### INTERNATIONAL MONETARY FUND

### CZECH REPUBLIC

# Staff Report for the 2006 Article IV Consultation

Prepared by the Staff Representatives for the 2006 Consultation with the Czech Republic

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### **Executive Summary**

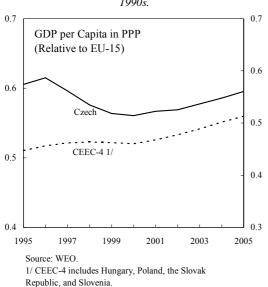
- Sharing in the regional dynamism, economic performance remains strong, driven by productivity gains and buoyant exports. The near-term outlook is favorable, but sustaining strong performance over the medium term requires renewed progress on fiscal consolidation and improving labor market flexibility.
- The current political uncertainty risks leading to policy drift. Although financial markets are assured by strong growth and generally sound fundamentals, there is broad agreement between the staff and the authorities that it is important to guard against competitive populism and return to the path of fiscal consolidation.
- The main concerns center on the erosion of fiscal discipline in 2006-7 and the medium-term fiscal outlook. The expansionary fiscal stance for 2007 is out of place in view of the expected robust growth. The authorities' medium-term consolidation plans are appropriate, but supporting measures should be identified without delay. A cutback in high mandatory social spending would improve fiscal flexibility and efficiency. The institutional fiscal framework also needs to be strengthened.
- The Czech National Bank's steady hand continues to anchor inflation expectations close to the target of 3 percent. In view of the projected rise in inflation, CNB should continue to withdraw monetary stimulus, albeit at a cautious pace, striving to balance the rising resource pressures with the strengthening koruna and the impact of supply-driven changes. Rapid credit growth calls for continued supervisory vigilance.
- On the structural policy front, raising labor market flexibility remains the main priority. A high tax wedge and generous entitlements discourage job search, and strict employment protection hampers job creation. The authorities view the recent changes in the labor code as improving the flexibility of employment contracts. A new bankruptcy law should help improve the business environment and should be implemented effectively.

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### I. Introduction<sup>1</sup>

1. **A sharp pick-up in economic growth in 2005-06 with continued low inflation has placed the economy on a firmer footing**. The momentum of growth—fully in line with the recent regional dynamism—is supported by strong productivity gains and a

The pace of real convergence has recovered from the crisis-related lows of the late 1990s.



rapid expansion of exports, underpinned by the emergence of the Czech Republic as an important regional hub for automotive production. Earlier policy reforms and growing integration with the European Union have helped build a solid foundation for income convergence. Yet sustaining this success requires further fiscal consolidation to address rising pressures on public spending and a more flexible labor market.

2. An electoral stalemate has led to prolonged political uncertainty. With the outgoing center-left coalition and the opposition center-right grouping each winning equal number of seats in parliament in the elections held in June 2006, intense negotiations continued into the new year in an

effort to resolve the electoral deadlock. A coalition headed by the Civic Democratic Party (ODS) leader Mirek Topolanek won a confidence vote on January 19, 2007, but its narrow majority suggests a weak mandate for reforms and a possibility of early elections. Financial markets have taken the political uncertainty in stride, assured by the recent strong economic performance and favorable outlook.

3. **Against this backdrop, this year's consultation focuses on options for reforms to prevent fiscal erosion**. Complementing last year's in-depth assessment of fiscal sustainability, greater prominence is given to the analysis of efficiency of public

<sup>&</sup>lt;sup>1</sup> The staff team comprising Mr. Thakur (Head), Mmes. Tamirisa and Tuladhar (all EUR) and Messrs. Mattina (FAD) and Sierhej (Regional Resident Representative Office), joined by Mr. Polak, Senior Advisor to the Executive Director, held discussions during November 13–21. The mission met with the Czech National Bank Governor Tuma, Deputy Finance Ministers Hejduk, Volf, and Zidek, and other government officials as well as representatives of labor, business, the financial sector, and the media. The Czech Republic has accepted the obligations of Article VIII and maintains an exchange system that is free of restrictions on the making of payments and transfers for current international transactions.

<sup>&</sup>lt;sup>2</sup> The Selected Issues paper explores four fiscal topics: (i) expenditure efficiency and flexibility; (ii) the fiscal framework; (iii) fiscal accounting; and (iv) absorption of EU funds.

spending. The authorities are also urged to strengthen the fiscal framework and enhance transparency. With the assistance of MCM, a range of financial indicators and market views on country risk are also examined with a view to assess the durability of and the forces behind the nominal convergence of the Czech economy with that of the eurozone.

