4	0.0
EA12 Qo	<b>0.7</b>	0.1	0.1	-0.3	0.0	-0.1	0.0	0.0
Y	2.4	1.6	1.3	0.7	-0.1	-0.3	-0.4	-0.1
<b>Germany</b> Qo	Q <b>1.3</b>	0.3	0.6	-0.2	0.5	0.0	0.2	0.1
Y	γ 4.6	2.9	2.7	2.0	1.2	0.9	0.5	0.8
France QC	<b>0.9</b>	0.0	0.3	0.1	0.0	-0.1	0.0	0.2
У	oY 2.4	1.6	1.5	1.2	0.3	0.3	0.0	0.1
United Kingdom Qd	<b>0.2</b>	-0.1	0.6	-0.3	-0.3	0.3	0.2	0.3
У	γ 1.5	0.4	0.4	0.7	-0.1	0.2	-0.1	0.5
<b>Austria</b> Qo	Q <b>0.8</b>	0.5	0.0	-0.1	0.3	0.1	0.2	0.3
	9Y 4.2	4.0	2.5	1.2	0.7	0.4	0.5	0.9
Hungary Qo	Q <b>1.4</b>	-0.2	0.0	0.0	-1.2	0.0	-0.1	0.1
Y	oy 2.4	1.7	1.5	1.2	-1.4	-1.2	-1.3	-1.2
Poland Qo	<b>1.2</b>	1.1	0.9	1.0	0.8	0.3	0.2	0.3
Y	γ 4.6	4.5	4.0	4.3	3.8	3.0	2.3	1.6
Slovakia Qo	Q <b>0.9</b>	0.8	0.7	0.8	0.7	0.2	0.0	0.1
Y	3.5	3.4	3.2	3.4	3.2	2.5	1.8	1.0
Czech Republic Qo	Q <b>0.5</b>	0.3	0.0	-0.2	-0.8	0.5	0.1	0.1
	2.8	2.1	1.3	0.6	-0.7	-0.6	-0.4	-0.1

Graph A.1.5: Real Gross Domestic Product – Central European economies

YoY growth in %, seasonally unadjusted data



Graph A.1.6: GDP in the Czech Republic and the neighbouring states

Q3 2008=100, seasonally adjusted data

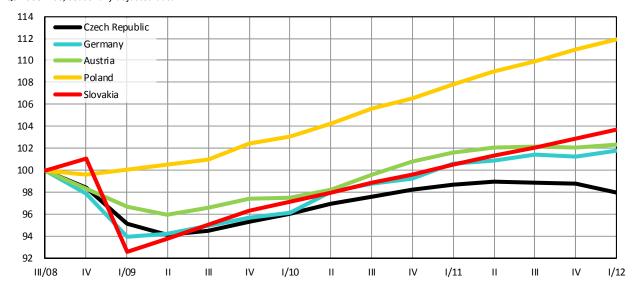


Table A.1.3: **Prices of Commodities** – yearly *spot prices* 

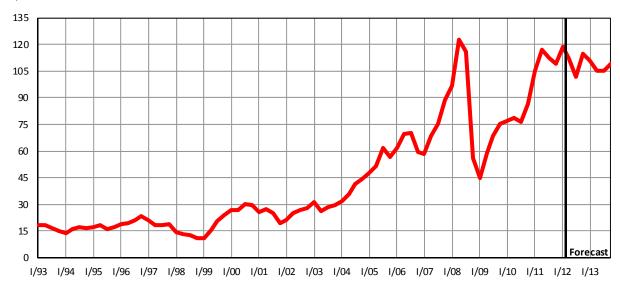
		2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
										Forecast	Forecast
Crude oil Brent	USD/barrel	38.3	54.4	65.4	72.7	97.7	61.9	79.6	111.0	112	108
	growth in %	33.0	42.0	20.1	11.2	34.4	-36.7	28.7	39.3	0.8	-3.9
Crude oil Brent index (in CZK)	2005=100	75.5	100.0	113.3	113.3	127.9	90.5	116.7	150.6	171	166
	growth in %	21.1	32.4	13.3	-0.1	12.9	-29.3	29.0	29.0	13.4	-2.5
Wheat	USD/t	156.9	152.4	191.7	255.2	326.0	223.6	223.7	316.2		
	growth in %	7.3	-2.8	25.8	33.1	27.7	-31.4	0.1	41.4		
Wheat price index (in CZK)	2005=100	110.4	100.0	118.7	141.9	152.4	116.7	117.1	153.3		
	growth in %	-2.2	-9.4	18.7	19.6	7.3	-23.4	0.3	30.9		

Table A.1.4: **Prices of Commodities** – quarterly *spot prices* 

			201	1			201	.2	
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
							Estimate	Forecast	Forecast
Crude oil Brent	USD/barrel	104.9	117.1	112.5	109.3	118.5	112	102	115
	growth in %	36.8	48.9	47.3	25.9	13.0	-4.4	-9.3	5.2
Crude oil Brent index (in CZK)	2005=100	143.2	151.5	148.7	157.1	173.6	169	159	179
	growth in %	30.3	24.8	31.8	29.5	21.3	11.5	7.1	14.0
Wheat price	USD/t	330.5	339.0	315.6	279.7	278.8			
	growth in %	68.9	91.0	32.7	-1.4	-15.6	•		
Wheat price index (in CZK)	2005=100	161.3	156.8	149.2	143.8	146.1	•		
	growth in %	60.9	60.1	18.7	1.4	-9.4			

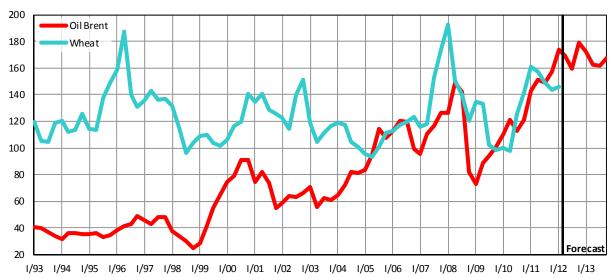
Graph A.1.7: Dollar Prices of Oil

USD/barrel



**Graph A.1.8: Koruna Indices of World Commodity Prices** 

index 2005=100



# A.2 Fiscal Policy

Currently, the general government deficit is estimated to reach 3.2% of GDP in 2012. The resulting deficit should thus be 0.1 p.p. higher, compared with 2011. However, given the anticipation of a more negative output gap in 2012, fiscal effort should reach 0.6 p.p.

The core reason behind the upward revision of the deficit is a drop in estimated tax revenues, mainly in consumption taxes (almost 0.5% of GDP), which is explained by a downward change in the household consumption forecast. On the contrary, given improved expectations about dynamics of the total wage bill, direct taxes are expected to develop slihgtly more favourably (impact of almost 0.2% of GDP). According to current information, the expenditure side is likely to witness a minor drop in some items, particularly because of the lower need to co-finance European projects.

Growth of the revenue side is expected to slow down to 1.3% in 2012, even though tax revenues might grow marginally faster.

As far as tax revenues are concerned, we forecast growth in the value added tax. The reason for this is the increase in the reduced VAT rate from 10% to 14%, which should overweigh the downward change in the household consumption forecast. Excise taxes are expected to decline by 2.5% this year. Although rates have increased, a drop in real household and government consumption is forecast for 2012. Moreover, this year's collection is affected by the stockpiling from the end of 2011.

Revenues from personal income tax should decline moderately. This is primarily due to raising the child credit by CZK 1,800 annually to compensate for increasing the reduced VAT rate. Corporate income tax revenues should rise, even though legislative changes in this area were purely marginal. Direct taxes are still being positively affected by the introduction of taxation of incomes from lotteries, with an expected collection of more than CZK 8.2 billion in 2012. This tax will be abolished in 2013 and replaced with a gambling tax.

Following a two-year decline, expenditures of the government sector are expected to grow by 1.5% in 2012, with final consumption expenditures falling by 1.6%, however. Intermediate consumption (in particular operating expenditures for running of the government apparatus) will contribute most to the decrease in final consumption. The main reason is the government-approved partial spending freeze of CZK 23.6 billion for this year. Unlike in 2011, wage expenditures within the government sector are expected to go up by approximately 0.7%. Social benefits in kind (especially health insurance companies' costs for health care) will likely decrease by 1.1%.

According to current conservative estimates, interest payments for servicing the government debt will rise by 11%. This reflects both higher overall indebtedness and conditions on international markets. The development of these payments must be closely monitored, as financial markets are quite volatile and the current debt crisis is far from resolved.

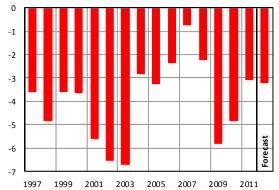
An increase of 4.0% is expected for social benefits, in particular among monetary social security benefits. The record-breaking increase in the number of pensioners from the second half of last year and continued moderate growth over the course of this year should be fully reflected in this area.

In the social area, only slight adjustments were approved this year, with a marginal negative impact on the government sector. In particular, these adjustments concern an increase of the subsistence minimum, amendment of the Social Services Act, and amendment of the Act on State Social Support. Therefore, growth in cash social assistance benefits is expected.

Regarding government investments, we forecast moderate improvement after two consecutive sharp declines. It can be expected that a considerable portion of previously postponed investment activities will be carried out sooner or later. Due to a slight decrease in investment grants on the revenue side, investment growth is expected to stem from national sources.

Graph A.2.1: Net Lending/Borrowing

in % of GDP



Graph A.2.2: Government Debt

in % of GDP

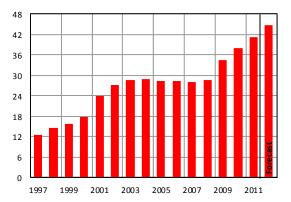


Table A.2.1: Net Lending/Borrowing and Debt

		2003	2004	2005	2006	2007	2008	2009	2010	2011 Prelim.	2012 Forecast
General government balance 1)	bill. CZK	-180	-83	-101	-80	-27	-86	-218	-182	-118	-124
	% GDP	-6.7	-2.8	-3.2	-2.4	-0.7	-2.2	-5.8	-4.8	-3.1	-3.2
Cyclical balance	% GDP	-0.6	-0.6	-0.1	0.6	1.2	1.0	-1.1	-0.6	-0.3	-0.8
Cyclically adjusted balance	% GDP	-6.1	-2.2	-3.1	-3.0	-1.9	-3.3	-4.8	-4.3	-2.8	-2.5
One-off measures	% GDP	-0.3	-0.7	-1.2	-0.2	-0.3	-0.1	0.3	0.0	-0.1	-0.3
Structural balance	% GDP	-5.8	-1.5	-1.9	-2.8	-1.6	-3.2	-5.1	-4.3	-2.7	-2.1
Fiscal effort <sup>2)</sup>	percent. points	0.1	4.3	-0.4	-0.8	1.1	-1.5	-1.9	0.8	1.6	0.6
Interest expenditure	% GDP	1.0	1.1	1.1	1.1	1.1	1.0	1.3	1.4	1.4	1.5
Primary balance	% GDP	-5.7	-1.8	-2.2	-1.3	0.4	-1.2	-4.6	-3.5	-1.7	-1.7
Cyclically adjusted primary balance	% GDP	-5.0	-1.1	-2.1	-1.9	-0.8	-2.2	-3.5	-2.9	-1.4	-0.9
General government debt	bill. CZK	768	848	885	948	1 023	1 104	1 286	1 437	1 568	1 714
	% GDP	28.6	28.9	28.4	28.3	27.9	28.7	34.4	38.1	41.2	44.6
Change in debt-to-GDP ratio	percent. points	1.5	0.4	-0.5	-0.1	-0.3	0.8	5.7	3.7	3.1	3.4

Note: Government debt consists of the following financial instruments: currency and deposits, securities other than shares excluding financial derivatives and loans. Government debt means total gross debt at nominal value outstanding at the end of the year and consolidated between and within the sectors of general government. The nominal value is considered to be an equivalent to the face value of liabilities. It is therefore equal to the amount that the government will have to refund to creditors at maturity.

Balance in EDP methodology, i.e. general government net lending (+)/borrowing (-) including interest derivatives.

<sup>&</sup>lt;sup>2)</sup> Change in structural balance.

# A.3 Monetary Policy and the Financial Sector

#### Monetary policy

The primary monetary policy instrument is the interest rate for **2W repo operations**, which was reduced by 0.25 p.p. to 0.50% on 28 June. At present, the **interestrate spread** is thus -0.5 p.p. between the Czech Republic and the EMU and 0.25 to 0.50 p.p. relative to the US. Interest spreads thus continue at very low levels and therefore do not constitute a fundamental cause for great fluctuations in the exchange rate.

#### Financial sector and interest rates

The average value for **3M PRIBOR** held at 1.2% in Q2 2012 (consistent with the forecast). We expect a value of 1.1% (versus 1.2%) for the whole of 2012. The rate should remain at that level on average also in 2013.

Looking at the quarterly averages, long-term interest rates can be evaluated as stable. Given macroeconomic stability and credible fiscal policy, the Czech Republic's ratings are at a good investment-grade: AA— with S&P, Moody's A1 and Fitch A+.

The CNB carried out another round of stress tests of the Czech banking sector, the results of which were published in June in the Report on Financial Stability 2011/2012. The stress tests confirmed Czech banks' high resilience to even large negative shocks. Even in extremely stressed scenarios (the scenario *Europe in depression* with loss of confidence accompanied by losses from exposures of the five largest banks to their parent groups), capital adequacy for the entire sector remained above the regulatory minimum of 8%, even if some banks required the addition of capital. The necessary injection of capital, however, did not exceed 1% of GDP.

On the interbank market, the volume of deposit operations based on a selective measurement in April 2012 further decreased slightly versus the previous quarter. This was caused especially by a decline in overnight operations between residents. The volume of derivative operations (interest rate swaps) fell by almost half versus January. Forward rate agreements (FRAs), on the other hand, rose by more than half.

The level of uncertainty on the interbank market, as measured by the spread between the 2W repo rate and 2W or 3M PRIBOR, remained stable.

We expect the **yields to maturity of 10-year government bonds** to average 3.4% in 2012 and 3.5% in 2013 (*unchanged in both cases*). The spread between Czech and German bonds will once again depend on developments regarding the debt crisis in the euro zone (its escalation has the tendency to push German bond yields down).

**Interest rates for loans** to non-financial corporations remained level at 3.9% in Q1 2012. Rates for loans to households dropped slightly to 6.6%. Rates for households' deposits stagnated at 1.2%, while rates for non-financial corporations' deposits increased by 0.1 p.p. to 0.6%.

The stock of households' deposits recorded YoY growth of 5.3% (versus 4.5% in the same period of 2011) in Q1 2012, while the volume of deposits of non-financial corporations grew markedly by 10.5% (versus growth of 1.2% in the same period of the previous year). The stock of loans to households grew by 5.7% YoY (versus 7.1% in the same period of 2011) in Q1 2012, and the volume of loans to non-financial corporations increased by 4.8% (versus 0.1% in Q1 2011). The slowing in the growth rate of household indebtedness thus continues.

The situation concerning loans in default is improving, as in Q1 their share in total loans reached 5.0% for households (0.4 p.p. less YoY) and 8.1% for non-financial corporations (0.7 p.p. less YoY). The ratio of loans to household deposits in the Czech Republic in the long term fluctuates at just over 60% and is approximately one-third lower than in the euro zone. We may note an even more distinct difference between the Czech Republic and the euro zone in the ratio of loans to non-financial corporations' deposits. In the Czech Republic this ratio is currently at a level of 120%, whereas in the euro zone it is 280–290%.

Table A.3.1: Interest Rates, Deposits and Loans – yearly

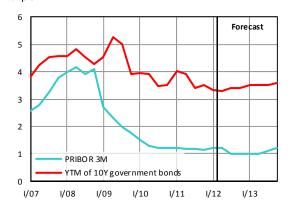
		2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
										Forecast	Forecast
Repo 2W rate CNB (end of period)	in % p.a.	2.50	2.00	2.50	3.50	2.25	1.00	0.75	0.75		
Main refinancing rate ECB (end of period)	in % p.a.	2.00	2.25	3.50	4.00	2.50	1.00	1.00	1.00		
Federal funds rate (end of period)	in % p.a.	2.25	4.25	5.25	4.25	0.25	0.25	0.25	0.25		
PRIBOR 3M	in % p.a.	2.36	2.01	2.30	3.09	4.04	2.19	1.31	1.19	1.1	1.1
YTM of 10Y government bonds	in % p.a.	4.75	3.51	3.78	4.28	4.55	4.67	3.71	3.71	3.4	3.5
Households (CR, unless stated otherwise)											
-interest rates on loans	in % p.a.	8.09	7.53	6.93	6.63	6.81	7.00	7.00	6.83		
-loans	growth in %	31.8	32.6	32.1	31.7	28.9	16.3	8.7	6.5		
-deposits	growth in %	6.0	5.2	7.3	10.6	9.4	10.5	5.4	5.0		
-share of non-performing loans	in %	4.8	4.2	3.7	3.2	3.0	3.7	4.8	5.3		
-loans to deposits ratio	in %	26	33	40	48	57	60	61	62		
-loans to deposits ratio (Eurozone)	in %	91	94	99	99	94	89	90	90		
Non-fin. corporations (CR, unless stated oth	nerwise)										
-interest rates on loans	in % p.a.	4.51	4.27	4.29	4.85	5.59	4.58	4.10	3.93		
-loans	growth in %	3.3	10.3	13.9	16.7	17.5	0.2	-6.5	3.3		
-deposits	growth in %	10.5	4.5	10.9	13.2	5.3	-1.7	4.8	0.9		
-share of non-performing loans	in %	7.8	5.7	4.5	3.8	3.6	6.2	8.6	8.5		
-loans to deposits ratio	in %	108	113	117	120	134	137	123	126		
-loans to deposits ratio (Eurozone)	in %	294	290	292	296	315	315	294	286		

Table A.3.2: Interest Rates, Deposits and Loans – quarterly

Tuble A.S.Z. Interest Rates, Bepos									
			2011	L			201	.2	
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
							Estimate	Forecast	Forecast
Repo 2W rate CNB (end of period)	in % p.a.	0.75	0.75	0.75	0.75	0.75	0.50	•	
Main refinancing rate ECB (end of period)	in % p.a.	1.00	1.25	1.50	1.00	1.00	1.00		
Federal funds rate (end of period)	in % p.a.	0.25	0.25	0.25	0.25	0.25	0.25		
PRIBOR 3M	in % p.a.	1.20	1.21	1.18	1.16	1.20	1.2	1.0	1.0
YTM of 10Y government bonds	in % p.a.	4.03	3.90	3.40	3.50	3.34	3.3	3.4	3.4
Households (CR, unless stated otherwise)									
-interest rates on loans	in % p.a.	6.95	6.88	6.80	6.69	6.59			
-loans	growth in %	7.1	6.8	6.4	5.6	5.7		•	
-deposits	growth in %	4.5	4.9	5.6	5.1	5.3		•	
-share of non-performing loans	in %	5.3	5.3	5.3	5.1	5.0		•	
-loans to deposits ratio	in %	62	62	62	63	62		•	
-loans to deposits ratio (Eurozone)	in %	90	90	90	90	88			
Non-fin. corporations (CR, unless stated oth	nerwise)								
-interest rates on loans	in % p.a.	4.00	3.99	3.88	3.87	3.87		•	
-loans	growth in %	0.1	3.3	4.4	5.3	4.8		•	
-deposits	growth in %	1.2	-3.6	-0.1	6.0	10.5			
-share of non-performing loans	in %	8.8	8.5	8.4	8.2	8.1			
-loans to deposits ratio	in %	126	128	130	120	119			
-loans to deposits ratio (Eurozone)	in %	290	285	286	284	287			

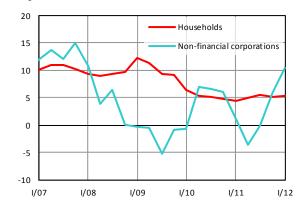
Graph A.3.1: Interest Rates

in % p.a.