### Effectiveness of Fund Surveillance

Billoui veilless of	Tana Sarveniance
Past Policy Advice	Policy Outcomes
Fiscal	l Policy
• Pension and healthcare reforms through an increase	Increases in retirement age and drug pricing
in effective retirement age and greater reliance on	improvements are under discussion, but broader reforms
private provision.	are politically infeasible.
• Faster fiscal consolidation in good times by saving	• Deterioration of deficits due to tax cuts and increased
revenue gains and spending rationalization.	mandatory spending.
Strengthening the fiscal framework.	• Treatment of carryover reserves was improved, but expenditure ceilings continue to be violated.
Moneta	ry Policy
• A cautious pace of tightening, with due regard to the	• The CNB has tightened policy at a gradual pace.
impact of supply-side influences.	• The CNB has clarified the respective roles of the staff
• Clarify the roles of CNB staff and Board in preparing inflation forecasts.	and the Board.
Financi	ial Sector
• More proactive and forward-looking supervision.	<ul> <li>Ongoing efforts in this direction.</li> </ul>
• Improvements in risk analyses.	• Substantive improvements in stress testing, credit risk
	analyses, and data collection.
Labor	Market
• Welfare benefit reform to improve targeting and	• Early retirement benefits scaled down, but entitlement
reduce disincentives to work.	programs expanded before elections.
• Rent liberalization to reduce geographical	<ul> <li>A new labor code adopted, but strict employment</li> </ul>
mismatches.	protection in place.
	• A multi-year program of rent liberalization.
Structui	ral Policy
Bankruptcy reform	<ul> <li>A new bankruptcy resolution law was adopted.</li> </ul>
• Standardizing business registration forms.	<ul> <li>Business forms were standardized.</li> </ul>

### II. BACKGROUND

• The work on "e-government" is underway, as a step

toward a "one-stop" shop for investors.

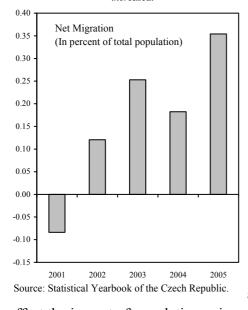
• "One-stop" shop for investors.

4. **Exports, fuelled by the expanding capacity of the automotive sector, have served as the engine behind the recent acceleration in growth** (Table 1 and Figure 1). The coming on stream of new capacity, aided by foreign investment and coinciding with a

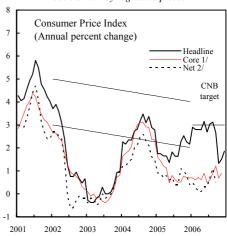
cyclical recovery in the EU markets, sustained a surge in automobile exports.<sup>3</sup> Investment, especially in machinery and transport equipment, has been buoyant, supported by strong corporate profitability. Private consumption also strengthened on the back of income tax cuts, increased pre-election spending, and rising employment.

a strong koruna have kept inflation below the target of 3 percent. Growing competition owing to globalization and entry of international retail chains also helped contain inflation by narrowing margins. The pickup in headline inflation in 2006 was largely due to increases in prices of energy and regulated utilities. Core inflation has remained broadly stable around 1 percent, reflecting strong central bank credibility and the absence of second-round effects. Although the koruna has

The inflow of foreign workers in the economy increased.



The recent increase in headline inflation has been driven by regulated prices.



Sources: Czech Statistical Office; Eurostat; and IMF staff estimates.

- 1/ Harmonized CPI excluding energy and seasonal food.
- 2/ Excluding the contribution of changes in indirect taxes and regulated prices.

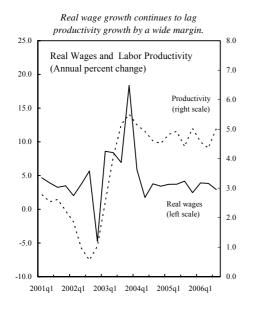
continued to be strong, having risen by 5–6 percent against the euro and in real effective terms during 2006, export market shares have continued to grow (Figures 2–5).

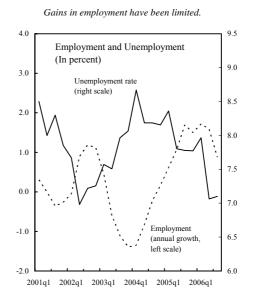
6. **Lingering slack in the labor market has helped contain wage inflation**. Despite
strengthening demand for labor, suggested by rising
vacancies, wage pressures have remained subdued,
as rising inflows of immigrant workers have helped

offset the impact of population aging on labor supply. Recent employment gains have been concentrated in industry and private services, including real estate, and do not yet appear broad-based. Unemployment has fallen, but remains around 7 percent, as continued geographical and skill mismatches have kept structural unemployment high.

<sup>&</sup>lt;sup>3</sup> Automotive exports accounted for about a fifth of GDP growth in 2005.

6





- 7. The current account deficit continues to be comfortably financed by foreign direct investment inflows (Table 2 and Figure 3). The deficit is estimated to have widened to 4.3 percent of GDP in 2006, in part reflecting higher dividend outflows by foreign-owned companies. Inflows of direct investment remain strong, albeit declining from their recent high levels driven by the privatization of Cesky Telecom. While gross official reserves continued to climb, estimated to have reached about \$32 billion by end-2006, equivalent to more than 3 months of imports, gross external debt is estimated to have remained broadly stable at 37 percent of GDP.
- 8. **Monetary policy has been tightened gradually**. After raising the policy rate by 25 basis points in October 2005, the Czech National Bank (CNB) paused until early August 2006, when rising food and energy prices and a pickup in domestic demand prompted a rise. The rate was raised another notch to  $2\frac{1}{2}$  percent in late September, against the backdrop of a worsening fiscal outlook and some weakening of the koruna. Since then, however, with global monetary tightening, the Czech policy rate is now the lowest in the EU, and 100 basis points below that of the ECB (Figure 4).
- 9. **Recent fiscal gains were relinquished in 2006, as fiscal policy turned strongly expansionary** (Table 3). Healthy fiscal performance in 2005, with the general government deficit narrowing sharply to about 2 percent of GDP, was due to buoyant revenues from strong growth and carryover of unused budget allocations. However, in