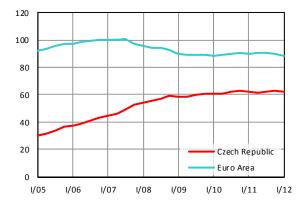


Graph A.3.3: Deposits of Households and Firms

YoY growth in %

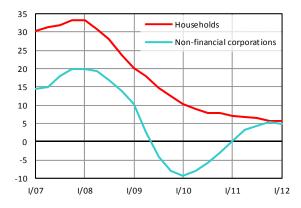


Graph A.3.5: Households – Loans to Deposits Ratio in %



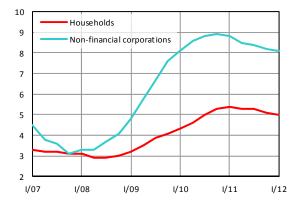
Graph A.3.2: Loans to Households and Firms

YoY growth in %



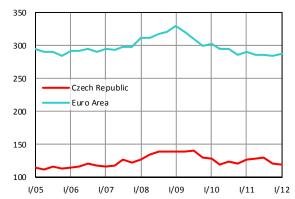
Graph A.3.4: Non-performing Loans

ratio of non-performing to total loans, in %

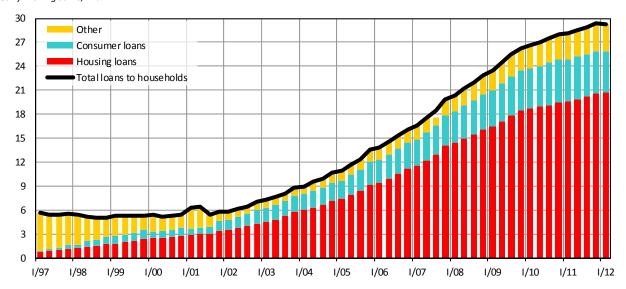


Graph A.3.6: Firms – Loans to Deposits Ratio

in %



Graph A.3.7: Ratio of Bank Loans to Households to GDP yearly moving sums, in %



# A.4 Exchange Rates

After rather fierce depreciation in the last quarter of the previous year due to escalation of the debt crisis in the euro zone, the Czech koruna returned to moderate strengthening, though this lasted only to mid-March 2012. The uncertain political and economic situation in the euro zone contributed to a rise in risk aversion that was demonstrated, among other ways, by the koruna's return to depreciation. That period was associated with relatively high volatility.

In connection with the negative interest rate differential versus the euro zone, YoY weakening of the exchange rate in recent quarters, and uncertainty concerning future developments, the nominal and real exchange rates should be below the long-term trend for the entire forecast horizon. The average rate should reach 25.3 CZK/EUR in 2012, while appreciation of ca 1.2% per year should resume thereafter. Should the situation in the euro zone worsen, considerable

exchange rate fluctuations in both directions are not out of the question.

Graph A.4.1: Exchange Rate CZK/EUR quarterly averages

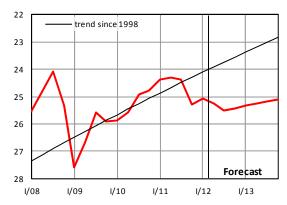


Table A.4.1: Exchange Rates – yearly

		2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
								Forecast	Forecast	Outlook	Outlook
Nominal exchange rates:											
CZK / EUR	average	28.34	27.76	24.96	26.45	25.29	24.59	25.3	25.2	24.9	24.6
	appreciation in %	5.1	2.1	11.3	-5.6	4.6	2.8	-2.9	0.4	1.2	1.2
CZK / USD	average	22.59	20.31	17.06	19.06	19.11	17.69	19.9	20.2	19.9	19.7
	appreciation in %	6.0	11.3	19.0	-10.5	-0.3	8.0	-11.1	-1.4	1.2	1.2
NEER	average of 2010=100	88.2	90.6	101.2	98.0	100.0	103.1	99	99	100	102
	appreciation in %	4.8	2.7	11.7	-3.2	2.1	3.1	-4.0	0.2	1.2	1.2
Real exchange rate to EA121)	average of 2010=100	89.7	92.5	102.8	98.0	100.0	100.8	98	98	99	100
	appreciation in %	3.8	3.1	11.2	-4.7	2.0	0.8	-2.3	0.0	0.6	0.8
REER	average of 2010=100	86.4	88.8	102.3	98.2	100.0	102.4				
(Eurostat, CPI deflated, 36 countries)	appreciation in %	5.1	2.9	15.1	-4.0	1.8	2.4				

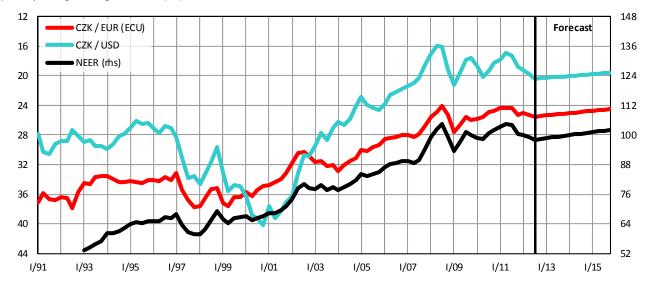
<sup>1)</sup> Deflated by GDP deflators.

Table A.4.2: Exchange Rates – quarterly

			201	.1			201	12	
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
							Estimate	Forecast	Forecast
Nominal exchange rates:									
CZK / EUR	average	24.37	24.32	24.39	25.28	25.08	25.3	25.5	25.4
	appreciation in %	6.1	5.2	2.2	-1.9	-2.8	-3.7	-4.4	-0.6
CZK / USD	average	17.83	16.90	17.27	18.78	19.14	19.7	20.4	20.3
	appreciation in %	5.0	19.3	11.7	-2.8	-6.9	-14.4	-15.3	-7.7
NEER	average of 2010=100	103.4	104.3	104.0	100.6	100.2	99	98	98
	appreciation in %	4.9	6.0	2.9	-1.6	-3.2	-4.8	-5.7	-2.2
Real exchange rate to EA12	average of 2010=100	100.8	101.6	101.6	98.9	98.9	98	98	99
	appreciation in %	3.0	2.2	0.2	-2.5	-1.8	-3.1	-4.0	-0.4
REER	average of 2010=100	103.1	103.2	103.3	99.7				
(Eurostat, CPI deflated, 36 countries)	appreciation in %	4.3	4.5	2.1	-1.4				

**Graph A.4.2: Nominal Exchange Rates** 

quarterly average, average 2010=100 (rhs)



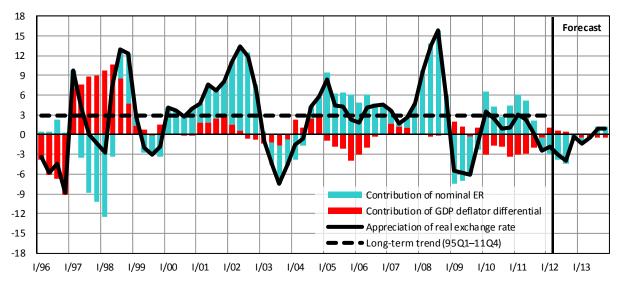
Graph A.4.3: Real Exchange Rate to EA12

quarterly average, deflated by GDP deflators, average 2010=100



Graph A.4.4: Real Exchange Rate to EA12

deflated by GDP deflators, YoY growth in %, contributions in percentage points



## A.5 Structural Policies

#### **Business environment**

Essential public administration registers were launched on 1 July 2012 in order to improve the quality and efficiency of the public administration. The previous system of uncoordinated, and in some cases outdated or overlapping, databases administered by various authorities was replaced with four basic information registers (register of inhabitants; register of legal entities, entrepreneurs, and public enterprises; register of land identification, addresses and real estate; and register of public enterprises' undertakings and of certain rights and obligations). The main benefit of the basic registers consists in reduced time demands when dealing with the public administration, improved protection of personal data and expansion of public

administration services. Data taken from registers – the so-called reference data – has the status of being current, guaranteed and valid without the need for further verification. All reference data are entered only once and are updated at a single location. Thus, changes made in one register are also reflected in the other registers. Individuals and entrepreneurs will therefore not need repeatedly to provide documentation for the reference data and, at the same time, will know what reference data about them are maintained and who uses them.

An amendment to the act on investment incentives came into force on 12 July 2012, the goal of which is to attract to the Czech Republic firms specialising in sophisticated technologies and services. While the

basic parameters of investment incentives remain unchanged, the amendment introduces the possibility to draw investment incentives also for companies operating in research and development as well as strategic or telecommunications services. Moreover, the period for receiving income tax incentives was extended from 5 years to 10.

The amendment to the trade licensing act that came into force on 30 June 2012 also reduces the administrative burden on entrepreneurs. That amendment extends the range of services offered by central registration offices, simplifies the administrative process of moving, and abolishes the obligation to designate a place of business with a special number.

#### Taxes

In order to strengthen the revenues side of the state budget, and thereby gradually reduce the public finances deficit, the government approved on 23 May 2012 draft legislation to amend taxation, insurance and other legislation related to decreasing public budget deficits. According to the draft legislation, as from 2013 lump-sum cost deductions for personal income taxes will be limited to CZK 800,000 for activities included under the 40% deduction and to CZK 600,000 for the 30% deduction. At the same time, persons benefiting from deductions will not be able to apply the tax benefit for child support or the credit for a spouse. Furthermore, the real estate transfer tax will be increased from 3% to 4%, entitlement to an excise tax refund on diesel fuel for agricultural purposes will be abolished, and the withholding tax on income of non-residents from countries with which the Czech Republic has not concluded an agreement on preventing double taxation will be increased from 15% to 35%.

During 2013–2015, a 7% surcharge on the personal income tax will be temporarily introduced for incomes exceeding 48 times the average monthly wage, the basic income tax deduction for working pensioners will be abolished, and the maximum assessment base for health insurance premiums will be cancelled. During this period, the two VAT rates will be increased to 21% and 15%, respectively.

An amendment to the act on excise taxes approved by the government on 19 June 2012 divides the increase in the excise tax on cigarettes, originally planned for 1 January 2014, between 2013 and 2014. For the purpose of preventing tax evasion, the government approved an amendment to the VAT act on 26 June 2012. The main change is the introduction of an obligation for taxpayers, with the exception of individuals with turnover up to CZK 6 billion, to file electronically. The amendment comes into force on 1 January 2013, and the provisions relating to electronic filing one year later.

#### **Financial markets**

On 30 May 2012, the government approved draft legislation on increasing the transparency of joint-stock companies. This bill should contribute to making commercial relationships more transparent and reducing the room for possible corruption, as it imposes limitations on anonymous ownership of bearer shares. The draft legislation places the obligation on joint-stock companies with bearer shares in documentary form to transform those shares either through physical custody at a bank, book entry, or changing the shares to registered ones. For the purposes of paying dividends, shareholders holding registered shares in documentary form will then be obliged to open an account at a banking institution thus allowing for verification of the shareholder's identity conducted by an independent company and monitoring the flow of dividends and other pecuniary considerations in favour of the given shareholder.

An amendment to the act on building society savings approved by the government on 18 April 2012 should ensure that government expenditures intended for financial support to housing were actually used for that purpose. The amendment introduces special-purpose state assistance payments for housing needs or for provision in old age. The possibility to use state aid to pay university tuition is anticipated for the future. The amendment also expands the range of building society savings providers to include universal banks. The amendment is expected to take effect on 1 January 2014 and will also apply to contracts concluded prior to this date.

#### **Energy industry and environmental protection**

On 9 May 2012, the Chamber of Deputies voted to override the veto of the President and to approve a law on subsidised energy sources, combining within a single regulation support for renewable sources, secondary sources, and combined heat and electricity production from renewable sources. The legislation's objective is effectively to achieve the binding target for the proportion of energy from renewable sources in gross final consumption at 13.5% in 2020. If as of

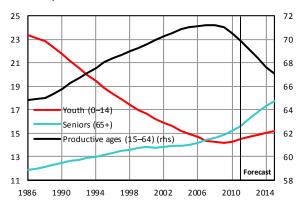
30 May of a given year the Energy Regulatory Office determines that the target set in the National Action Plan for a certain type of source has already been achieved, then it will not stipulate any aid for production of electricity from that source for the following two years. Measures will apply only for new parties interested in connecting power plants to the network. Moreover, electricity from solar radiation produced during 2013 in facilities put into operation in 2009 and 2010 will be obliged to make tax payments in amounts of up to 28% of the awarded subsidies. The law will come into effect on 1 January 2013.

The aim of an amendment to the law on climate protection signed by the President on 29 May 2012 is to maintain climate quality at levels that do not pose

# A.6 Demographic Trends

According to preliminary figures, the Czech Republic had 10.508 million inhabitants at the end of March 2012. The population increased by 2 thousand inhabitants during Q1 2012. The positive migration balance reached 4 thousand, and the mortality rate exceeded the birth rate by 2 thousand. All of these figures are very similar to the developments in Q1 2011.

Graph A.6.1: **Groups by Age** *structure in per cent* 



CZSO published the age structure of the population compatible with the results of the 2011 census. In accordance to our assumptions, the total undercount of 46 thousand (the difference between the balance of population changes based on the previous census and the results of the 2011 census) was reflected in a decline in the number of inhabitants aged 15–64. The largest undercount was recorded among people aged 24–29, at around 2.5% of the respective age group. The most likely explanation is unreported emigration, though likely only temporary (e.g. study, work).

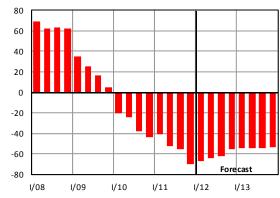
The health risks amendment reduces the administrative burden and strengthens incentives for those who reduce emissions beyond the scope established by law. Fees for atmospheric pollution remain in place and will be gradually increased from 2017 to 2021. Henceforth, only those firms whose fees for emission of harmful substances exceed CZK 50,000 will be obliged to pay those fees. Municipalities will be able to define low-emission zones in polluted areas, spas and localities in protected areas, and an industrial plant in the process of introducing new operations will have to put old ones out of operation so that there will not be an increase of emissions in the given area. The amendment comes into effect on 1 September 2012 and selected parts thereafter on 1 January 2013.

Nevertheless, the Czech population has still an economically favourable age structure, and especially in comparison to Western European countries. At the start of 2011, the structural proportion of the population in the age group of 15–64 years was 69.9%, versus 66.2% in the EA12.

The decline in the working-age population is, however, partially compensated by effects within the age structure of the labour force, as proportions of age groups with high or growing participation are increasing. The extension of the retirement age has the same effect.

Immigration could be another positive factor, but its extent in the last two years was below the middle variant of CZSO's demographic projection.

Graph A.6.2: **Czech Population Aged 15–64**YoY increases of quarterly averages, in thousands



Note: This graph does not reflect the results of the 2011 census

The continuing ageing of the population, which is accelerating sharply in this decade (see Graph A.6.1), has been confirmed. The structural proportion of persons over 64 years of age in the total population reached 16.2% at the start of 2012 and should increase to nearly 20% by 2020. Both the number and proportion of seniors in the population are rising considerably due to the demographic structure and further continuation of the intensive process of increasing life expectancy and have a negative impact on the state budget balance.

# Graph A.6.3: Life Expectancy

in years

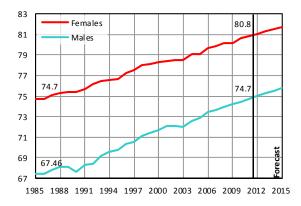


Table A.6.1: **Demography** *in thousands of persons* 

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
							Forecast	Forecast	Outlook	Outlook
Population (January 1)	10 251	10 287	10 381	10 468	10 507	10 487	10 505	10 539	10 571	10 601
growth in %	0.3	0.4	0.9	0.8	0.4	-0.2	0.2	0.3	0.3	0.3
Age structure (January 1):										
(0–14)	1 501	1 480	1 477	1 480	1 494	1522	1 541	1 563	1 587	1 611
growth in %	-1.7	-1.5	-0.2	0.2	1.0	1.8	1.3	1.4	1.5	1.5
(15–64)	7 293	7 325	7 391	7 431	7 414	7 328	7 263	7 207	7 154	7 105
growth in %	0.5	0.4	0.9	0.5	-0.2	-1.2	-0.9	-0.8	-0.7	-0.7
(65 and more)	1 456	1 482	1513	1 556	1 599	1637	1 701	1 768	1 830	1 885
growth in %	1.5	1.8	2.1	2.9	2.7	2.4	3.9	3.9	3.5	3.0
Old-age pensioners (January 1) <sup>1)</sup>	1 985	2 024	2 061	2 102	2 147	2260	2340	2 390	2 422	2 453
growth in %	1.0	2.0	1.8	2.0	2.1		3.5	2.1	1.3	1.3
Old-age dependency ratios (January 1, in %):										
Demographic 2)	20.0	20.2	20.5	20.9	21.6	22.3	23.4	24.5	25.6	26.5
Under current legislation 3)	35.6	35.8	35.9	36.1	36.6	37.4	37.8	37.8	38.2	38.7
Effective 4)	41.3	41.6	41.5	41.8	43.6	45.9	47.6	48.8	49.5	49.9
Fertility rate	1.328	1.438	1.497	1.492	1.493	1.42	1.52	1.53	1.54	1.55
Population increase	36	94	86	39	-20	19	33	32	31	29
Natural increase	1	10	15	11	10	2	8	7	6	4
Live births	106	115	120	118	117	109	114	113	112	110
Deaths	104	105	105	107	107	107	106	106	106	106
Net migration	35	84	72	28	16	17	25	25	25	25
Immigration	68	104	78	40	31	23				
Emigration	33	21	6	12	15	6				
Census difference	х	х	х	х	-46	х	х	х	х	х

 $<sup>^{1)}</sup>$  In 2010 disability pensions of pensioners over 64 were transferred into old-age pensions.

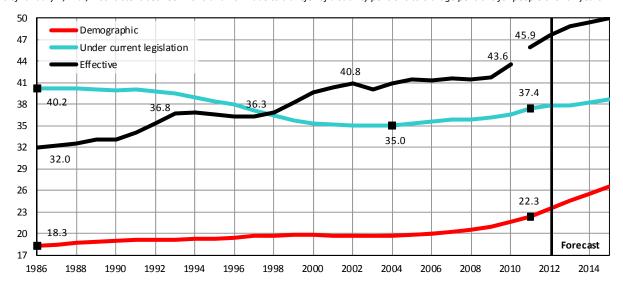
Demographic dependency: ratio of people in senior ages (65 and more) to people in productive age (15–64).

Dependency under current legislation: ratio of people above the official retirement age to the people over 19 below the official retirement age.

<sup>4)</sup> Effective dependency: ratio of old-age pensioners to working people.

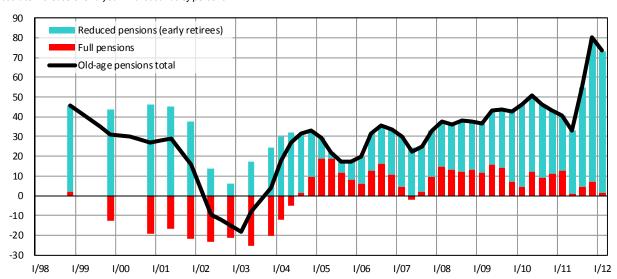
## **Graph A.6.4: Dependency Ratios**

As of January 1, in %, inconsistent between 2010 and 2011 due to transfer of disability pensions to old-age pensions for people over 64 years



Graph A.6.5: Old-Age Pensioners

absolute increase over a year in thousands of persons



Note: Transfer of disability pensions to old-age pensions for people over 64 years in 2010 is not included.

# **B** Economic Cycle

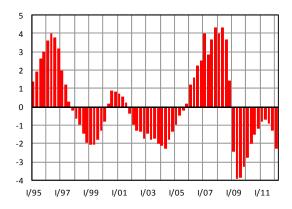
Sources of tables and graphs: CNB, CZSO, EC, Eurostat, own calculations

# **B.1** Position within the Economic Cycle

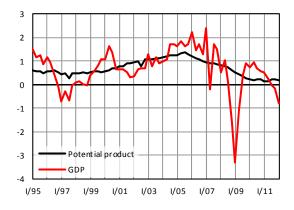
Potential product (PP), specified on the basis of a calculation by means of the Cobb—Douglas production function, indicates the level of GDP to be achieved with average utilisation of production factors. Growth of PP expresses possibilities for long-term sustainable growth of the economy without giving rise to imbalances. It can be broken down into contributions from the labour force, capital stock, and total factor productivity. The output gap identifies the cyclical position of the economy and expresses the relationship between GDP and PP. The concepts of potential product and output gap are used to analyse economic development and to calculate the structural balance of public budgets.

Under current conditions, when abrupt changes in the level of economic output have occurred, it is very difficult to distinguish the influence from deepening of the negative output gap from a slowing in PP growth. The results of these calculations display high instability and should be treated with caution.

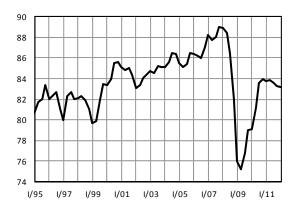
Graph B.1.1: **Output Gap** in % of potential GDP



Graph B.1.3: **Potential Product and GDP** *QoQ growth in %* 

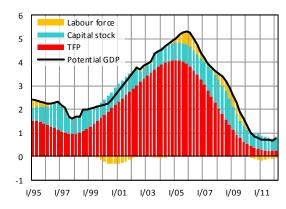


Graph B.1.5: Capacity Utilisation in Industry in %

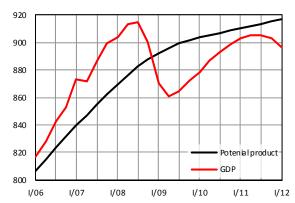


**Graph B.1.2: Potential Product Growth** 

in %, contributions in percentage points



Graph B.1.4: Levels of Potential Product and GDP in bill. CZK of 2005



Graph B.1.6: **Total Factor Productivity** *YoY growth in %* 

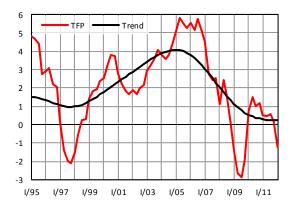


Table B.1: Output Gap and Potential Product

		2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
											Q1
Output gap	per cent	-1.8	-1.9	-0.4	1.9	3.7	3.3	-3.4	-1.9	-0.9	-2.3
Potential output	growth in %	4.2	4.7	5.2	4.8	3.9	3.3	2.1	1.0	0.7	0.8
Contributions:											
TFP	perc. points	3.6	4.0	4.0	3.6	2.7	1.7	0.9	0.4	0.3	0.2
Fixed assets	perc. points	0.5	0.7	0.8	0.9	1.1	1.2	0.8	0.6	0.6	0.6
Participation rate	perc. points	-0.2	-0.2	0.2	0.2	-0.2	0.0	0.3	0.2	0.3	0.4
Demography 1)	perc. points	0.2	0.2	0.2	0.3	0.3	0.4	0.1	-0.2	-0.4	-0.5

<sup>1)</sup> Contribution of growth of working-age population (15–64 years)

Economic recession at the turn of 2008 to 2009 gave rise to a deeply negative **output gap**. With the modest recovery after the end of the recession, the output gap was gradually reduced to -1% in Q2 2011. GDP's subsequent stagnation, however, caused the production gap to deepen once again to -2.3% in Q1 2012. These data are not entirely representative, however, due to deformation of the real GDP time series caused by the non-standard development of taxes on products (for more information, see Box C.1)

As a result of the Czech economy's lacklustre performance in the last period, YoY growth in **potential product** fell below 1% in 2011. We believe, however, that this estimate undervalues the reality.

The PP component most seriously affected is **total factor productivity** (TFP). In Q1 2012, TFP remained 2.2% lower than at the peak of the cycle in Q3 2008. Its trend component, derived using the HP filter,

grew by a mere 0.2% YoY. By comparison, peak growth of 4.0% had been reached in 2005.

A deep drop in investment activity led to a decline in **capital stock's** contribution from 1.2 p.p. in 2008 to 0.6 p.p. in 2010 and 2011.

The **labour supply** has been markedly affected by decrease in the number of working-age inhabitants, which stems from the process of population ageing as well as from a significant drop in immigration versus the situation recorded during 2006–2008. In Q1 2012, the contribution of demographic development to potential GDP growth was significantly negative, at –0.5 p.p.<sup>2</sup> At the same time, however, the positive participation trend, measured as the ratio of labour force to the number of inhabitants aged 15–64, has accelerated and, with a contribution of 0.4 p.p., has become the second most significant factor in potential GDP growth.

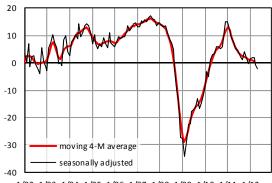
26

According to LFS, this figure does not yet take into account the census results. The total undercount (see Chapter A.6), however, will be evenly distributed across the period 2000–2011.

# **Business Cycle Indicators**

Business cycle indicators express respondents' views as to the current situation and short-term outlook and serve to identify in advance possible turning points in the economic cycle. Their main advantage lies in the quick availability of results reflecting a wide range of influences shaping the expectations of economic entities.3

**Graph B.2.1: Industrial Confidence Indicator** 

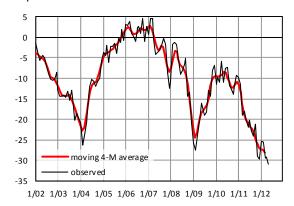


1/02 1/03 1/04 1/05 1/06 1/07 1/08 1/09 1/10 1/11 1/12

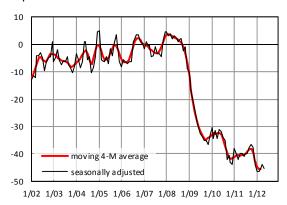
**Graph B.2.3: Retail Trade Confidence Indicator** 



**Graph B.2.5: Consumer Confidence Indicator** 



**Graph B.2.2: Construction Confidence Indicator** 



**Graph B.2.4: Selected Services Confidence Indicator** 



1/02 1/03 1/04 1/05 1/06 1/07 1/08 1/09 1/10 1/11 1/12

Graph B.2.6: Aggregate Confidence Indicator



1/02 1/03 1/04 1/05 1/06 1/07 1/08 1/09 1/10 1/11 1/12

For the business cycle research methodology, see CZSO: http://www.czso.cz/eng/redakce.nsf/i/business\_cycle\_surveys.

Business cycle indicators developed almost exclusively in a negative manner during April and May 2012.

In **industry**, the assessment of current total and foreign demand declined, as did the three-month outlook for these indicators. The current economic situation and its three-month and six-month outlooks worsened more appreciably. Prospects for employment over a three-month horizon also worsened.

Assessments as to the outlook for total demand in **construction** have stagnated, albeit at a lower level than that in Q1 2012.

According to respondents in **retail trade**, the assessment of the current economic situation slightly worsened. Its six-month outlook, on the other hand, significantly improved in May 2012. In no case, however, is the latest value of the time series indicative of a change in its trend.

The assessment of the current economic situation in selected **services** sectors improved moderately, while evaluation of the economic situation on a six-month horizon worsened. The expected development for the number of employees in the coming three months also declined appreciably.

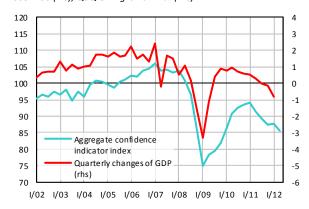
The **consumer** confidence indicator worsened.

As a result, the **composite confidence indicator** fell in April and May 2012, reaching slightly negative values (Graph B.2.6).

The relationship between development of the composite confidence indicator and lagged QoQ growth in real GDP, quantified using regression analysis, is quite a loose one and cannot be used to make a short-term forecast of the cycle. Without the lag, the correlation between these two time series is ca 60%. This correlation allows using at least the existing composite indicator published in advance of the quarterly national accounts. Below, we present only a qualitative graphical appraisal. Because the values for June 2012 were not yet available at the time of preparing the new Macroeconomic Forecast, the same value reached in May was assumed for June. It is clear that for Q2 2012 the composite confidence indicator has signalled further QoQ decline in GDP.

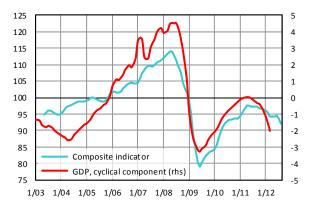
Graph B.2.7: Aggregate confidence indicator and QoQ GDP growth

2005=100 (lhs), QoQ GDP growth in % (rhs)



For Q1 2012, the composite leading indicator signalled a drop in the relative cyclical component of GDP, which was then confirmed by data from the quarterly national accounts published in June 2012. For Q2 2012, the indicator showed stagnation of the relative cyclical component of GDP. Since the trend dynamics can reasonably be regarded as constant in the short term, the conclusion for QoQ GDP dynamics in Q2 2012 is thus for its slight growth, which is inconsistent with the analysis resulting from the comparison of QoQ changes in GDP and the composite confidence indicator.

Graph B.2.8: **Composite Leading Indicator** average 2005=100 (lhs), in % of GDP (rhs) synchronized with cyclical component of GDP based on statistical methods (Hodrick-Prescott filter)



Considering the unusual development of GDP in Q1 (see Box C.1), however, this analysis is not very informative.

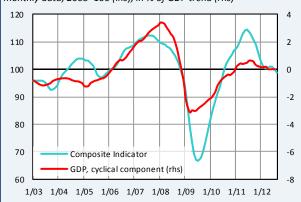
#### Box B.2: Business Cycle Indicators for the European Union

The European Commission publishes surveys on business and consumer confidence of EU member states on a monthly basis. The Ministry of Finance of the Czech Republic regularly monitors and analyses the data and uses it to formulate short-term estimates of GDP development for the Czech Republic's main trading partner countries.

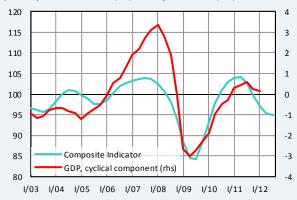
The Ministry's method, which is based on dividing real GDP into trend and cyclical components, follows a procedure similar to that used by the OECD. To estimate the relative cyclical component of GDP, we construct our own composite leading indicators compiled from questions within a business survey that are significantly correlated with the cyclical component of GDP. A composite leading indicator is constructed in a monthly variant using monthly business cycle surveys and in a quarterly variant using quarterly data. Time series are seasonally adjusted. The cyclical component is calculated filtering (Hodrick–Prescott filter) real GDP data and dividing by trend values. The indicators published herein are constructed for the EU as a whole and for Germany. The correlation between the relative cyclical component and the monthly composite leading indicator is 78% (71% quarterly) for the EU and 71% (63%) for Germany.

The composite leading indicator signals further decline in the relative cyclical component of GDP in the approaching months both in the EU and in Germany. Given the nature of the survey questions, monthly data are more optimistic than are those from quarterly questions, which focus more on the longer-term expectations of economic entities. The trend in both cases is negative. Considering the stable dynamics of potential product development in the short term, the signalled substantial decrease in the relative cyclical component can be attributed to the QoQ decline in GDP.

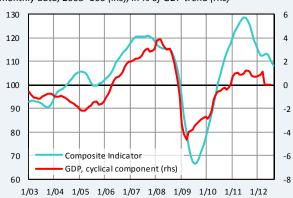
Graph 1: **EU Composite Leading Indicator** monthly data, 2005=100 (lhs), in % of GDP trend (rhs)



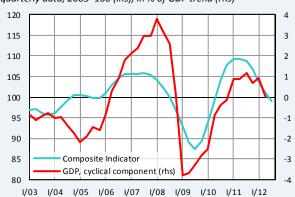
Graph 3: **EU Composite Leading Indicator** quarterly data, 2005=100 (lhs), in % of GDP trend (rhs)



Graph 2: **Germany Composite Leading Indicator** monthly data, 2005=100 (lhs), in % of GDP trend (rhs)



Graph 4: Germany Composite Leading Indicator quarterly data, 2005=100 (lhs), in % of GDP trend (rhs)



The European Commission constructs its own composite confidence indicator called the Economic Sentiment Indicator (ESI), which is compiled from five partial indicators for industry (weight: 40%), services (30%), consumers (20%), retail (5%) and construction (5%). As is the case for the Czech Republic, the correlation between lagged ESI values and QoQ increases in GDP for the entire EU27 is very weak. ESI cannot therefore be used as a leading indicator. Without the lag, however, the correlation is a respectable 74%, which allows us to use at least the ESI published in advance of the quarterly national accounts. Quarterly ESI values are calculated by averaging the monthly values. In view of the publication dates, the most recent quarterly figure is an average of the most recent two months recorded.

The ESI for the EU27 fell from 93.3 to 91.9 points in Q2 2012. The calculated regression relationship indicates QoQ GDP growth of 0.1%, which rather corresponds to the monthly composite leading indicator.

Graph 5: ESI and QoQ GDP Growth in EU27

quarterly average (lhs), QoQ growth in % (rhs)



Graph 6: **ESI a QoQ GDP Growth in EU27** – regression *QoQ growth in %* 



An illustration of ESI's applicability and information value is presented in Table 1, which summarises the results of estimates of QoQ GDP growth for the Czech Republic's main trading partners for Q1 2012 (in column "ESI"). The estimate is compared with the European Commission's forecast and the recorded reality. Table 2 presents current estimates for Q2 2012.

Table 1: **GDP Estimate for Q1 2012** *QoQ growth in %* 

FSI EC Outcome 0.0 0.06 -0.1 Germany 0.61 0.1 0.5 Slovakia 0.42 -0.3 0.7 0.8 Poland 0.81 0.5 0.0 France 0.16 -0.1UK 0.20 0.1 -0.3 Austria -0.05 0.0 0.3 Italy -0.31 -0.7 -0.8

Table 2: **GDP Estimate for Q2 2012** *QoQ growth in %* 

	ESI	EC
EU	0.09	0.0
Germany	0.48	0.3
Slovakia	0.51	0.2
Poland	0.80	0.4
France	0.11	0.0
UK	0.09	0.4
Austria	0.21	0.1
Italy	-0.29	-0.4

The European Commission's business cycle surveys provide a useful additional tool for macroeconomic analyses and estimating near-term economic development. As such, these will be used by the Ministry of Finance as one of the factors for formulating short-term forecasts.

# **C** Forecast of the Development of Macroeconomic Indicators

Sources of tables and graphs: CZSO, Eurostat

## **C.1** Economic Output

#### Latest development of GDP

Surprisingly, seasonally adjusted GDP<sup>5</sup> fell by 0.8% (*versus growth of 0.1%*) QoQ in Q1 2012. YoY, GDP decreased in Q1 2012 by 0.4% (*versus 0.1%*). On the expenditures side, the most significant factor in deviation between the forecast and reality was the greater YoY drop in household consumption. Other expenditure items were satisfactorily forecasted, taking into account their impact on GDP development.