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<sup>&</sup>lt;sup>4</sup> Staff analysis is based on a cash-based definition of the general government balance, since accrual-based ESA-95 or GFSM 2001 fiscal data are not yet available with sufficient detail for fiscal analysis. Differences with the ESA-95 measure and the authorities' cash-based definition are explained in Appendix II of the staff supplement. Drawing on a pilot study by the STA, the authorities are preparing to move fully to the GFSM 2001-based fiscal accounting in the near future.

2006, the deficit is estimated to have risen sharply to 3¾ percent of GDP, reflecting preelection tax cuts and increases in social transfers for pensions and health care. Fiscal policy has thus added a strong procyclical impulse to an already booming economy.

### III. ECONOMIC OUTLOOK

10. **Growth is set to slow but remain robust in 2007** (Tables 1 and 4). Staff's growth forecast of 4¾ percent is close to the latest consensus. With the effects of export capacity expansion unwinding, domestic demand will remain the primary driver of growth. Private consumption is expected to strengthen, supported by gains in employment and disposable income and a continued expansionary fiscal stance. Business investment is projected to remain robust, as integration of global supply chains in the automotive and electronics sectors continues apace. Public investment is also expected to pick up with rising utilization of EU funds. Exports will decelerate, but remain strong, in line with growth in the euro area. Headline inflation is expected to rise, but remain around the target of 3 percent. The current account deficit is projected to remain at around 4 percent of GDP.

Czech Republic: Macroeconomic Outlook, 2006-11

	2006 Est.	2007 Proj.	2008 Proj.	2009-11 Proj.
	(perc	ent growth)		
Real GDP	6.0	4.8	4.3	4.4
Consumption	3.1	3.3	3.1	3.1
Investment	8.6	8.0	7.3	5.9
Exports	14.2	9.0	7.4	7.4
Imports	12.8	9.0	7.6	7.1
CPI inflation	2.6	3.2	3.0	3.0

Sources: Czech Statistical Office, Czech National Bank, Ministry of Finance, and IMF staff estimates.

- 11. **The risks to the outlook for growth appear balanced**. Upside risks stem from stronger recovery in the eurozone and lower oil prices. On the downside, investment could be weaker if a worsening fiscal outlook under uncertain political prospects begins to take its toll on investor confidence. A faster-than-expected appreciation of the koruna might also weigh on exports and investment. Although vulnerability indicators are generally favorable (Table 5), the correlation of Czech credit default swaps with those for Hungary and Poland suggests exposure to regional contagion risk (Figure 2).
- 12. **Longer-term prospects are clouded by population aging and rising global competition** (Table 4). With old-age dependency set to rise sharply after 2010, the Czech Republic faces one of the more daunting demographic challenges in the EU. Although investment is likely to remain strong, benefiting further from FDI in manufacturing and

outsourcing of business services, aging will begin to weigh heavily on labor supply soon.<sup>5</sup> Competitiveness could suffer, if productivity growth or wage moderation cannot be sustained, or the education system fails to keep pace with the demands of an increasingly knowledge-based economy. Staff projects a slowdown in potential growth to around 4 percent, assuming the current gradual pace of reforms. The external position is, however, likely to remain comfortable. With the current account deficit projected to decline to about 3.4 per cent of GDP over the medium term, external debt is set to stabilize below 30 percent of GDP, and its dynamics seem resilient to significant macroeconomic shocks (Appendix I).

### IV. POLICY DISCUSSIONS

- 13. With near-term prospects remaining robust despite the political gridlock, the policy debate is focused on how to preserve the recent economic gains. The authorities are confident that the economy is likely to remain resilient to any adverse shifts in emerging market sentiment. Looking forward, there is a broad recognition in the Czech policy community that sustaining growth in the face of population aging and intensifying global competition requires strong fiscal consolidation and enhancing the flexibility of labor markets. These reforms are also seen as crucial for the success of euro adoption.
- 14. The main challenge is to guard against policy drift and competitive populism. Consensus on major fiscal and labor market reforms is likely to be elusive in the current fractured political environment, especially since the main political parties hold differing views on the generosity of social protection, healthcare benefits and pensions. To mitigate the risk of policy drift, staff place emphasis on strategies for reducing public spending while raising its efficiency and on improving the institutional framework to ensure fiscal discipline. Czech officials concur with this emphasis. It remains to be seen if adequate political support can be marshaled behind a minimum program of reform over the coming year.

# A. How to Arrest Fiscal Policy Drift?

15. The key concern centers on the recent erosion of fiscal discipline and the medium-term fiscal outlook. The budget for 2007—passed by parliament on largely bipartisan lines—envisages a rise in the deficit to 4.4 percent of GDP, largely reflecting the impact of the pre-election social benefits package of about 1 percent of GDP. Moreover, there is a risk of overruns in mandatory spending. The budget implies a further increase in the structural deficit and a significant slippage from the 2005 Convergence Program target.

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<sup>&</sup>lt;sup>5</sup> Hyundai has recently started a major new automobile plant, which is expected to come on stream in late 2008

Czech Republic: Pre-election Social Spending Package

Measure	Description	Cost	Targeting 1/
Parental allowance	Provides benefits to parents of children under the age of four.	CZK 15 billion (0.4 percent of GDP)	No
Birth allowance	Increases the generosity of the birth grant per child.	CZK 1 billion (less than 0.1 percent of GDP)	No
Housing allowance	Subsidizes housing costs to help offset the impact of easing rent controls.	CZK 3 billion (0.1 percent of GDP)	Yes
Elderly care allowance	Supports about <sup>2</sup> / <sub>3</sub> of elderly care costs.	CZK 6.5 billion (0.2 percent of GDP)	No
Sickness insurance reform	Lowers employer contributions for sickness insurance.	CZK 12 billion (0.4 percent of GDP)	Not applicable

Source: Czech authorities.

1/ On income basis.

Officials do not contest the staff view that with domestic demand continuing to grow strongly and GDP growth projected to remain above potential, the fiscal stance should ideally withdraw stimulus. Such a stance would also help the authorities return to the medium-term path of a gradual reduction in structural deficits. However, even maintaining a broadly neutral fiscal stance calls for reducing the deficit by about <sup>3</sup>/<sub>4</sub> percent of GDP in 2007. Building consensus on measures to do so appears difficult at the current political juncture, given the likelihood of early elections.

Fiscal Outlook, 2005-09 (In percent of GDP)

	2005	2006 20		)7	2008	2009
		Staff estimate	Budget	Staff	recommen	dation
General government deficit 1/	-1.9	-3.7	-4.4	-3.5	-3.0	-2.2
Cyclically adjusted deficit	-0.9	-3.3	-4.1	-3.3	-2.8	-2.2
Change (fiscal impulse)	-0.9	2.4	0.9	0.0	-0.5	-0.5
General government debt	25.6	27.6	29.4	28.5	29.6	29.6
General government deficit (ESA-95) 2/	-3.6	-3.5	-4.0	•••	-3.5	-3.0

Source: Czech authorities, and staff calculations.

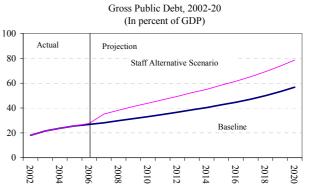
<sup>1/</sup> Corresponds to the authorities' target (excluding net lending, transfers to transformation institutions and privatization receipts) plus non-privatization net lending.

<sup>2/</sup> Provisional Convergence Program targets for 2007-09.

## 16. The authorities acknowledge major spending pressures looming on the horizon.

The phasing-in of the social benefits package over 2007-09, increasing cofinancing for EU-

funded projects, and payments for contingent liabilities are expected to impact the fiscal position adversely, especially as privatization proceeds continue to shrink. Although official gross public debt, at 28 percent of GDP in 2006, is low, age-related spending is projected to raise public debt close to 60 percent of GDP by 2020 (Appendix I). Debt will rise faster, if fiscal adjustment is not implemented or growth were to be slower than now projected.



Source: Staff calculations

Notes: Baseline assumes medium term deficit target of 3 percent. Staff alternative scenario assumes that medium-term deficit targets stay at the 2007 budget level and that high risk contingent liabilities are called.

17. With the tax wedge already relatively high, fiscal adjustment would need to come primarily from spending cuts. Spending reforms should aim to address rising agerelated pressures, while enhancing the efficiency of spending. Expenditure restructuring will also provide fiscal space for the growing co-financing of EU-funded projects and widen the discretionary scope for fiscal policy. Drawing on studies of long-term fiscal sustainability and spending efficiency, staff has identified pensions, healthcare, and social benefits as priority areas for spending reforms.<sup>6</sup> Given the relatively high efficiency of social spending, the rolling back of the newly approved social benefits package should not compromise social objectives (Box 1). A proposal for a flat tax rate of 17–19 percent for corporate and personal incomes has featured prominently in coalition discussions, but offsetting measures have not been identified.

## 18. The political impasse has hindered the formulation of a fiscal reform package.

The provisional 2006 Convergence Program envisages an annual reduction in the deficit of ½ percent of GDP to meet the 3 percent Stability and Growth Pact target by 2009.<sup>7</sup> However, measures to achieve the targets remain to be identified. The authorities highlighted ongoing efforts to stabilize healthcare costs. They also intend to take steps toward pension reform by raising the statutory retirement age from 63 to 65 years, encouraging private retirement savings through savings subsidies, and continuing to build fiscal reserves. Yet consensus on broader pension and healthcare reforms remains elusive.

<sup>&</sup>lt;sup>6</sup> See Country Report 05/275 and the accompanying Selected Issues Paper.