Considering the development in Q4 2011, it would be necessary formally to evaluate the position of the economy based on the QoQ decline in GDP in Q1 2012 as a recession. The unfavourable data for Q1 are rather due to issues of accounting methodology, however, and a review of the development of gross value added (GVA) shows the situation to be ambiguous. Seasonally adjusted GVA fell by 0.6% QoQ in Q4 2011, while it grew by 0.2% in Q1 2012. It is not clear from these GVA dynamics that the Czech economy was in recession. The aforementioned also demonstrates that from the perspective of the resources side the relatively strong QoQ decrease in GDP in Q1 2012 was caused by the drop in taxes on products (the contribution of indirect taxes to GDP development was -0.8 p.p.). The situation is explained in greater detail in Box C.1.

Gross domestic expenditures recorded a YoY decrease in Q1 2012, due to a drop in household consumption by 2.8% (*versus 1.2%*) and decrease in government consumption by 0.2% (*versus 1.7%*) and in gross capital formation by 5.3% (*versus 3.6%*). Gross capital formation fell due to a lower YoY change in inventories and valuables. Gross fixed capital formation, on the other hand, grew by a slight 1.2% (*versus 1.5%*). The sharp YoY decline in change in inventories was clearly due also to the distortion described in Box C.1.

The forecast for foreign trade dynamics was more conservative with respect to the reality, as exports grew YoY by 7.3% (*versus 3.8%*) and imports increased YoY by 4.7% (*versus 1.8%*). As regards foreign trade's resulting positive impact on GDP, however, there is no substantial deviation.

Foreign trade contributed positively to GDP growth in Q1 2012 despite deterioration in the terms of trade. This deterioration was reflected in the YoY decline in real gross domestic income (RGDI) by 0.7% (*versus 0.9%*), representing a greater decrease than the YoY drop in GDP.

Nominal GDP grew YoY in Q1 2012 by 1.7% (*versus 2.0%*). The main cause for the deviation was the aforementioned significantly greater YoY decline in real household consumption. Despite the large YoY change in the household consumption deflator, household consumption recorded slight YoY growth in nominal terms.

With a view to the income structure of GDP, we would highlight the significant upward revision in growth rates of compensation to employees (and the associated wages and salaries) for 2011. This of course renders comparison of the forecast for Q1 2012 with actual data for the given period not meaningful. Gross operating surplus dynamics were considerably lower as compared to the dynamics of compensation to employees<sup>6</sup> not only in Q1 2012 but also throughout 2011.

#### Forecast and outlook for GDP

The forecast for GDP and its expenditure components is influenced qualitatively by the same key factors as in the April forecast, i.e. by the high level of uncertainty regarding external developments relating to the Czech economy and the impacts of fiscal consolidation of public finances. However, we regard those risks connected with developments outside the economy as more intensive.

Due to further decline in gross domestic expenditures, GDP should diminish by 0.5% (*versus growth of 0.2%*) in 2012.

Considering gross domestic expenditures, we have adjusted especially the development of household consumption for 2012, which we expect will decline by 2.2% (*versus 0.4%*). The forecasted decrease in household consumption ensues from the expected real decline in wages in 2012 owing, on the one hand, to

<sup>5</sup> Unless stated otherwise, data presented in the text are not seasonally adjusted.

The positive evaluation of the increased profitability of the business sector in Q4 2011 presented in the April forecast was negated by this revision.

moderate growth in nominal wages due to the continuing tense situation on the labour market and, on the other hand, to a rise in the price level due primarily to administrative measures, and in particular an increase in the reduced VAT rate. Due to the position within the economic cycle, we also expect a slight decrease in employment that will contribute to the decline in household consumption. It appears, too, that in uncertain conditions households will increase their level of savings. In principle, these are not new factors. In light of the household consumption in Q1 2012, however, we assess their negative impact to be stronger.

According to the fiscal consolidation strategy we expect a real drop in government consumption in 2012 by 2.8% (*versus 3.7%*).

Given low domestic demand, uncertain prospects of foreign demand and declining utilisation of production capacities, companies' needs to invest in physical capital are very limited. We expect that gross capital formation will drop noticeably by 0.3% (*versus growth of 0.8%*) in real terms in 2012. Gross fixed capital formation could therefore decrease by 1.0% (*versus 0.5%*). The low dynamics of internal resources for financing investment projects, which we may deduct from the development of the gross operating surplus,

and the very low contribution of government investments in view of the aforementioned fiscal consolidation may be presented as reasons for the low expected investment activity.

The negative impact of gross domestic expenditures will be mitigated by the positive contribution of foreign trade. In 2012, we expect only moderate growth in exports by 4.3% (*versus 3.2%*) and in imports by 2.8% (*versus 2.1%*). The marginal rise in the expected export and import growth rates results from their development in Q1 2012.

For 2013, we forecast a very slight recovery for gross domestic expenditures, owing especially to gross capital formation and household consumption. Expected GDP growth of 1.0% (*versus 1.3%*) will continue to be driven primarily by foreign trade. As from 2014, however, the main factor in GDP growth should be gross domestic expenditures.

We expect that nominal GDP will grow YoY in 2012 by 0.9% (*versus 2.1%*). The decrease in the expected nominal GDP growth rate is connected primarily with the stated decline in the outlook for household consumption dynamics. Our view regarding the GDP expenditure deflators remains fundamentally unchanged.

#### Box C.1: GDP and Gross Value Added – Important Consequences of Subtle Methodical Nuances

Both the professional and general public know that economic output and the course of the economic cycle are typically evaluated on the basis of real GDP, i.e. GDP adjusted for price impacts. It is less well known that the information value of this indicator has numerous limitations and that there exist other indicators of national accounting that in certain situations may provide complementary information, the use of which prevents misinterpretation of non-standard developments. Such a situation occurred in Q4 2011 and Q1 2012.

Let us begin with a detailed methodical explanation. The production approach to estimating GDP relies on measuring the production of individual entities, from which intermediate consumption is deducted. The result is gross value added (GVA). This indicator is measured in so-called base prices (i.e. exclusive of indirect taxes on products). To determine GDP, measured in purchase prices, it is therefore still necessary to add the so-called taxes on products to the GVA and subtract subsidies on products.

Taxes on products are comprised predominantly of VAT and excise taxes. Other taxes on products (e.g. real estate transfer tax, fees for permanent changes in use of agricultural and forest land, admissions and spa and recreation fees) are less significant in volume terms. Compared to taxes on products, subsidies on products are by an order of magnitude lower.

What happened at the turn of 2011 and 2012? Excise taxes on cigarettes were increased with effect from the start of 2012. Economic entities that tried to avoid a competitive disadvantage resulting from higher prices of goods with the raised tax rate responded by stockpiling duty stamps at the original excise tax rate. CZSO estimates this stockpiling at ca CZK 3.5 billion (excise taxes and VAT) in Q4 2011.

While the GVA was not encumbered by these transactions, GDP was "artificially" inflated in Q4 2011 by CZK 3.5 billion and subsequently decreased in the following quarter by the same amount. The overall impact on the QoQ decrease in

GDP can be quantified at ca CZK 7 billion in current prices in Q1 2012. This phenomenon thus explains the **overall QoQ decline** in GDP by 0.8%.

The following graphs show the development of taxes on products and the dynamics of GDP and GVA.

**Graph 1: Taxes on products** 

chained volumes, reference year 2005, CZK bln., seasonally adjusted



Graph 2: GDP and GVA



GVA fell in Q4 2011 by 0.6% and rose in Q1 2012 by 0.2%. The actual output of the Czech economy in Q1 2012 was therefore distinctly higher than in Q4 2011, which also corresponds to the course of the cycle in Germany (see Table A.1.2).

This phenomenon has implications also for Q2 2012. If the entire effect on GDP were removed by the "artificial" reduction of Q1, one can expect return to a "normal" level with "artificially" slightly higher QoQ GDP dynamics in Q2.

The entire issue can be summarised such that a mechanical interpretation of the standard indicators may lead to entirely erroneous conclusions.

#### C.2 Prices

#### **Consumer prices**

YoY growth in consumer prices slowed to 3.2% (*versus 3.6%*) in May. The contribution from administrative measures remained the main source of price growth at 2.7 p.p., of which 1.2 p.p. reflects the impact from a rise in indirect taxes.

Regulated prices of gas contributed 0.6 p.p. to YoY inflation and, for example, prices of electricity, heat, water and sewage combined, as well as prices for health care contributed 0.2 p.p. each.

With respect to the contributions of individual segments of the consumer basket to YoY inflation, housing (1.6 p.p.), food and non-alcoholic beverages (0.8 p.p.) and transportation (0.3 p.p.) contributed the most.

The transportation segment once again recorded record-level fuel prices, as the price of diesel fuel reached 37.08 CZK/l in March, and in April the price of Natural 95 petrol hit 37.62 CZK/l. A considerable drop in crude oil prices on world markets, however, led fuel prices to come down from record levels.

We continue to anticipate that this year administrative measures will contribute approximately three-quarters of the inflationary effect, consisting in the impacts of changes to indirect taxes and changes in prices which the CZSO reports as regulated. We do not expect in the remainder of this year more fundamental price adjustments in the group of goods and services with regulated prices. From that group, those goods and services related to housing will contribute most to the YOY rise in CPI for December 2012 (0.8 p.p.). Administrative measures should contribute 2.1 p.p. (no change) to YOY inflation for December 2012.

Very weak domestic demand will remain the main anti-inflationary factor through the rest of 2012. Conversely, the effect of the exchange rate should be a slight pro-inflationary factor. The **average inflation rate** in 2012 should reach 3.2% (*versus 3.3%*), with December YoY growth of 2.4% (*no change*). Contributions from market growth in prices to the YoY inflation should remain positive also in the remaining part of 2012.

Administrative measures will have a dominant influence on inflation also in **2013**. The intended

increase of both VAT rates by 1 p.p. to 15% and 21% from the beginning of 2013 will be reflected in a 0.7 p.p. contribution to CPI, a small part of which may already have an impact in Q4 2012. Nevertheless, at the start of 2013, individual entities in the supply chain may partially absorb this change into their margins. Concerning indirect taxes, we continue to expect growth in the excise taxes on cigarettes (impact 0.1 p.p.). Among regulated prices, one may once again expect the largest impact for CPI in the case of electricity prices. Nevertheless, that estimate is associated with considerable uncertainty, as can be said, too, about the estimate for solid waste collection prices. Like this year, administrative measures should be the source of approximately three-quarters of inflation in 2013, contributing ca 1.7 p.p. (versus 1.5 p.p.) to YoY inflation in December 2013.

In spite of considerable anticipated growth in unit labour costs for 2012 and 2013 (see table C.3.3), due to weak domestic demand and the persisting position of the Czech economy in negative output gap, room for price growth in 2013 is very limited. We estimate the average inflation rate in 2013 at 2.2% (*versus 2.3%*) and YoY growth in December at 2.4% (*versus 2.6%*). Through 2013 as a whole, YoY inflation should remain

## C.3 Labour Market

In the context of economic stagnation, the situation on the labour market is, meanwhile, surprisingly good. Employment remains stable by QoQ and YoY comparison, the unemployment rate continues to decline, the labour participation rate is increasing at a record pace, and the wage bill and average salary grew unexpectedly rapidly in Q1 2012.

## **Employment**

According to the Labour Force Survey (LFS<sup>7</sup>), **employment** grew by 0.1% in Q1 2012 (*versus a decline of 0.2%*) with dynamic growth in self-employment of 3.1%. In a QoQ comparison after seasonal adjustments, employment remained level, which may be considered a success in conditions of economic stagnation. In view of reports for planned layoffs in large industrial enterprises, however, the outlook is less optimistic.

The growing number of individuals formally self-employed is very likely the consequence of expanding the very unfavourable (from the view of

within the tolerance band around CNB's 2% inflation target.

#### **Deflators**

The gross domestic expenditure (GDE) deflator, which is a comprehensive indicator of domestic inflation, grew by 2.4% (*versus 2.9%*) YoY in Q1 2012. Its development was very strongly influenced by increase in the reduced VAT rate. This is apparent from the development of the private consumption deflator, which in Q1 2012 grew YoY by 3.6%.

We anticipate the GDE deflator to rise in 2012 by 2.1% (*versus 2.4%*). In 2013, when we await further indirect taxes, the deflator should grow by 2.0% (*versus 1.8%*).

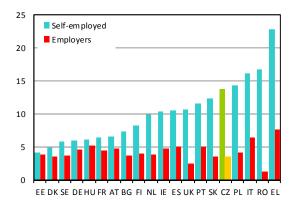
The implicit GDP deflator in Q1 2012 grew YoY by 2.1% (in line with the forecast). Higher growth of the GDE deflator relative to the rise in the implicit GDP deflator for Q1 2012 is due to worsening of the terms of trade by 0.4% (versus 1.1%).

We anticipate growth of the GDP deflator by 1.5% (*versus 2.0%*) in 2012 while in 2013 we predict it to rise by 1.1% (*versus 1.4%*). The lowering of the forecast ensues primarily from the anticipated worsening of trends relating to the terms of trade.

government budget) so-called "black-system". In a European context, the Czech Republic is among those countries with the highest ratios of self-employment to overall employment (see Graph C.3.1). Rather than attesting to the quality of the business environment, however, this indicates rather the opposite. In fact, countries which are on the top positions in international comparisons of business conditions (e.g. Doing Business) exhibit the lowest ratios of selfemployment. Greece, followed by other problematic countries with regard to the sustainability of their government sector deficits, stands unrivalled at the opposite end of the rankings. As in the Czech Republic, the apparently high ratio of self-employment may be ascribed primarily to cost optimisation efforts by means of evading taxes. In the Czech Republic, moreover, the speed at which this ratio is growing is extremely telling. Whilst from 2000 to 2008 it fluctuated in the range of 11-12%, it subsequently began to rise, and its YoY percentage point gain in Q1 2012 was 0.8 p.p. (to 14.6%), further indicating the conspicuous strengthening of this unfavourable trend.

Data from LFS are stated in the text, graphs and tables in a manner before recalculation according to the 2011 census.

Graph C.3.1: Entrepreneurs in Selected States share on total LFS employment in %, 2011 data



New legislation as from January 2012 introduced stronger financial sanctions on the "black system". The Ministry of Labour and Social Affairs increased the number of inspections for illegal employment. Nevertheless, its detection and proving is evidently considerably more difficult than in cases of illegally employing foreigners. Proposed changes in the tax allowances for the use of lump-sum cost estimates should bring a certain improvement in the situation.

The number of employees declined by 0.6% (*versus 0.8%*). This was most conspicuous in the construction industry, and it continued also in civil service.

As in the previous quarters, the **employment rate** (15–64 years) increased YoY by a strong 0.7 p.p. to 65.7%.

The **economic activity rate** (15–64 years) grew YoY in Q1 2012 by 0.7 p.p. to 70.8%, which is the largest YoY gain since Q3 2009. This outcome may be interpreted as increased interest among the population to engage in the employment process, most likely as a consequence of residents' needs to compensate for present or anticipated losses of real disposable income in a worsening economic situation.

The reason for moderating the forecast of declining employment in 2012 to 0.3% (*versus 0.5%*) is the positive outcome from Q1 and anticipated continuation of growth in self-employment. For 2013, we anticipate a decline of 0.2% (*versus growth of 0.1%*), which above all is a consequence of the worsening economic outlook for the coming months and the customary delayed reaction of the labour market.

### Unemployment

Seasonally adjusted registered unemployment shows ambiguous progress. On MoM basis, it fell both in March and April, but grew moderately in May.

According to LFS, the **unemployment rate** in Q1 2012 reached 7.2% (*versus 7.0%*), which still signified a slight 0.1 p.p. decline YoY and increase QoQ (after seasonal adjustment) of 0.3 p.p.

The conflicting trends of the two statistics (LFS versus registered unemployment) may be attributed to the effect of labour market reform, and particularly to the considerably lower attractiveness for the unemployed to register in labour offices (for example, due to expansion of the public services system). Growth in problems also is manifested in a rise in the numbers of the long-term unemployed. One may infer from the QoQ increase in the rate of unemployment of individuals with the lowest level of education that the termination of contracts towards the end of the year applies predominantly to this category.

Corresponding to the previous forecast, we anticipate that the business cycle and employment trend will reflect growth in the unemployment rate (LFS) to 7.0% in 2012 and to 7.2% in 2013.

#### Wages

Growth in the wage bill and average wage was surprising in the context of the economy's performance. We do not, however, anticipate a continuation of such rapid growth, particularly taking into consideration data on collection of personal income tax from dependent labour, which in April and May recorded slowing growth. In the cases of both wage bill growth and the average wage, we are therefore inclined towards the explanation that one-off components of remuneration (bonuses, severance and others) which were paid only in the first quarter to a limited number of employees played a rather important role.

In spite of a drop in the number of employees, the wage bill (national accounts, domestic concept) in Q1 2012 grew YoY by 3.4% (*versus 1.4%*), with the most substantial contribution from the manufacturing industry.

Taking Q1 into consideration, we increase the wage bill growth forecast in 2012 to 1.9% (*versus 1.5%*). In 2013, the forecast slightly decreases the projection for a decrease in employment (but while maintaining workers with high qualifications and wages) to 2.5% (*versus 2.6%*).

When converting to full-time work equivalents as determined by means of statistical records, the average nominal wage in Q1 2012 grew YoY by 3.6% (versus 1.5%).

In the business sector, YoY growth amounted to 3.6%. A contributing cause of the aforementioned high growth in the average wage could be the laying off of more individuals in the lowest income bracket towards the end of 2011 (see above). In the business sector, and particularly in the industrial sector, we do not anticipate further wage growth due to the rather pessimistic anticipated economic developments and signalling of layoffs on the near horizon. The average nominal wage in the non-business sector grew YoY by 3.5% while there were further decreases in the numbers of workers. Due to continuing sweeping cost-cutting measures in public administration budgets, we anticipate the impact of wage growth on a comparative basis only in select professions (health care, education).

Although wage growth most likely affected only a portion of employees, from an overall perspective, it nevertheless results in significant growth in unit labour costs.

C.4 External Relations

(a balance of payments perspective)

The external imbalance, expressed as the ratio of the current account balance to GDP on an annual basis, reached -2.5% (*versus* -1.6%) in Q1 2012 and thus grew YoY by 1.3 p.p. The improvement was caused exclusively by the result of the trade balance (increase of 1.8 p.p.). Other current account items deteriorated slightly: balance of services by 0.2 p.p., income balance by 0.1 p.p. and balance of current transfers by 0.2 p.p.

Following all-round strong growth in 2010, growth in world trade slowed in 2011. This trend has continued in 2012, as the unfavourable situation connected with the debt crisis in certain euro zone countries has been reflected in the real economy of trading partner countries. We anticipate growth in export markets of 1.0% (versus 1.9%) for 2012. For 2013, we expect only a moderate recovery of the global economy, accompanied by growth in export markets by 2.4% (versus 2.8%). We also expect slower growth in export performance, which indicates the volume proportion of Czech goods on foreign markets, from 4.6% in 2011 to 3.1% (versus 1.2%) in 2012 and 0.8% (forecast unchanged) in 2013.

After the inclusion of revisions and Q1 results, for 2012 we anticipate growth of the average nominal wage by 2.4% (*versus 2.0%*), which should signify a real decline in the overall average wage by 0.7%. Due to lower inflation, growth in 2013 of 2.4% (*versus 2.6%*) should mean a real increase in the average wage by 0.2%.

Growth of foreign trade turnover has decelerated since Q2 2011, but still achieved solid results in Q1 2012. Exports increased by 10.4% and imports by 7.5% in the annual aggregate. The deceleration in demand from EU partner countries, exports to which grew by a belowaverage 8.8% (foreign trade statistics in a national residents methodology), was partially compensated by exports to other territories outside the EU, for which exports increased by a strong 19.4%. For the remainder of 2012, we expect that foreign trade growth will continue to slow down and that the trade surplus will increase by 3.5% of GDP (versus 3.0%) as exports lead imports. In 2013, in addition to the recovery of trade, the slump in domestic demand should come to an end and the ratio of the trade balance to GDP should reach 3.2% (versus 3.4%).

The deficit on the fuels balance (SITC 3) reached 4.8% of GDP in annual terms in Q1 2012. Considering the oil price development scenario, we expect the current high prices of raw materials to hold in 2012 and to drop only slightly in 2013. As a proportion of GDP, the fuels deficit should thus reach ca 5.2% in 2012 (*versus* 5.4%) as well as in 2013 (*versus* 5.3%).

The balance of services surplus decreased YoY by 0.2 p.p. to 1.7% of GDP (*versus 1.8%*) in Q1 2012 in annual terms. Services export and import growth rates

The forecast starts from the assumption that the hike in Q1 was a one-off phenomenon, to which the data revision contributed moderately, rather than a change in trend. On the basis of signals from the business sector and the known intentions and decisions regarding wages in the public sector, for the following period we anticipate moderate growth in the average nominal wage.

Weighted average growth in goods imports by the seven most important trading partner countries (Germany, Slovakia, Poland, Austria, France, United Kingdom and Italy).

slowed, while during faster growth of services imports the surplus was diminishing. The balance improved only in the tourism industry, while the surplus for transportation services diminished. The balance of other services showed the worst development, crossing into deficit. For 2012 and 2013, we expect the balance of services surplus to remain at ca 1.7% of GDP (forecast unchanged for both years).

The deficit on the income balance, which includes the reinvested and repatriated profits of foreign investors, shows a continually weak growing tendency due to faster growth of costs than revenues. Outflow of

investment income, consisting predominantly of reinvested profit, is rising, while employee compensation has stagnated. We expect this trend to continue in 2012 and 2013. We estimate an incomes deficit of 7.5% of GDP (*versus 7.2%*) in 2012 and 7.6% of GDP (*versus 7.5%*) in 2013.

In the given circumstances, we estimate that the current account balance as a ratio to GDP will reach -2.2% (*versus* -2.4%) in 2012, while the forecast for 2013 is -2.6% (*versus* -2.3%). A current account deficit in this amount poses no risks of macroeconomic imbalances.

## C.5 International Comparisons

Comparisons for the period up to and including 2011 are based on Eurostat statistics. From 2012, our own calculations are used on the basis of real exchange rates.

In using the purchasing power parity method, comparisons of economic output for individual countries within the EU are made in PPS (purchasing power standards). PPS is an artificial currency unit expressing a quantity of goods that can be bought on average for one euro on EU27 territory after exchange rate conversion for countries that use currency units other than the euro. Using updated Eurostat data, purchasing power parity of the Czech Republic in 2011 was CZK 18.07/PPS in comparison to the EU27 or CZK 17.16/EUR in comparison to the EA12.

In 2009, the economic recession led to a decline in the absolute level of GDP per capita, adjusted by current purchasing power parity, in all monitored countries except for Poland. Since then, most countries have been gradually recovering, the only exception being Greece and Portugal, where the economic level has been falling since 2008 and 2011, respectively. In these two countries, the unfavourable development should continue in 2012 as well. In addition to the decrease in absolute level, Greece and Portugal also slipped in their relative economic levels vis-à-vis the EA12. The total decrease in Greece for the period 2009-2012 should come to 14 p.p. Slovenia has also recorded a drop in its relative economic level since 2009, though the dynamics of decline is gradually slowing. By contrast, the Baltic states have recorded the fastest increases in their economic levels compared to the EA12 average. In 2012, however, the pace of real convergence should slow considerably.

In 2011, the economic level of the Czech Republic expressed by GDP per capita as adjusted to current purchasing power parity was approximately 20,000 PPS, corresponding to 73% of the EA12's economic output. After a period of convergence, in

which during 2000–2007 the real economic level in the Czech Republic rose in comparison to EA12 countries by 13 p.p., there has been no change since 2009, or even slight divergence, due to the low growth in real GDP. Nevertheless, the Czech Republic again surpassed the economic level of Portugal in 2011 and this year it should surpass the level of Greece.

An alternative way of calculating GDP per capita by means of the current exchange rate takes into account the market value of the currency and ensuing differences in price levels. In the case of the Czech Republic, this indicator was ca EUR 14,700 in 2011, i.e. approximately half the level of the EA12 (51%). Due to expected stagnation of the economy and slight devaluation of the koruna in 2012, however, we expect a slight decline in both absolute and relative terms.

Looking at price levels, the comparative price level of GDP in the Czech Republic increased by 1 p.p. in 2011, thus reaching 70% of the EA12 average. An expected slight decrease of the price level in 2012, due to the weaker exchange rate, should help to boost the competitiveness of the Czech economy.

# **D** Monitoring of Other Institutions' Forecasts

The Ministry of Finance of the Czech Republic monitors macroeconomic forecasts of other institutions engaged in forecasting future development of the Czech economy. Forecasts of 13 institutions are continuously monitored from publicly available data sources. Of these, eight institutions are domestic (CNB, Ministry of Labour and Social Affairs, domestic banks and investment companies) and others are foreign (European Commission, OECD, IMF etc.). The forecasts are summarised in the following table.

Sources of tables and graphs: Ministry of Finance's own calculations.

Table D.1: Consensus Forecast

			June 2012		July 2012
		min.	max.	consensus	MoF forecast
Gross domestic product (2012)	growth in %, const.pr.	-0.8	0.5	-0.2	-0.5
Gross domestic product (2013)	growth in %, const.pr.	0.9	2.4	1.6	1.0
Average inflation rate (2012)	%	2.9	3.9	3.4	3.2
Average inflation rate (2013)	%	1.5	2.4	2.1	2.2
Average monthly wage (2012)	growth in %	2.4	3.1	2.7	2.4
Average monthly wage (2013)	growth in %	3.0	3.5	3.3	2.4
Current account / GDP (2012)	%	-3.2	-0.2	-2.1	-2.2
Current account / GDP (2013)	%	-3.2	-1.0	-2.1	-2.6

According to the monitored institutions' expectations, the Czech Republic should experience a shallow recession in 2012, as real GDP should slip by 0.2% for the year as a whole. These institutions expect moderate recovery and growth in real GDP of 1.6% already for the following year. The Ministry's forecast is more conservative for both years.

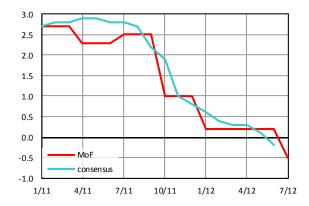
Due to impacts from the increase in indirect taxes, the monitored institutions expect the average inflation rate to rise to 3.4% for 2012. For the following year, however, these institutions anticipate a slowdown in consumer prices growth to 2.1%. The Ministry's forecast is in accordance with both estimates.

According to the monitored institutions' forecasts, the average wage should rise by 2.7% in 2012 while in

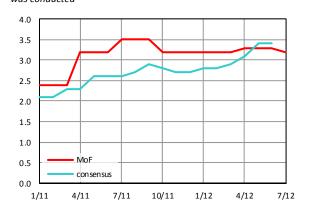
2013, in connection with the economy's expected recovery, growth is expected to accelerate to 3.3%. The Ministry's forecast for 2012 does not differ greatly from the average of the monitored institutions' forecasts, but its expectations for the speed of economic recovery and the trajectory of fiscal consolidation provide a distinctly different view on development in 2013.

According to the monitored institutions, the current account deficit in the balance of payments should be around 2.1% of GDP, thus remaining at a sustainable level. The Ministry's forecast fully corresponds with that view.

Graph D.1: **Forecast of Real GDP Growth for 2012** *in %; the horizontal axis shows the month, in which the monitoring was conducted* 



Graph D.2: **Forecast of Average Inflation Rate for 2012** *in %; the horizontal axis shows the month, in which the monitoring was conducted* 



# **Tables and Graphs:**

#### **Economic Output C.1**

Sources: CZSO, MoF estimates

Table C.1.1: Real GDP by Type of Expenditure – yearly

chained volumes, reference year 2005

		2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
							Prelim.	Forecast	Forecast	Outlook	Outlook
Gross domestic product	bill. CZK 2005	3335	3526	3635	3465	3560	3619	3600	3634	3704	3804
	growth in %	7.0	5.7	3.1	-4.7	2.7	1.7	-0.5	1.0	1.9	2.7
Private consumption exp. 1)	bill. CZK 2005	1605	1673	1720	1714	1724	1713	1675	1676	1705	1747
	growth in %	4.4	4.2	2.8	-0.4	0.6	-0.6	-2.2	0.1	1.7	2.5
Government consumption exp.	bill. CZK 2005	664	666	674	700	704	692	672	667	653	652
	growth in %	-0.6	0.4	1.2	3.8	0.6	-1.7	-2.8	-0.8	-2.1	-0.1
Gross capital formation	bill. CZK 2005	910	1051	1071	848	898	887	885	900	931	966
	growth in %	10.2	15.5	1.9	-20.8	5.9	-1.3	-0.3	1.8	3.4	3.7
-Gross fixed capital formation	bill. CZK 2005	851	964	1004	888	889	881	872	890	915	944
	growth in %	5.8	13.2	4.1	-11.5	0.1	-0.9	-1.0	2.0	2.8	3.2
-Change in stocks and valuables	bill. CZK 2005	59	87	68	-40	9	6	12	10	16	22
Exports of goods and services	bill. CZK 2005	2286	2541	2642	2377	2768	3074	3206	3317	3470	3648
	growth in %	13.8	11.2	4.0	-10.0	16.4	11.0	4.3	3.5	4.6	5.1
Imports of goods and services	bill. CZK 2005	2129	2402	2467	2180	2529	2718	2793	2872	2988	3131
	growth in %	10.8	12.8	2.7	-11.6	16.0	7.5	2.8	2.8	4.1	4.8
Gross domestic exp.	bill. CZK 2005	3179	3390	3465	3271	3334	3299	3238	3248	3291	3367
	growth in %	4.9	6.6	2.2	-5.6	1.9	-1.0	-1.9	0.3	1.3	2.3
Methodological discrepancy 2)	bill. CZK 2005	0	-3	-6	5	-6	-29	-45	-54	-66	-77
Real gross domestic income	bill. CZK 2005	3280	3488	3562	3423	3458	3457	3414	3418	3477	3566
	growth in %	5.3	6.3	2.1	-3.9	1.0	0.0	-1.2	0.1	1.7	2.6
Contribution to GDP growth 3)											
-Gross domestic expenditure	percent. points	4.7	6.4	2.2	-5.5	1.8	-1.0	-1.8	0.3	1.3	2.2
<ul><li>consumption</li></ul>	percent. points	2.0	2.1	1.6	0.6	0.4	-0.7	-1.7	-0.1	0.4	1.2
<ul> <li>household expenditure</li> </ul>	percent. points	2.2	2.1	1.4	-0.2	0.3	-0.3	-1.1	0.0	0.9	1.3
-government expenditure	percent. points	-0.1	0.1	0.2	0.7	0.1	-0.4	-0.6	-0.2	-0.4	0.0
<ul><li>gross capital formation</li></ul>	percent. points	2.7	4.3	0.6	-6.0	1.4	-0.3	-0.1	0.4	0.8	0.9
<ul><li>gross fixed capital formation</li></ul>	percent. points	1.5	3.4	1.1	-3.1	0.0	-0.2	-0.2	0.5	0.7	0.8
-change in stocks	percent. points	1.2	0.9	-0.5	-3.0	1.4	-0.1	0.2	0.0	0.2	0.2
– Foreign balance	percent. points	2.3	-0.7	0.9	0.8	0.9	2.7	1.2	0.7	0.7	0.5

The consumption of non-profit institutions serving households (NPISH) is included in the private consumption.

2) Deterministic impact of using prices and structure of the previous year for calculation of y-o-y growth.

Table C.1.2: **Real GDP by Type of Expenditure** – quarterly chained volumes, reference year 2005

			201	1			201	.2	
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
		Prelim.	Prelim.	Prelim.	Prelim.	Prelim.	Estimate	Forecast	Forecast
Gross domestic product	bill. CZK 2005	851	917	916	935	848	906	909	936
	growth in %	3.1	2.1	1.4	0.3	-0.4	-1.2	-0.7	0.2
	growth in % <sup>1)</sup>	2.8	2.1	1.3	0.6	-0.7	-0.6	-0.4	-0.1
	QoQ growth in % $^{1)}$	0.5	0.3	0.0	-0.2	-0.8	0.5	0.1	0.1
Private consumption exp.	bill. CZK 2005	409	428	433	444	397	417	425	436
	growth in %	-0.5	-0.5	-0.7	-0.8	-2.8	-2.6	-1.8	-1.7
Government consumption exp.	bill. CZK 2005	163	171	168	191	162	164	161	184
	growth in %	-0.3	-1.3	-3.0	-2.1	-0.2	-4.0	-3.8	-3.3
Gross capital formation	bill. CZK 2005	190	226	249	221	180	218	254	232
	growth in %	4.2	0.6	-3.4	-5.1	-5.3	-3.6	1.8	5.2
- Gross fixed capital formation	bill. CZK 2005	187	217	226	252	189	213	223	247
	growth in %	-1.7	1.4	-2.6	-0.7	1.2	-1.5	-1.5	-1.8
- Change in stocks and valuables	bill. CZK 2005	3	10	23	-31	-9	5	31	-15
Exports of goods and services	bill. CZK 2005	756	783	751	785	810	817	771	807
	growth in %	19.2	13.0	8.6	4.6	7.3	4.3	2.8	2.9
Imports of goods and services	bill. CZK 2005	656	683	679	700	687	696	694	716
	growth in %	16.9	10.0	3.7	1.1	4.7	2.0	2.2	2.3
Methodological discrepancy	bill. CZK 2005	-9	-9	-5	-5	-15	-14	-8	-8
Real gross domestic income	bill. CZK 2005	810	875	876	896	804	859	863	889
	growth in %	0.6	-0.1	-0.2	-0.3	-0.7	-1.8	-1.6	-0.8

<sup>1)</sup> From seasonally and working day adjusted data

Table C.1.3: Nominal GDP by Type of Expenditure – yearly

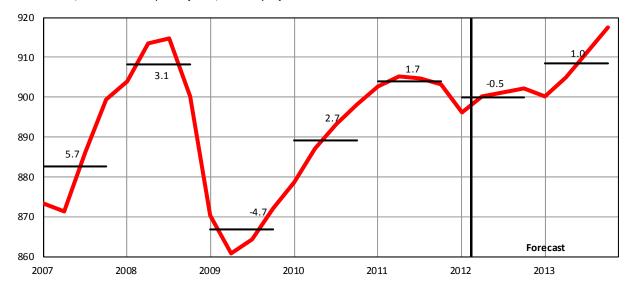
		2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
							Prelim.	Forecast	Forecast	Outlook	Outlook
Gross domestic product	bill. CZK	3353	3663	3848	3739	3775	3808	3843	3922	4060	4224
	growth in %	7.6	9.2	5.1	-2.8	1.0	0.9	0.9	2.1	3.5	4.0
Private consumption	bill. CZK	1629	1748	1883	1880	1900	1921	1938	1982	2060	2150
	growth in %	6.0	7.3	7.8	-0.2	1.1	1.1	0.9	2.3	3.9	4.3
Government consumption	bill. CZK	694	726	759	810	808	793	780	791	786	795
	growth in %	4.0	4.6	4.6	6.6	-0.2	-1.9	-1.6	1.4	-0.6	1.1
Gross capital formation	bill. CZK	928	1092	1114	898	947	934	938	967	1013	1061
	growth in %	12.4	17.6	2.0	-19.3	5.4	-1.4	0.4	3.2	4.7	4.8
-Gross fixed capital formation	bill. CZK	860	990	1031	927	923	913	915	947	986	1028
	growth in %	6.9	15.0	4.2	-10.1	-0.5	-1.1	0.2	3.5	4.1	4.2
-Change in stocks and valuables	bill. CZK	68	102	83	-29	24	21	23	20	27	33
External balance	bill. CZK	101	97	92	151	121	160	187	182	201	218
-Exports of goods and services	bill. CZK	2245	2498	2480	2233	2562	2854	3084	3216	3381	3561
	growth in %	11.8	11.3	-0.7	-10.0	14.7	11.4	8.1	4.3	5.1	5.3
-Imports of goods and services	bill. CZK	2144	2401	2388	2082	2441	2694	2897	3034	3179	3343
	growth in %	11.5	12.0	-0.5	-12.8	17.3	10.4	7.5	4.7	4.8	5.1
Gross national income	bill. CZK	3180	3401	3668	3489	3521	3551	3565	3632	3747	3880
	growth in %	6.6	6.9	7.8	-4.9	0.9	0.8	0.4	1.9	3.2	3.6
Primary income balance	bill. CZK	-172	-261	-180	-250	-254	-257	-278	-290	-313	-344