<sup>&</sup>lt;sup>7</sup> The Czech Republic has been subject to the EU's excessive deficit procedure since shortly after its accession to the EU on May 1, 2004. Using the historical volatility of GDP and budget elasticities, staff estimates that the structural deficit of 1¼ percent of GDP is consistent with staying within the SGP limit.

Staff has argued that, without such reforms, medium-term fiscal targets would need to be more ambitious, aiming for a structural balance or a surplus by early in the next decade.

### Box 1. Raising the Efficiency of Social Spending

The recent erosion of fiscal discipline underscores the need to contain expenditure, including from higher social benefits and healthcare pressures.

### **Social protection**

Improved targeting could facilitate a decline in spending without jeopardizing social indicators. Existing social benefits appear relatively efficient in reducing poverty and inequality relative to other EU countries. However, additional social benefit spending could have a limited impact on outcomes given diminishing returns to spending. There is also scope to strengthen the targeting of existing social benefits. For instance, the share of the population receiving social assistance exceeds that in most other new EU member states. Moreover, the budget covers the health insurance premia of over half the population.

#### Health care

Greater efficiency could be achieved by addressing demand and cost pressures. Healthcare spending appears relatively inefficient based on outcome indicators, such as mortality rates and healthy life expectancy. As a result, enhancing outcome performance will be essential as healthcare budgets come under pressure from population aging. There is scope to contain healthcare demand by introducing means-tested co-payments, and narrowing the near universal coverage of public services to provide room for private provision and insurance. In terms of cost pressures, efforts are needed to contain drug costs, which absorb 25 percent of spending compared to the OECD average of 15 percent. Alternatives are also needed for the costly "social hospitalization" of elderly patients, and hospital financing could be better linked to the cost of service provision.

19. The fiscal framework needs to be strengthened to help stem eroding discipline. The upward revision of the nominal expenditure ceilings, initially established in the three-year rolling budget, in the face of stronger than expected revenues has led to a procyclical policy stance and undermined the credibility of the fiscal framework. Concerns about the effectiveness of the framework also arise from the carryover of unspent budget allocations available for future spending (1½ percent of GDP at end-2006). The authorities expect the recent decision to limit such carryover to strengthen the effectiveness of ceilings. The planned introduction of the integrated state treasury system is also expected to help ensure greater fiscal transparency and control. Enforcement of the medium-term expenditure framework remains the key challenge, calling for political will to adhere to the original spending ceilings in the annual budgeting process.

# B. What is the Appropriate Pace of Monetary Tightening?

20. Against the backdrop of strong growth, yet subdued inflation and well-anchored expectations, the CNB has pursued a measured pace of monetary tightening. Upside risks to inflation stemmed from capacity constraints, the fiscal loosening, and potential second-round effects of energy price increases. However, the CNB has also been

mindful of the offsetting impact of a strong koruna and declining labor costs, aided by strong productivity growth, lingering labor market slack and rising inflows of labor. It has also given weight to structural influences, such as shrinking margins reflecting growing global competition and the supply-driven nature of recent growth.

21. Looking ahead, inflation is expected to rise, although with risks to the downside. Assuming a stable exchange rate, the CNB and staff project headline inflation to move slightly above the 3 percent target by mid-2008, largely due to planned increases in regulated prices and excise taxes. Underlying inflation is also set to creep up gradually, against the backdrop of a strong domestic demand and negative real interest rates. The main downside risk is the koruna, which has remained resilient to negative interest rate differentials. Productivity growth could also be stronger than expected, as technological upgrading, supported by FDI inflows, continues at a fast pace. On balance, although output is judged to be close to potential, staff supports the CNB's cautious approach to tightening.

### C. Is Competitiveness Adequate to Sustain Growth?

- 22. The authorities and staff view the level of the koruna as broadly consistent with fundamentals. The real effective exchange rate (REER) based on relative consumer prices and unit labor costs appreciated by about 5–6 percent in 2006, as the koruna continued to strengthen against the euro and relative productivity growth slowed. Yet export market shares in EU-15 continued to rise (Figure 5). Staff's model-based analysis suggests that the level of the koruna is broadly in line with fundamentals. A cross-country study of export structures also confirms that the koruna's level does not threaten competitiveness (Box 2). The authorities have not intervened in the foreign exchange market for the purpose of influencing the level of the koruna since 2002, viewing intervention as an exceptional policy tool. Increases in gross reserves in recent years have largely reflected off-market conversion of large privatization receipts and EU transfers. Staff and the authorities view the current level of reserves as adequate.
- 23. The authorities plan to update their euro adoption strategy. They do not see entry into eurozone on the near-term agenda. With the economy already enjoying the benefits of nominal convergence, a delay is viewed as unlikely to put the economy at a disadvantage. Nonetheless, the authorities concur with the staff that euro adoption remains an important opportunity for reaping further gains from enhanced trade, investment and economic growth. Staff's analysis of financial market indicators and discussions with market participants suggest that policy credibility on fiscal consolidation and structural reforms would be important not only during the transition to the euro but to maximize the eventual gains from adopting it (Box 3). The forthcoming strategy update is intended to clarify the latest political thinking on the key reform issues on the road to euro adoption.