Table C.1.4: Nominal GDP by Type of Expenditure – quarterly

			201	1			201	12	
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
		Prelim.	Prelim.	Prelim.	Prelim.	Prelim.	Estim.	Forecast	Forecast
Gross domestic product	bill. CZK	884	961	966	997	899	965	969	1010
	growth in %	1.3	0.5	0.7	1.0	1.7	0.4	0.3	1.4
Private consumption	bill. CZK	455	480	486	500	458	483	492	504
	growth in %	1.2	1.2	0.9	1.2	0.7	0.7	1.2	0.9
Government consumption	bill. CZK	181	194	191	227	183	188	186	222
	growth in %	-1.1	-1.8	-2.9	-1.8	0.9	-2.7	-2.6	-1.8
Gross capital formation	bill. CZK	200	238	263	232	192	230	268	248
	growth in %	3.7	0.1	-3.3	-4.7	-4.3	-3.5	1.7	6.9
- Gross fixed capital formation	bill. CZK	194	224	234	262	198	223	233	260
	growth in %	-2.2	0.6	-3.0	0.1	2.0	-0.1	-0.1	-0.7
-Change in stocks and valuables	bill. CZK	7	15	30	-30	-6	6	34	-12
External balance	bill. CZK	47	49	25	39	66	63	23	36
<ul><li>Exports of goods and services</li></ul>	bill. CZK	693	721	694	746	766	784	749	786
	growth in %	18.5	10.7	8.7	8.5	10.4	8.7	7.9	5.4
-Imports of goods and services	bill. CZK	646	672	669	707	700	720	726	751
	growth in %	20.1	11.2	6.2	5.8	8.3	7.2	8.6	6.1

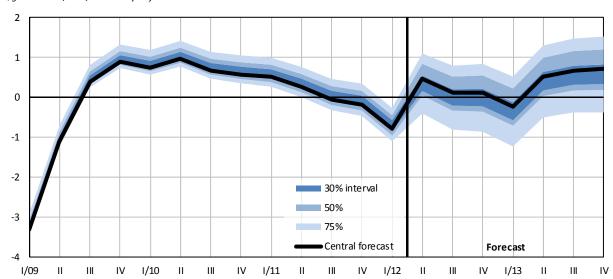
### Graph C.1.1: Gross Domestic Product (real)

chained volumes, bill. CZK in const. prices of 2005, seasonally adjusted

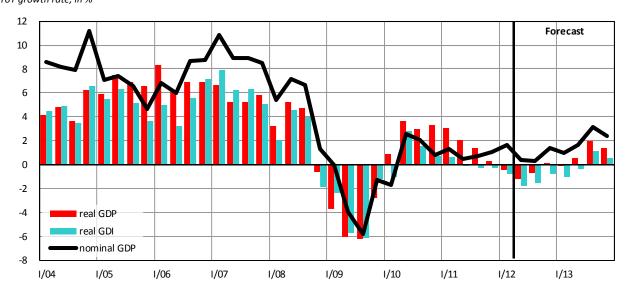


Graph C.1.2: Gross Domestic Product (real)

QoQ growth rate, in %, seasonally adjusted

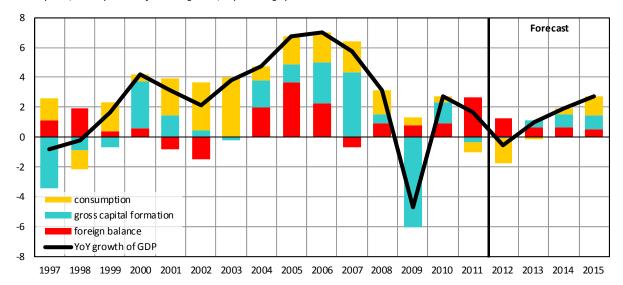


Graph C.1.3: Gross Domestic Product and Real Gross Domestic Income YoY growth rate, in %



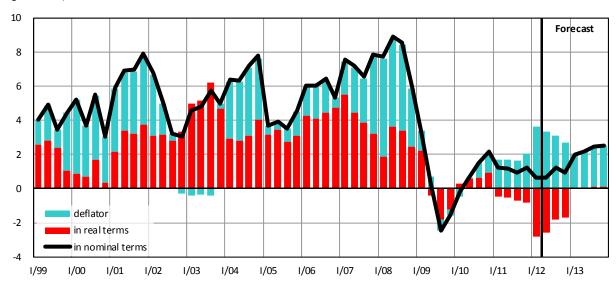
Graph C.1.4: Gross Domestic Product – contributions to YoY growth

in constant prices, decomposition of the YoY growth, in percentage points



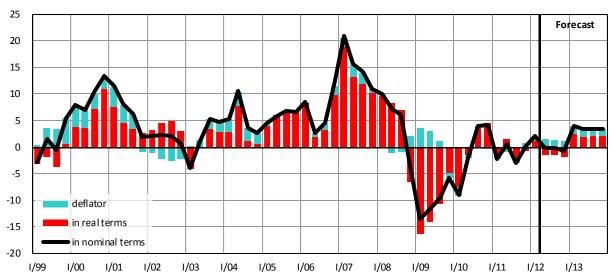
Graph C.1.5: Private Consumption (incl. NPISH)

YoY growth rate, in %



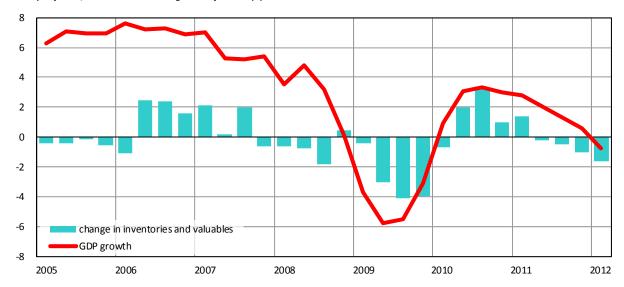
Graph C.1.6: Gross Fixed Capital Formation

YoY growth rate, in %

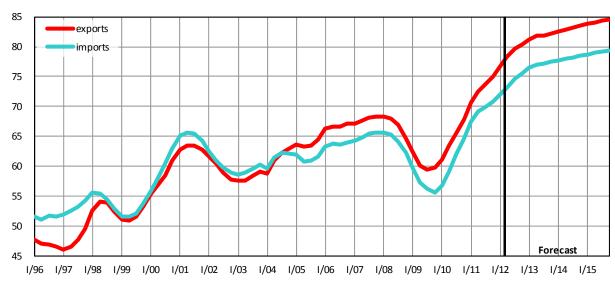


Graph C.1.7: Change in Inventories and Valuables (real)

seasonally adjusted, contributions to YoY growth of GDP in p.p.



Graph C.1.8: Ratio of Exports and Imports of Goods and Services to GDP (nominal) yearly moving sums, in %



Graph C.1.9: **GDP – Income Structure** *yearly moving sums, in* %

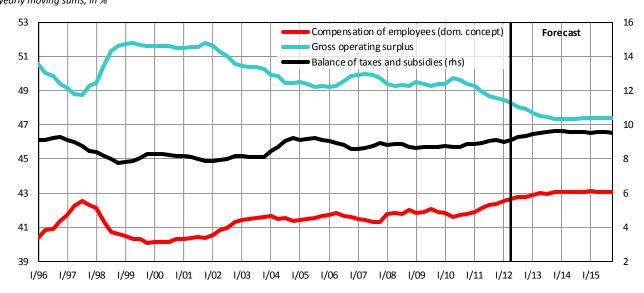


Table C.1.5: **GDP by Type of Income** – yearly

		2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
							Prelim.	Forecast	Forecast	Outlook	Outlook
GDP	bill. CZK	3353	3663	3848	3739	3775	3808	3843	3922	4060	4224
	growth in %	7.6	9.2	5.1	-2.8	1.0	0.9	0.9	2.1	3.5	4.0
Balance of taxes and subsidies	bill. CZK	287	327	335	325	334	346	359	378	388	402
	growth in %	1.5	13.9	2.5	-3.1	2.8	3.5	3.8	5.2	2.5	3.8
-Taxes on production and imports	bill. CZK	364	407	419	425	434	452	467	489	500	517
	growth in %	2.9	12.0	2.9	1.4	2.1	4.3	3.3	4.6	2.4	3.4
-Subsidies on production	bill. CZK	76	80	84	100	100	107	108	111	113	115
	growth in %	8.6	4.8	4.4	19.5	-0.4	7.0	1.4	2.5	2.0	2.0
Compensation of employees	bill. CZK	1394	1513	1617	1567	1577	1613	1644	1689	1749	1820
	growth in %	7.3	8.6	6.8	-3.1	0.6	2.3	1.9	2.7	3.6	4.0
-Wages and salaries	bill. CZK	1053	1140	1226	1200	1195	1223	1245	1276	1334	1388
	growth in %	7.2	8.3	7.5	-2.1	-0.4	2.3	1.9	2.5	4.5	4.0
-Social security contributions	bill. CZK	341	373	390	367	382	391	398	413	415	432
	growth in %	7.8	9.4	4.7	-6.1	4.1	2.4	1.9	3.6	0.7	4.0
Gross operating surplus	bill. CZK	1672	1822	1896	1847	1864	1848	1841	1856	1924	2002
	growth in %	8.9	9.0	4.1	-2.6	0.9	-0.8	-0.4	0.8	3.7	4.1
- Consumption of capital	bill. CZK	603	644	680	711	720	733	743	754	773	800
	growth in %	4.6	6.8	5.6	4.5	1.4	1.7	1.4	1.5	2.5	3.5
-Net operating surplus	bill. CZK	1069	1178	1216	1137	1144	1116	1098	1102	1151	1202
	growth in %	11.6	10.3	3.2	-6.5	0.6	-2.4	-1.6	0.4	4.5	4.5

Table C.1.6: **GDP by Type of Income** – quarterly

			201	1			201	12	
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
		Prelim.	Prelim.	Prelim.	Prelim.	Prelim.	Estimate	Forecast	Forecast
GDP	bill. CZK	884	961	966	997	899	965	969	1010
	growth in %	1.3	0.5	0.7	1.0	1.7	0.4	0.3	1.4
Balance of taxes and subsidies	bill. CZK	76	92	97	81	74	97	103	86
	growth in %	1.4	4.5	4.1	3.7	-2.8	5.6	5.4	6.3
Compensation of employees	bill. CZK	384	400	400	430	396	405	406	436
	growth in %	2.3	3.2	2.1	1.7	3.4	1.3	1.4	1.5
-Wages and salaries	bill. CZK	289	302	304	327	299	306	308	332
	growth in %	2.4	3.4	1.8	1.7	3.4	1.3	1.4	1.5
-Social security contributions	bill. CZK	94	97	96	102	98	99	98	104
	growth in %	2.1	2.9	3.2	1.5	3.4	1.3	1.4	1.5
Gross operating surplus	bill. CZK	424	470	468	487	428	463	460	489
	growth in %	0.4	-2.5	-1.2	0.1	1.0	-1.4	-1.6	0.4

# C.2 Prices

Sources: CZSO, Eurostat, MoF estimates

Table C.2.1: Prices – yearly

		2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
								Forecast	Forecast	Outlook	Outlook
Consumer Price Index											
average of a year	average 2005=100	102.5	105.4	112.1	113.3	115.0	117.2	120.9	123.6	126.3	128.6
	growth in %	2.5	2.8	6.3	1.0	1.5	1.9	3.2	2.2	2.2	1.8
December	average 2005=100	102.3	107.9	111.8	112.9	115.5	118.3	121.2	124.1	126.9	129.3
	growth in %	1.7	5.4	3.6	1.0	2.3	2.4	2.4	2.4	2.3	1.9
-of which contribution of											
administrative measures 1)	percentage points	0.8	2.2	4.3	1.0	1.6	1.2	2.1	1.7	1.3	0.8
market increase	percentage points	0.8	3.3	-0.7	0.0	0.7	1.2	0.3	0.6	0.9	1.1
HICP	average 2005=100	102.1	105.1	111.7	112.4	113.7	116.2	120.2	122.9	125.7	128.1
	growth in %	2.1	3.0	6.3	0.6	1.2	2.1	3.5	2.3	2.3	1.9
Offering prices of flats	average 2005=100	108.9	131.6	162.4	157.9	151.6	144.4	•			
	growth in %	8.9	20.8	23.4	-2.8	-4.0	-4.8				
Deflators											
GDP	average 2005=100	100.5	103.9	105.9	107.9	106.1	105.2	106.8	107.9	109.6	111.0
	growth in %	0.5	3.3	1.9	1.9	-1.7	-0.8	1.5	1.1	1.6	1.3
Domestic final use	average 2005=100	102.3	105.2	108.4	109.7	109.6	110.6	112.9	115.1	117.2	119.0
	growth in %	2.3	2.8	3.1	1.2	-0.1	0.9	2.1	2.0	1.8	1.5
Consumption of households	average 2005=100	101.5	104.5	109.5	109.7	110.2	112.1	115.7	118.3	120.9	123.1
	growth in %	1.5	2.9	4.8	0.2	0.4	1.8	3.2	2.2	2.2	1.8
Consumption of government	average 2005=100	104.6	108.9	112.6	115.7	114.8	114.6	116.0	118.6	120.4	121.9
	growth in %	4.6	4.1	3.4	2.7	-0.8	-0.2	1.3	2.2	1.6	1.2
Fixed capital formation	average 2005=100	101.0	102.7	102.8	104.4	103.8	103.7	104.9	106.4	107.8	108.9
	growth in %	1.0	1.6	0.1	1.6	-0.6	-0.1	1.2	1.4	1.3	1.0
Exports of goods and services	average 2005=100	98.2	98.3	93.9	93.9	92.5	92.8	96.2	97.0	97.4	97.6
	growth in %	-1.8	0.1	-4.5	0.0	-1.5	0.3	3.6	0.8	0.5	0.2
Imports of goods and services	average 2005=100	100.7	99.9	96.8	95.5	96.5	99.1	103.7	105.6	106.4	106.8
	growth in %	0.7	-0.7	-3.1	-1.4	1.1	2.7	4.6	1.9	0.7	0.4
Terms of trade	average 2005=100	97.6	98.4	97.0	98.4	95.9	93.7	92.8	91.8	91.6	91.4
	growth in %	-2.4	0.8	-1.4	1.4	-2.5	-2.3	-0.9	-1.1	-0.2	-0.2

The contribution of increase in regulated prices and in indirect taxes to increase of December YoY consumer price inflation.

Table C.2.2: Prices – quarterly

			201	1			2012				
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
							Estimate	Forecast	Forecast		
Consumer Price Index	average 2005=100	116.4	117.2	117.3	117.8	120.7	121.1	120.9	121.0		
	growth in %	1.7	1.8	1.8	2.4	3.7	3.4	3.1	2.7		
contr. of administrative measur	es percentage points	0.8	0.7	0.8	1.0	2.6	2.6	2.5	2.3		
contribution of market increase	percentage points	0.9	1.1	1.0	1.4	1.1	0.8	0.6	0.4		
HICP	average 2005=100	115.3	116.0	116.4	117.0	119.9	120.4	120.2	120.3		
	growth in %	1.9	1.9	2.0	2.8	4.0	3.7	3.3	2.8		
Offering prices of flats	average 2005=100	147.3	144.4	143.5	142.2	143.7					
	growth in %	-3.5	-5.1	-5.2	-5.2	-2.4		•			
GDP deflator	average 2005=100	103.8	104.8	105.5	106.6	106.0	106.5	106.5	107.9		
	growth in %	-1.8	-1.6	-0.7	0.8	2.1	1.6	1.0	1.2		
Domestic final use deflator	average 2005=100	109.6	110.3	110.7	111.7	112.2	112.6	112.7	114.0		
	growth in %	0.6	0.6	0.9	1.3	2.4	2.1	1.8	2.1		
Terms of trade	average 2005=100	93.2	93.5	93.9	94.0	92.8	92.8	92.8	92.8		
	growth in %	-3.2	-3.0	-2.3	-0.9	-0.4	-0.8	-1.2	-1.2		

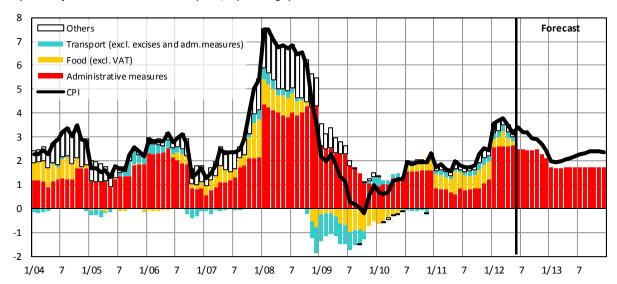
Graph C.2.1: Consumer Prices

YoY growth rate, in %



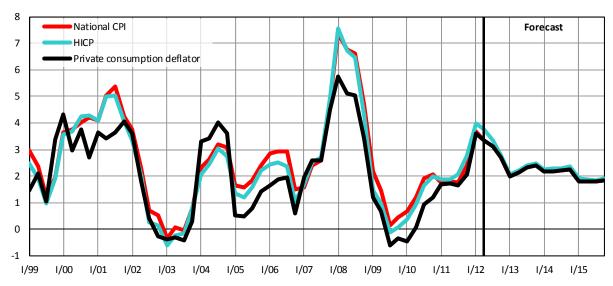
### **Graph C.2.2: Consumer Prices**

decomposition of the YoY increase in consumer prices, in percentage points



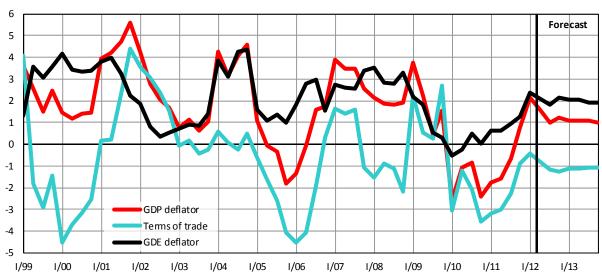
**Graph C.2.3: Indicators of Consumer Prices** 