# Box 2. Empirical Analyses of Competitiveness

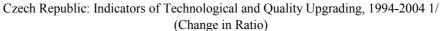
A survey of the literature shows that model-based analyses of the koruna's equilibrium exchange rate are inconclusive, partly due to the difficulty of measuring equilibrium rates in transition economies.

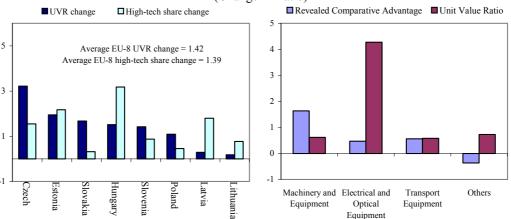
Survey of the Empirical Literature on the Equilibrium Exchange Rate for the Koruna

	Estimates	Period	Author	Methodology
1.	6 percent undervaluation	2004 Q1	Frait, Komarek, Melesky (2005)	Average of six estimation methods: cointegration using Engel-Granger and ARDL methods
2.	8 – 20 percent undervaluation	End 2004	Schularik and Muhlberger (2005)	Fixed and random-effects panel regressions
3.	10 – 20 percent overvaluation	2005 Q1	Bulir and Smidkova (2006)	Fundamental Equilibrium Exchange Rate approach
4.	0.23 percent overvaluation	2005 Q2	Coudert (2006)	Behavioral Equilibrium Exchange Rate approach (using panel data)
I				

Source: IMF staff.

Staff's cross-country analysis of disaggregated export data suggests that the strength of Czech exports has been led by high technology industries, with quality upgrading contributing to strong gains in non-price competitiveness.<sup>1</sup>





Source: UN Comtrade, staff calculations.

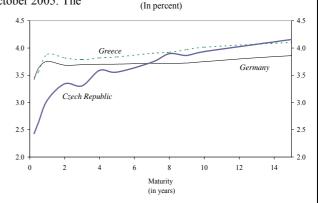
1/ Unit Value Ratio (UVR) is a weighted index of the ratio of the product-level unit value of a country's export to that of the world. The Revealed Comparative Advantage measures the share of the country's product-level export in total exports of the country as a ratio of the share of the world's export of the product to its total exports.

1/ Czech Republic and other countries, 2006, "Export Structure and Credit Growth," Country Report 06/414.

### Box 3. The Financial Market View: Full and Sustainable Convergence? 1/

Markets seem to perceive the Czech Republic as having achieved nominal convergence with the eurozone. In the *local currency debt* market, koruna yields are close to Greek euro-denominated yields at maturities 8 years and longer. At shorter maturities, Czech debt yields are below those for German bunds, in part reflecting the negative interest rate differential vis-à-vis the eurozone since October 2005. The

Czech 5-year-forward rates, often used as a litmus test of convergence, have been almost identical to those of the euro area during 2006. Forward interest rates imply that markets expect that Czech convergence is sustainable. The 5-year ahead yield moves in tandem with those of the eurozone, in marked contrast to both the zloty and forint yields. Credit default swap (CDS) spreads are lower than those of main central European peers (Poland and Hungary) and are below those for Italy and Greece. Sovereign ratings, at investment grade, also underscore the Czech economy's strong fundamentals.



**Technical factors support the favorable market indicators**. With low liquidity in markets for Czech instruments limiting investors' ability to take large positions, the investor base has been dominated by "slow money" convergence funds, and increasingly "eurozone" funds. Few hedge funds have actively engaged in Czech markets, in contrast to Polish and Hungarian ones. In addition, low volatility of the koruna—less than half of that of the forint and well below that of the zloty—allows investors to take currency positions involving the koruna with confidence. The

CDS Spreads (7-year euros, bps)

25

Greece
20

Italy

Czech Republic

France

Mar Apr May Jun Jul Aug Sep Oct Nov

more important to investors.

regional carry trade with the koruna used as the funding currency might have helped stabilize the koruna.

Market reaction to the authorities' decision to delay euro adoption beyond 2010 has been muted, as this outcome was widely anticipated. Contacts believe that maintaining an independent, floating exchange rate at a time of rapid growth and structural change gives policymakers useful flexibility, underpinned by the central bank's strong policy credibility. Nonetheless, should investor confidence in the authorities' commitment to sound macroeconomic policy weaken, the role of euro adoption as an anchor for policies might become

Investors are beginning to grow concerned that the delay in forming a stable government would raise the risk of further fiscal slippages. The koruna rallied modestly on signs of progress in coalition negotiations, signaling an underlying concern. Looking ahead, fiscal policy and the sustainability of FDI inflows have been cited as the main medium-term concerns.

<sup>1/</sup> Prepared by Mark Walsh (London Office, MCM), drawing on discussions with market participants.

## D. How to Maintain Financial Stability in the Face of Rapid Credit Growth?

# 24. **Financial soundness indicators and stress tests point to a sound financial sector**. Profitability, efficiency and capital adequacy are broadly comparable to those of regional peers. Banks' capital ratios have been above the regulatory minimum of 8 percent, albeit declining in tandem with the expansion in bank balance sheets. The authorities did not rule out that the introduction of the new capital accord (Basel II) would further reduce banks' capital cushions. Yet their recent stress tests indicated that the banking sector should be able to withstand sizeable market and credit risk shocks.

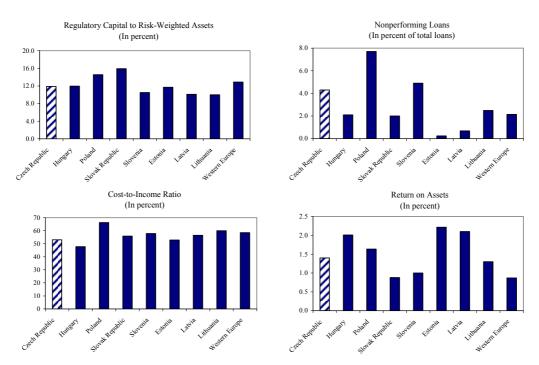
Financial Sector Indicators, 2001-06

	2001	2002	2003	2004	2005	2006Q3
Number of banks	38	37	35	35	36	37
Of which: foreign-controlled	26	26	26	26	27	28
Regulatory capital to risk-weighted assets (in percent)	15.4	14.3	14.5	12.6	11.9	11.3
Classified loans (in percent of total loans) 1/	20.8	15.8	11.2	10.8	11.7	12.4
Nonperforming loans (in percent of total loans)	13.4	8.1	4.9	4.1	4.3	4.1
Liquid assets (in percent of total assets)	20.8	32.5	35.9	32.8	32.1	32.4
After-tax return on average assets (in percent)	0.7	1.2	1.2	1.3	1.4	1.3

Sources: CNB; and IMF staff calculations.

1/ Classified loans include watch, substandard, doubtful, and loss loans.

Czech Republic: Financial Soundness Indicators from a Cross-Country Perspective, 2005 1/



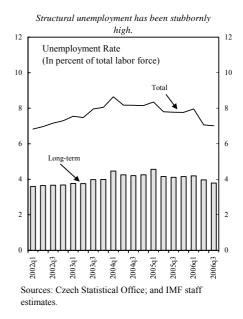
Sources: National Banks, ECB, and IMF staff estimates.

1/ Western Europe comprises Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxemburg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom. Data for the cost-to-income ratio do not cover Iceland, Norway, and Switzerland.

- 25. Sustained rapid growth of credit to households has brought concerns about credit risks to the fore. Mortgage lending has been growing at annual rates exceeding 30 percent since 2002, and consumer credit growth accelerated to almost 40 percent in the last two years (Figure 4). Financial indicators suggest that the current level of loan quality is reasonably high, although the trend is not as positive as one might expect in current favorable circumstances. In particular, the share of classified loans has been rising gradually in line with a pickup in household lending. These concerns are mitigated by the fact that foreign currency lending to households is negligible and house price inflation remains moderate. The authorities' and staff's empirical analyses confirm that credit risks are contained at present and are concentrated in a few rapidly growing institutions.<sup>8</sup>
- The authorities plan to continue enhancing supervision, to make it more forward looking and risk based. To encourage strong risk management by banks, they intend to issue best practice recommendations on stress testing in the coming years. Continued strengthening of cooperation with foreign counterparts is also a priority, given significant foreign ownership in the financial system and the introduction of Basel II. Efforts to further strengthen risk assessment through stress testing, credit risk modeling, and analyses of disaggregated and nonbank loan data continue. With a view to further strengthening the efficiency of supervision of large and complex financial institutions, the authorities unified the financial sector regulation and supervision under the CNB in April 2006, and subsequent streamlining of financial regulations is under way.

## E. How to Improve the Functioning of the Labor Market

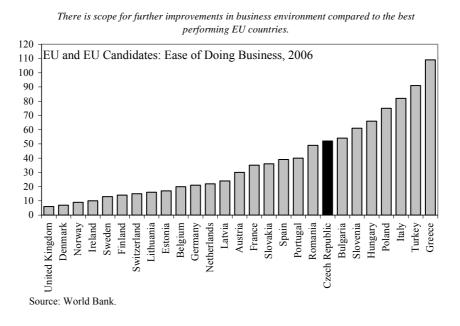
27. Continued efforts to improve labor market flexibility are essential for sustaining growth. While the employment rate is comparable to the EU-15 average, a high tax wedge and disincentives to work embedded in generous welfare programs weaken incentives to work for young low-wage earners. Geographical and skill mismatches also contribute to high and persistent structural unemployment. Recent policy measures, such as the reduction in income taxes for low-income groups, aimed at reducing marginal effective tax rates, go some way in this direction. The business sector views the new labor code as a missed opportunity for a substantive improvement in labor market flexibility, particularly in the area of employment protection. The authorities, however, note



<sup>&</sup>lt;sup>8</sup> Czech Republic and other countries, 2006, "Export Structure and Credit Growth", Country Report 06/414. Also see the CNB's Financial Stability Report for 2005.

that the scope of contractual employment has been broadened under the new legislation. They underscore the importance of the recent decision to phase out rent controls for reducing geographical mismatches.