YoY increases, in %



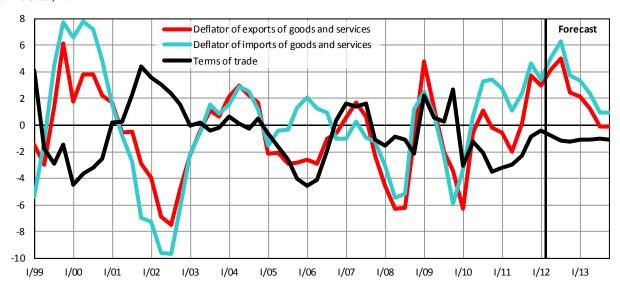
Graph C.2.4: GDP Deflator

YoY indices of final domestic use deflator and terms of trade, in %



## Graph C.2.5: Terms of Trade

YoY increases, in %



#### **C.3 Labour Market**

Sources: CZSO, Ministry of Industry and Trade, Ministry of Labour and Social Affairs, MoF estimates

Table C.3.1: **Employment** – yearly

		2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
										Outlook	Outlook
Labour Force Survey											
Employment	av. in thous.persons	4828	4922	5002	4934	4885	4904	4891	4882	4895	4915
	growth in %	1.3	1.9	1.6	-1.4	-1.0	0.4	-0.3	-0.2	0.3	0.4
-employees	av. in thous.persons	4048	4125	4196	4107	4019	4020	3977	3957	3961	3973
	growth in %	1.2	1.9	1.7	-2.1	-2.1	0.0	-1.1	-0.5	0.1	0.3
- enterpreneurs and	av. in thous.persons	780	797	807	827	866	884	914	925	934	941
self-employed	growth in %	2.2	2.2	1.2	2.5	4.7	2.0	3.5	1.2	1.0	0.8
Unemployment	av. in thous.persons	371	276	230	352	384	354	371	381	382	370
Unemployment rate	average in per cent	7.1	5.3	4.4	6.7	7.3	6.7	7.0	7.2	7.2	7.0
Labour force	av. in thous.persons	5199	5198	5232	5286	5269	5258	5262	5263	5277	5285
	growth in %	0.5	0.0	0.7	1.0	-0.3	-0.2	0.1	0.0	0.3	0.1
Population aged 15–64	av. in thous.persons	7307	7347	7410	7431	7399	7345	7283	7229	7178	7128
	growth in %	0.5	0.5	0.9	0.3	-0.4	-0.7	-0.8	-0.7	-0.7	-0.7
Employment/Pop. 15-64	average in per cent	66.1	67.0	67.5	66.4	66.0	66.8	67.2	67.5	68.2	68.9
Employment rate 15–64 <sup>1)</sup>	average in per cent	65.3	66.1	66.6	65.4	65.0	65.8	66.1	66.5	67.1	67.9
Labour force/Pop. 15-64	average in per cent	71.2	70.8	70.6	71.1	71.2	71.6	72.3	72.8	73.5	74.1
Participation rate 15–64 <sup>2)</sup>	average in per cent	70.3	69.8	69.7	70.1	70.2	70.6	71.2	71.8	72.5	73.0
<u>SNA</u>											
Employment (domestic concept	av. in thous.persons	4981	5086	5204	5141	5055	5066	5041	5031	5045	5065
	growth in %	1.3	2.1	2.3	-1.2	-1.7	0.2	-0.5	-0.2	0.3	0.4
Hours worked	bill. hours	9.01	9.12	9.37	9.07	9.07	8.99	8.91	8.86	8.86	8.87
	growth in %	0.3	1.3	2.7	-3.2	0.0	-0.9	-0.8	-0.6	0.0	0.1
Hours worked / employment	hours	1808	1793	1800	1764	1795	1775	1768	1760	1756	1751
	growth in %	-1.0	-0.8	0.4	-2.0	1.7	-1.1	-0.4	-0.4	-0.3	-0.3
Registered unemployment											
Unemployment	av. in thous.persons	474.8	392.8	324.6	465.6	528.7	507.8	499	510	511	496
Unemployment rate	average in per cent	8.13	6.62	5.45	7.98	9.01	8.57	8.5	8.6	8.6	8.3
Registered foreign workers											
Total	av. in thous.persons	233.2	276.2	343.5	335.4	313.5	307.7				
	growth in %	19.4	18.5	24.4	-2.3	-6.5	-1.8			•	
-employees	av. in thous.persons	165.5	209.7	270.2	252.6	219.6	214.9		•	•	
	growth in %	26.1	26.7	28.8	-6.5	-13.0	-2.1		•	•	
-self-employed	av. in thous.persons	67.7	66.5	73.3	82.8	93.9	92.8				
	growth in %	5.7	-1.8	10.2	13.0	13.4	-1.2				

The indicator does not include employment over 64 years.
 The indicator does not include labour force over 64 years.

Table C.3.2: **Employment** – quarterly

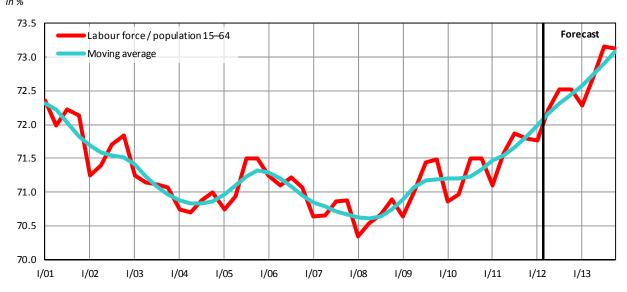
		2011 2012							
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
		Prelim.	Prelim.	Prelim.	Prelim.	Prelim.	Estimate	Forecast	Forecast
Labour Force Survey									
Employment	av. in thous. persons	4864	4908	4928	4915	4868	4897	4904	4896
	YoY growth in %	0,7	0,6	0,3	-0,1	0,1	-0,2	-0,5	-0,4
	QoQ growth in %	0,0	0,1	0,1	-0,1	0,0	-0,1	-0,2	0,0
-employees	av. in thous. persons	3989	4034	4043	4016	3966	3980	3980	3982
	growth in %	-0,1	0,5	0,2	-0,5	-0,6	-1,3	-1,6	-0,8
-entrepreneurs and	av. in thous. persons	875	874	885	899	902	917	924	914
self-employed	growth in %	4,6	0,7	1,0	1,9	3,1	4,9	4,4	1,6
Unemployment	av. in thous.persons	376	355	346	338	373	368	373	370
Unemployment rate	average in per cent	7,2	6,7	6,6	6,4	7,1	7,0	7,1	7,0
Labour force	av. in thous. persons	5241	5263	5274	5253	5241	5265	5277	5266
	growth in %	-0,2	0,1	-0,2	-0,5	0,0	0,0	0,1	0,2
Population aged 15–64	av. in thous. persons	7371	7354	7338	7317	7304	7290	7276	7262
	growth in %	-0,6	-0,7	-0,7	-0,9	-0,9	-0,9	-0,8	-0,8
Employment/Pop. 15-64	average in per cent	66,0	66,7	67,2	67,2	66,7	67,2	67,4	67,4
	increase over a year	0,8	0,8	0,7	0,6	0,7	0,4	0,2	0,2
Employment rate 15-64	average in per cent	65,0	65,7	66,2	66,2	65,7	66,2	66,4	66,4
	increase over a year	0,9	0,8	0,7	0,6	0,7	0,4	0,2	0,2
Labour force/Pop. 15-64	average in per cent	71,1	71,6	71,9	71,8	71,8	72,2	72,5	72,5
	increase over a year	0,2	0,6	0,4	0,3	0,7	0,7	0,7	0,7
Participation rate 15-64	average in per cent	70,1	70,6	70,9	70,8	70,8	71,2	71,5	71,5
	increase over a year	0,3	0,6	0,4	0,3	0,7	0,6	0,6	0,7
SNA									
Employment (domestic concept)	av. in thous. persons	5010	5065	5104	5084	5017	5047	5054	5046
	growth in %	0,4	0,3	0,1	0,0	0,1	-0,4	-1,0	-0,7
Hours worked	bill. hours	2,35	2,37	2,06	2,21	2,35	2,36	2,02	2,18
	growth in %	0,2	-1,0	-2,7	-0,3	0,2	-0,7	-1,5	-1,5
Hours worked / employment	hours	469	469	403	435	469	467	400	432
	growth in %	-0,2	-1,3	-2,8	-0,3	0,1	-0,4	-0,5	-0,7
Registered unemployment									
Unemployment	av. in thous. persons	564	506	481	480	531	493	483	487
Unemployment rate	average in per cent	9,6	8,5	8,1	8,1	9,0	8,4	8,2	8,2
Registered foreign workers									
Total	av. in thous. persons	303,0	305,6	309,5	312,8				
	growth in %	-3,8	-3,4	-1,1	0,9				
-employees	av. in thous. persons	211,2	212,7	216,3	219,6				
• ,	growth in %	-5,2	-2,6	-0,9	0,2				
-self-employed	av. in thous. persons	91,8	92,9	93,3	93,2	93,4			
	growth in %	-0,5	-5,1	-1,5	2,8	1,8			

### Graph C.3.2: Employment (LFS)

seasonally adjusted data, in thousands of persons, growth rates in %

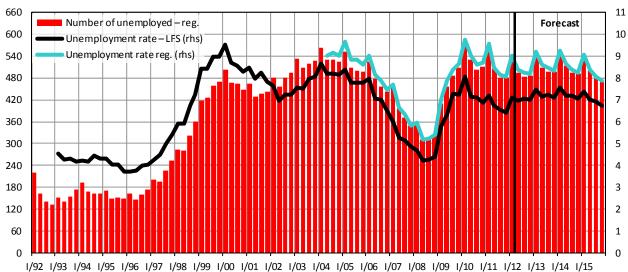


Graph C.3.3: Ratio of Labour Force to Population Aged 15–64



Graph C.3.4: Unemployment

quarterly average, in thousands of persons, in % (rhs)



**Graph C.3.5: Economic Output and Unemployment** 

YoY increase of real GDP in %. Change in unemployment in thousands of persons

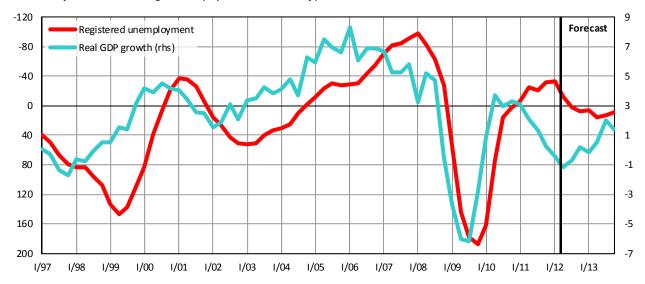


Table C.3.3: Labour Market – analytical indicators

		2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
										Forecast	Forecast
Compensation per employee											
– nominal	growth in %	8.5	4.9	6.1	6.6	5.0	-1.0	2.8	2.3	3.0	3.3
-real	growth in %	5.5	3.0	3.4	3.6	-1.2	-2.0	1.4	0.4	-0.2	1.0
Average monthly wage 1)											
– nominal	CZK	17 466	18 344	19 546	20 957	22 592	23 344	23 797	24 433	25 000	25 600
	growth in %	6.3	5.0	6.6	7.2	7.8	3.3	1.9	2.7	2.4	2.4
-real	CZK 2005	17 791	18 344	19 063	19 874	20 147	20 602	20 699	20 850	20 700	20 700
	growth in %	3.4	3.1	3.9	4.3	1.4	2.3	0.5	0.7	-0.7	0.2
Labour productivity	growth in %	5.3	5.5	5.6	3.7	1.4	-3.4	3.8	1.3	-0.3	1.2
Unit labour costs 2)	growth in %	3.0	-0.6	0.4	2.7	3.5	2.5	-0.9	1.0	3.3	2.1
Compensations of employees / GDP	%	41.4	41.7	41.6	41.3	42.0	41.9	41.8	42.4	42.8	43.1

 $<sup>^{1)}</sup>$  New time series: average wage is derived from full-time-equivalent employers in the entire economy.

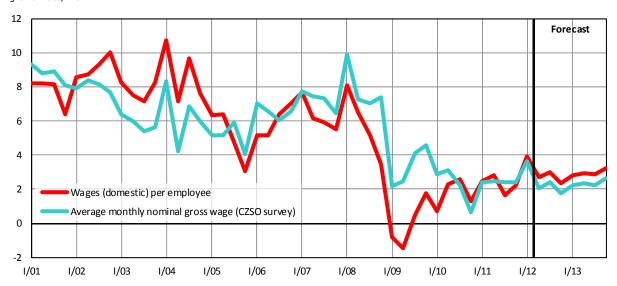
Graph C.3.6: **Wage Bill** – nominal, domestic concept *YoY growth rate, in %* 



Ratio of nominal compensation per employee to real productivity of labour.

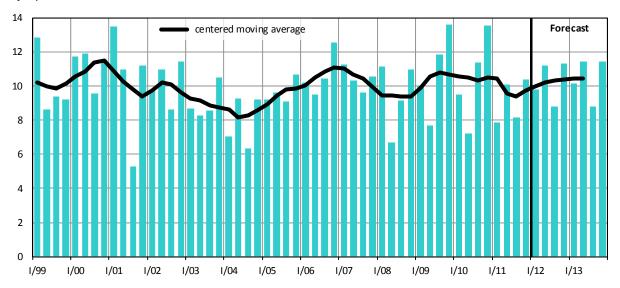
Graph C.3.7: Average Nominal Wage

YoY growth rate, in %



**Graph C.3.8: Gross Savings Rate of Households** 

in % of disposable income



 $\label{thm:come} \mbox{Table C.3.4: } \mbox{\bf Income and Expenditures of Households} - \mbox{\bf yearly} \\ \mbox{\it SNA methodology} - \mbox{\it national concept} \\$ 

		2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
										Forecast	Forecast
<u>Current income</u>											
Compensation of employees	bill.CZK	1223	1302	1397	1510	1597	1556	1576	1595	1638	1683
	growth in %	7.6	6.5	7.3	8.1	5.8	-2.6	1.3	1.2	2.6	2.8
Gross operating surplus	bill.CZK	508	515	538	570	587	588	601	597	600	606
and mixed income	growth in %	4.2	1.3	4.4	6.0	3.0	0.1	2.3	-0.8	0.5	1.0
Property income received	bill.CZK	119	135	150	155	167	149	139	138	142	147
	growth in %	7.0	13.0	11.5	3.1	8.2	-10.9	-6.7	-0.7	3.0	3.0
Social benefits not-in-kind	bill.CZK	368	386	422	471	495	536	547	563	578	600
	growth in %	3.7	5.1	9.1	11.6	5.1	8.4	2.0	2.9	2.7	3.7
Other current transfers received	bill.CZK	100	104	113	122	137	139	134	137	142	147
	growth in %	4.6	4.5	8.9	7.8	11.8	1.4	-3.3	2.6	3.0	4.0
<u>Current expenditure</u>											
Property income paid	bill.CZK	20	19	21	26	30	18	20	18	18	18
	growth in %	15.0	-6.6	10.6	26.5	12.8	-38.1	8.6	-9.9	-0.5	0.0
Curr. taxes on income and property	bill.CZK	141	144	144	160	146	141	141	154	157	162
	growth in %	7.9	1.7	0.4	11.0	-8.6	-3.8	-0.1	9.1	2.4	2.8
Social contributions	bill.CZK	483	515	564	618	638	605	623	640	657	680
	growth in %		6.5	9.6	9.5	3.4	-5.3	3.1	2.6	2.7	3.6
Other current transfers paid	bill.CZK	104	109	119	132	143	144	139	145	148	151
	growth in %	6.1	4.7	9.4	11.0	8.3	0.7	-3.7	4.0	2.0	2.0
Gross disposable income	bill.CZK	1569	1657	1771	1891	2025	2059	2074	2075	2120	2172
	growth in %	5.4	5.6	6.9	6.8	7.1	1.7	0.7	0.0	2.2	2.4
Final consumption	bill.CZK	1461	1516	1604	1720	1857	1852	1872	1897	1914	1957
	growth in %	6.8	3.8	5.9	7.2	8.0	-0.2	1.0	1.4	0.9	2.3
Change in share in pension funds	bill.CZK	17	19	23	26	24	17	15	12	12	13
Gross savings	bill.CZK	125	160	190	197	193	224	218	190	218	227
Capital transfers											
(income (-) / expenditure (+))	bill.CZK	-27	-31	-31	-36	-29	-26	-30	-33	-24	-23
Gross capital formation	bill.CZK	140	158	178	203	209	193	212	199	187	180
	growth in %	4.8	13.2	12.4	14.2	3.0	-7.5	10.0	-6.2	-6.0	-4.0
Change in financial assets and liab.	bill.CZK	12	34	43	30	12	56	35	23	55	71
Real disposable income	growth in %	2.5	3.7	4.3	3.8	0.7	0.6	-0.7	-1.9	-1.0	0.0
Gross savings rate	%	8.0	9.7	10.7	10.4	9.5	10.9	10.5	9.2	10.3	10.5

# **C.4** External Relations

Sources: CNB, CZSO, Eurostat, MoF estimates

Table C.4.1: Balance of Payments – yearly

		2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
											Forecast
Balance of goods and services	bill.CZK	3	86	108	106	100	161	129	160	201	197
balance of trade 1)	bill.CZK	-13	49	59	47	26	87	54	94	134	129
of which mineral fuels (SITC 3) <sup>2)</sup>	bill.CZK	-72	-111	-139	-124	-167	-107	-138	-177	-202	-207
balance of services	bill.CZK	17	38	49	59	74	74	75	66	67	67
Balance of income	bill.CZK	-157	-128	-165	-255	-175	-250	-285	-272	-292	-304
-compensation of employees	bill.CZK	-16	4	3	-4	-19	-11	-1	-3	3	3
-investment income	bill.CZK	-141	-132	-168	-251	-156	-239	-284	-269	-295	-307
Balance of transfers	bill.CZK	6	11	-11	-8	-6	-1	9	2	4	4
Current account	bill.CZK	-147	-31	-67	-157	-81	-89	-147	-109	-86	-103
Capital account	bill.CZK	-14	6	10	22	27	51	33	15	15	17
Financial account	bill.CZK	177	160	100	125	92	143	174	88		
-foreign direct investments	bill.CZK	102	280	90	179	36	38	95	75		
<ul><li>portfolio investments</li></ul>	bill.CZK	53	-81	-27	-57	-9	159	150	6		
- other investments	bill.CZK	23	-38	36	3	65	-53	-71	7		
Change in reserves	bill.CZK	7	93	2	16	40	61	41	-17		
International investment position	bill.CZK	-825	-837	-1084	-1418	-1545	-1728	-1830	-1895		
Gross external debt	bill.CZK	1012	1144	1196	1377	1630	1639	1767	1873	1938	1990
Balance of goods and services / GDP	per cent	0.1	2.8	3.2	2.9	2.6	4.3	3.4	4.2	5.2	5.0
Current account / GDP	per cent	-5.0	-1.0	-2.0	-4.3	-2.1	-2.4	-3.9	-2.9	-2.2	-2.6
Financial account / GDP	per cent	6.1	5.1	3.0	3.4	2.4	3.8	4.6	2.3		
IIP / GDP	per cent	-28.2	-26.9	-32.3	-38.7	-40.2	-46.2	-48.5	-49.8		
Gross external debt / GDP 3)	per cent	34.5	36.7	35.7	37.6	42.3	43.8	46.8	49.2	50	51

<sup>1)</sup> Imports – fob since May 2004
2) Imports – cif
3) Ratio of external debt (in CZK) at the end of period to GDP (in CZK)

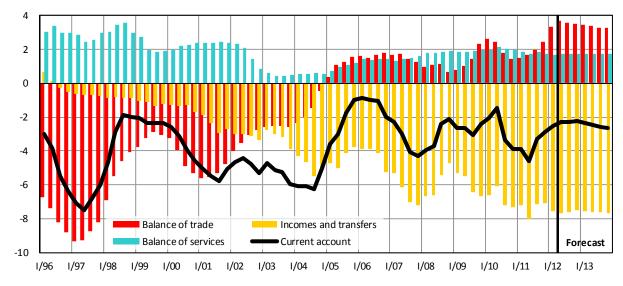
Table C.4.2: Balance of Payments – quarterly

moving sums of the latest 4 quarters

			201	1			201	.2	
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
							Estimate	Forecast	Forecast
Balance of goods and services	bill.CZK	128	130	145	160	192	207	205	201
balance of trade	bill.CZK	56	63	75	94	127	141	138	134
of which mineral fuels (SITC 3)	bill.CZK	-150	-160	-166	-177	-182	-191	-198	-202
balance of services	bill.CZK	71	67	70	66	65	66	67	67
Balance of income	bill.CZK	-283	-313	-280	-272	-289	-290	-291	-292
-compensation of employees	bill.CZK	-2	-2	-3	-3	0	1	2	3
-investment income	bill.CZK	-281	-310	-277	-269	-289	-291	-293	-295
Balance of transfers	bill.CZK	10	8	8	2	0	-4	0	4
Current account	bill.CZK	-146	-175	-126	-109	-96	-87	-87	-86
Capital account	bill.CZK	31	21	9	15	15	15	15	15
Financial account	bill.CZK	185	244	115	88	115	•		
-foreign direct investments	bill.CZK	94	99	57	75	79	•		
<ul><li>portfolio investments</li></ul>	bill.CZK	97	77	-3	6	71	•		
- other investments	bill.CZK	-6	68	62	7	-35			
Change in reserves	bill.CZK	21	20	-45	-17	42			
International investment position	bill.CZK	-1874	-1937	-1937	-1895				
Gross external debt	bill.CZK	1714	1751	1829	1873	1874	1903	1935	1938

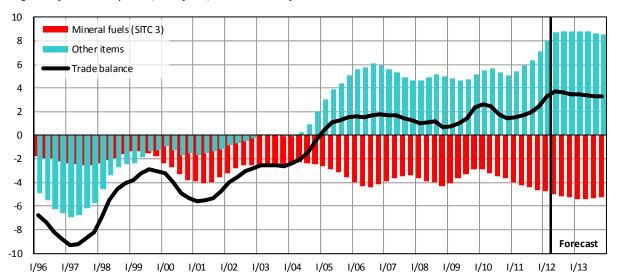
Graph C.4.1: Current Account

moving sums of the latest 4 quarters, in % of GDP, trade and service balances in BoP definitions



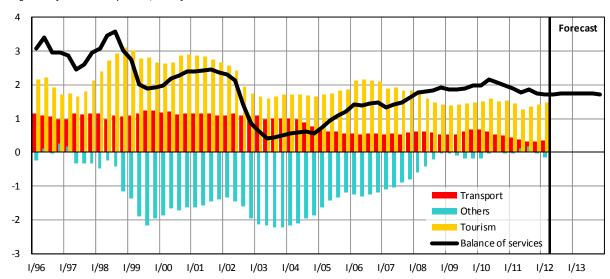
Graph C.4.2: Balance of Trade (exports fob, imports cif)

moving sums of the latest 4 quarters, in % of GDP, in cross-border definitions



Graph C.4.3: Balance of Services

moving sums of the latest 4 quarters, in % of GDP



Graph C.4.4: Balance of Income

moving sums of the latest 4 quarters, in % of GDP



Table C.4.3: **Decomposition of Exports of Goods** – yearly

		2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
										Forecast	Forecast
GDP 1)	average of 2005=100	97.8	100.0	104.3	108.9	110.5	105.9	109.3	112.3	113	114
	growth in %	2.0	2.2	4.3	4.4	1.4	-4.1	3.2	2.7	0.9	1.0
Import intensity 2)	average of 2005=100	94.6	100.0	107.9	110.2	110.1	102.4	111.0	115.6	116	117
	growth in %	6.2	5.7	7.9	2.1	-0.1	-7.0	8.4	4.1	0.2	1.3
Export markets 3)	average of 2005=100	92.6	100.0	112.5	120.0	121.6	108.5	121.4	129.9	131	134
	growth in %	8.4	8.0	12.5	6.6	1.4	-10.8	11.9	7.0	1.0	2.4
Export performance	average of 2005=100	97.6	100.0	101.3	105.8	107.5	106.4	111.4	116.5	120	121
	growth in %	5.0	2.5	1.3	4.5	1.6	-1.0	4.6	4.6	3.1	0.8
Real exports	average of 2005=100	90.3	100.0	114.0	126.9	130.7	115.5	135.2	151.3	158	163
	growth in %	13.8	10.7	14.0	11.4	3.0	-11.7	17.1	11.9	4.2	3.2
1 / NEER	average of 2005=100	105.9	100.0	95.4	93.0	83.2	86.0	84.2	81.7	85	85
	growth in %	-1.2	-5.6	-4.6	-2.6	-10.5	3.4	-2.2	-2.9	4.1	-0.1
Prices on foreign markets	average of 2005=100	97.0	100.0	103.1	106.1	112.8	109.5	110.5	114.7	115	116
	growth in %	3.5	3.1	3.1	2.9	6.3	-2.9	0.9	3.8	0.0	1.0
Exports deflator	average of 2005=100	102.7	100.0	98.4	98.6	93.8	94.2	93.0	93.7	98	98
	growth in %	2.3	-2.6	-1.6	0.2	-4.9	0.4	-1.3	0.7	4.1	0.8
Nominal exports	average of 2005=100	92.8	100.0	112.2	125.1	122.7	108.6	125.8	141.8	154	160
	growth in %	16.4	7.7	12.2	11.6	-2.0	-11.4	15.8	12.7	8.4	4.1

Weighted average of GDP of the seven most important partners – Germany, Slovakia, Austria, the United Kingdom, Poland, France and Italy.

Index of ratio of real imports of goods to real GDP.

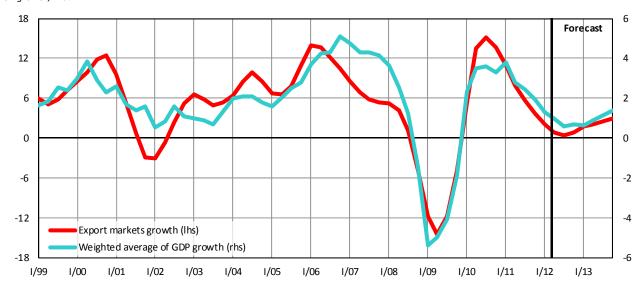
Weighted average of imports of goods of the main partners.

Table C.4.4: **Decomposition of Exports of Goods** – quarterly

			201	1			201	.2	
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
							Estimate	Forecast	Forecast
GDP	average of 2005=100	111.7	112.1	112.7	112.7	113.1	113	113	113
	growth in %	3.8	2.8	2.4	2.0	1.3	1.0	0.6	0.7
Import intensity	average of 2005=100	114.5	115.7	116.2	116.1	115.4	116	116	116
	growth in %	6.9	5.1	3.1	1.7	0.7	-0.1	-0.2	0.2
Export markets	average of 2005=100	127.9	129.8	130.9	130.9	130.5	131	131	132
	growth in %	11.0	8.0	5.6	3.7	2.0	0.9	0.4	0.8
Export performance	average of 2005=100	117.9	118.9	112.1	117.0	124.3	123	114	119
	growth in %	8.4	6.1	2.9	1.4	5.4	3.3	2.0	1.7
Real exports	average of 2005=100	150.9	154.3	146.8	153.1	162.2	161	150	157
	growth in %	20.3	14.5	8.7	5.1	7.5	4.2	2.4	2.6
1 / NEER	average of 2005=100	81.4	80.7	81.0	83.7	84.1	85	86	86
	growth in %	-4.6	-5.7	-2.9	1.6	3.3	4.9	6.0	2.2
Prices on foreign markets	average of 2005=100	113.7	115.2	115.3	114.7	113.7	115	115	115
	growth in %	4.9	4.3	3.4	2.5	0.0	-0.2	-0.3	0.4
Exports deflator	average of 2005=100	92.5	93.0	93.3	96.0	95.6	97	99	99
	growth in %	0.1	-1.6	0.5	4.1	3.3	4.7	5.7	2.7
Nominal exports	average of 2005=100	139.7	143.6	137.0	147.0	155.1	157	148	155
	growth in %	20.4	12.6	9.2	9.5	11.0	9.1	8.3	5.3

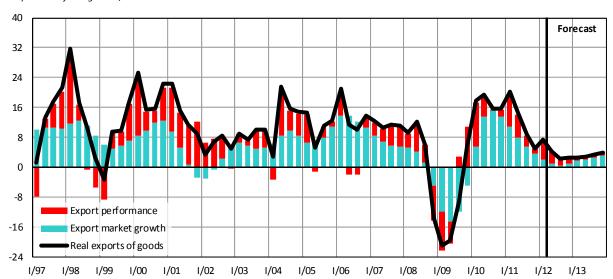
 $\label{eq:Graph C.4.5: GDP and Imports of Goods in Main Partner Countries} Graph C.4.5: \textbf{GDP and Imports of Goods in Main Partner Countries}$ 

YoY growth, in %



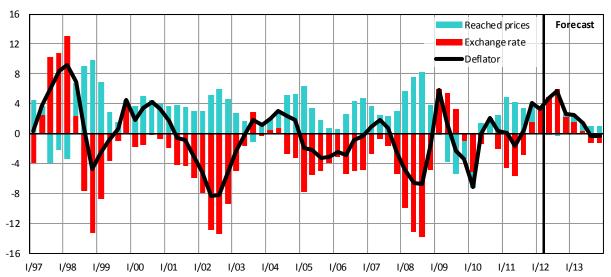
Graph C.4.6: Real Exports of Goods

decomposition of YoY growth, in %



Graph C.4.7: Deflator of Exports of Goods

 $decomposition\ of\ YoY\ growth,\ in\ \%$ 



# **C.5** International Comparisons

Sources: Eurostat, OECD, IMF, MoF estimates

Table C.5.1: GDP p.c. – using current purchasing power parities

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
								Prelim.	Forecast	Forecast
Slovenia PPS	18 800	19 600	20 700	22 100	22 700	20 500	20 700	21 000	21 000	21 500
EA12=100	78	79	79	80	83	79	78	77	76	76
Czech Republic PPS	16 900	17 800	18 900	20 700	20 200	19 300	19 400	20 000	20 100	20 600
EA12=100	71	72	73	75	74	75	73	73	73	73
Greece PPS	20 300	20 400	21 800	22 500	23 100	22 100	21 900	20 700	19 900	20 200
EA12=100	85	82	84	82	84	86	82	76	72	72
Portugal PPS	16 700	17 900	18 700	19 600	19 500	18 800	19 600	19 400	19 100	19 500
EA12=100	70	72	72	71	71	73	73	71	69	69
Slovakia PPS	12 300	13 500	15 000	16 900	18 100	17 000	17 900	18 400	19 100	19 900
EA12=100	52	55	57	62	66	66	67	67	69	71
Estonia PPS	12 400	13 800	15 600	17 500	17 300	14 900	15 700	16 800	17 400	18 300
EA12=100	52	56	60	64	63	58	59	62	63	65
Poland PPS	11 000	11 500	12 300	13 600	14 100	14 300	15 300	16 400	17 100	17 900
EA12=100	46	46	47	50	51	55	57	60	62	64
Hungary PPS	13 600	14 200	14 900	15 400	16 000	15 200	15 800	16 500	16 600	17 100
EA12=100	57	57	57	56	58	59	59	61	60	61
Lithuania PPS	11 000	11 900	13 100	14 800	15 400	12 800	14 000	15 500	16 300	17 200
EA12=100	46	48	50	54	56	50	53	57	59	61
Latvia PPS	9 900		12 200							
EA12=100	41	44	47	50	51	47	50	53	55	58
5112 100			.,		<u> </u>	.,			33	50

Graph C.5.1: GDP p.c. – using current purchasing power parities  $\it EA12=100$ 

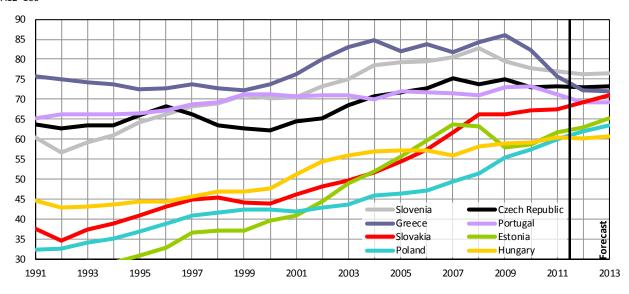
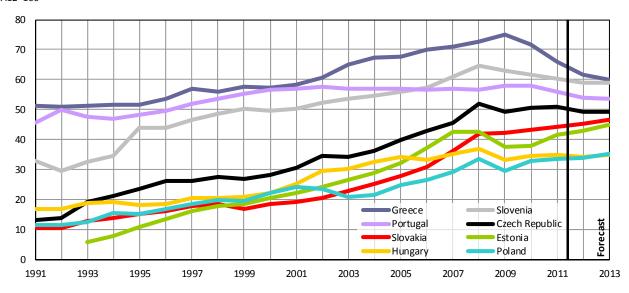


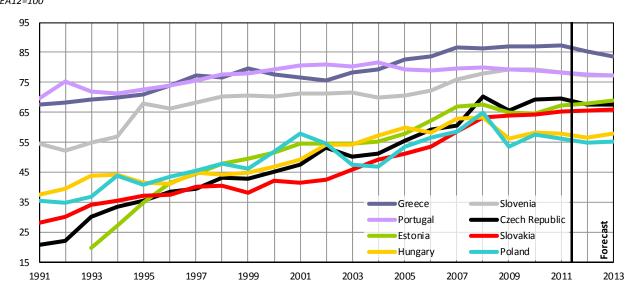
Table C.5.2: **GDP p.c. – using current exchange rates** 

			2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
										Prelim.	Forecast	Forecast
Greece		EUR	16 700	17 400	18 700	19 900	20 700	20 500	20 100	19 000	17 900	17 800
		EA12=100	67	68	70	71	73	75	72	66	62	60
	Comparative price level	EA12=100	79	83	84	87	86	87	87	87	85	84
Slovenia		EUR	13 600	14 400	15 400	17 100	18 400	17 300	17 300	17 400	17 100	17 500
		EA12=100	55	56	57	61	65	63	62	60	59	59
	Comparative price level	EA12=100	70	71	72	76	78	79	79	78	77	77
Portugal		EUR	14 200	14 600	15 200	16 000	16 200	15 800	16 200	16 000	15 600	15 900
		EA12=100	57	57	57	57	57	58	58	56	54	54
	Comparative price level	EA12=100	82	79	79	80	80	79	79	78	78	77
Czech Republic		EUR	9 000	10 200	11 500	12 800	14 800	13 500	14 200	14 700	14 300	14 600
		EA12=100	36	40	43	46	52	49	51	51	49	49
	Comparative price level	EA12=100	51	56	59	61	70	66	69	70	68	68
Slovakia		EUR	6 300	7 100	8 200	10 100	11 900	11 600	12 100	12 700	13 200	13 800
		EA12=100	25	28	31	36	42	42	43	44	45	47
	Comparative price level	EA12=100	49	51	54	59	63	64	64	65	66	66
Estonia		EUR	7 200	8 300	10 000	12 000	12 200	10 300	10 700	11 900	12 500	13 300
		EA12=100	29	32	37	43	43	38	38	41	43	45
	Comparative price level	EA12=100	55	58	62	67	68	65	65	67	68	69
Latvia		EUR	4 800	5 600	7 000	9 300	10 100	8 200	8 600	9 700	10 200	10 800
		EA12=100	19	22	26	33	35	30	31	34	35	36
	Comparative price level	EA12=100	47	50	56	66	69	64	61	63	63	63
Lithuania		EUR	5 300	6 100	7 100	8 500	9 700	8 000	8 400	9 500	10 000	10 800
		EA12=100	21	24	27	30	34	29	30	33	35	36
	Comparative price level	EA12=100	46	50	53	56	61	58	57	58	58	59
Hungary		EUR	8 100	8 800	8 900	9 900	10 500	9 100	9 700	10 100	9 900	10 400
		EA12=100	33	34	33	35	37	33	35	35	34	35
	Comparative price level	EA12=100	57	60	58	63	63	56	58	58	57	58
Poland		EUR	5 300	6 400	7 100	8 100	9 500	8 100	9 300	9 700	9 900	10 400
		EA12=100	21	25	27	29	33	30	33	34	34	35
	Comparative price level	EA12=100	47	54	57	59	65	54	58	56	55	55

Graph C.5.2: **GDP p.c. – using current exchange rates** *EA12=100* 



Graph C.5.3: Index of Comparative Price Level of GDP p.c.  $\it EA12=100$ 



rates, structural policies, demographic trends, position within the economic cycle, business cycle indicators, economic output, prices, labour market, external relations, international comparisons, monitor

external environment, fiscal policy, monetary policy and the financial sector, exchange rates, structural policies, demographic trends, position within the economic cycle, business cycle indicators, economic external environment, fiscal policy, monetary policy and the financial sector, exchange rates, structural policies, demographic trends, position within the economic cycle, business cycle indicators, economic

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