28. **Legislative changes to improve the business environment are in place.** A recent World Bank assessment suggests that doing business in the Czech Republic is considerably more onerous than in many EU economies. The bankruptcy resolution process has been especially lengthy and costly. The authorities hope that new bankruptcy legislation that became effective at the beginning of 2007 will help ease concerns in this area.



V. STAFF APPRAISAL

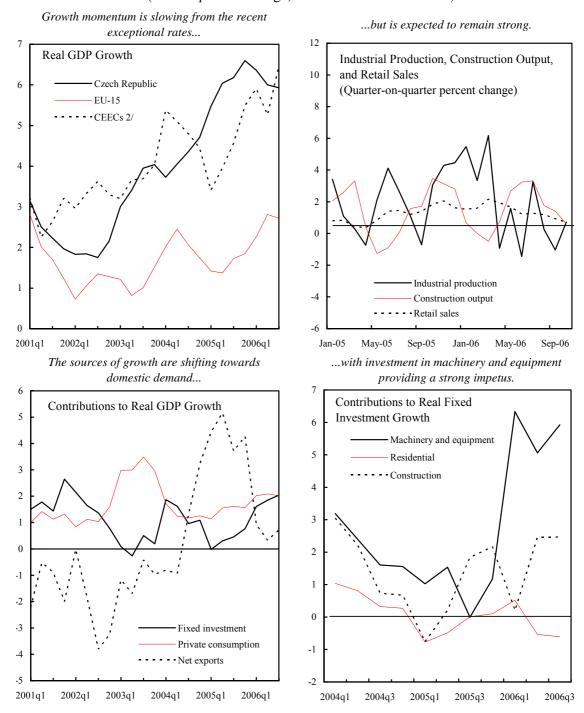
- 29. **Economic performance remains strong, despite political uncertainty**. Rising consumer confidence, high profitability and favorable competitiveness point to robust growth in 2007, in line with a continued recovery in the EU markets and a strong regional momentum in central and eastern Europe. However, sustaining this success calls for continued political commitment to reform.
- 30. The new government should place the highest priority on resuming progress on the reform agenda. Financial markets have taken the recent political uncertainty in stride, assured by the economy's recent strong performance, the generally sound fundamentals, and a record of responsible governance. However, policy drift, if allowed to persist, can be costly over the medium term. It is therefore important to guard against complacency and competitive populism.
- 31. **Fiscal policy is adding a strong procyclical impulse to an already booming economy**. A large pre-election fiscal relaxation has reversed the recent favorable trend in

public finances in 2006. Together with the large mandatory social spending in the pipeline, this trend points to a missed opportunity to advance fiscal consolidation in good times. With growth projected to remain above potential, at least a neutral policy stance is warranted, which would require additional measures amounting to about <sup>3</sup>/<sub>4</sub> percent of GDP.

- 32. A renewed political commitment to expenditure-based fiscal consolidation is necessary to address medium-term fiscal pressures. These pressures arise from population aging, cofinancing of EU-funded projects, high risky guarantees, and increased social benefits. The authorities' intention for an annual reduction in the structural deficit by ½ percent of GDP in the forthcoming Convergence Program is welcome. However, this intention needs to be supported by concrete expenditure measures by the incoming government. With the tax wedge already high, fiscal adjustment would need to come from spending cuts. Any tax reform package should, at the minimum, ensure budget neutrality. Looking ahead, without early and comprehensive pension and healthcare reforms, a structural balance or a small surplus would be needed by early in the next decade to prepare for the challenge of aging.
- 33. **Restructuring of public spending should be guided by its relative efficiency and the need to enhance its flexibility**. The efficiency of social benefits can be improved by better targeting of transfers to low-income households. As the private share of healthcare spending is among the lowest in the EU, introducing co-payments on a means-tested basis would help contain demand pressures. Structural reforms are also needed to address rising healthcare costs. Pension system reforms such as an early phase-in of a higher retirement age and strengthening the link between contributions and benefits are desirable irrespective of the choice of the new pension model.
- 34. **Institutional measures are needed to enhance public financial management and transparency**. The failure to adhere to the medium-term expenditure ceilings suggests the need for renewing political commitment to the fiscal framework. Further limits on the carryover and drawdown of unspent allocations are necessary to prevent a loss of budgetary control. Transparency can be enhanced by integrating extrabudgetary funds in budget preparation, reporting and implementation. The authorities' plans to move fully to *GFSM* 2001-based fiscal accounts, supported by their participation in the Fund's pilot project, are welcome.
- 35. A continued cautious pace of monetary tightening would be appropriate. Headline inflation is expected to rise gradually, driven partly by increases in regulated prices. Underlying inflation is also set to creep up as domestic demand strengthens against the backdrop of negative real interest rates. However, policy will need to navigate carefully, striving to balance these influences with the strengthening koruna and the impact of supply-driven changes.

- 36. Plans to clarify the strategy for euro adoption are welcome. Euro adoption remains an important opportunity for reaping the gains from enhanced trade and investment. A delayed timetable for euro entry was widely anticipated and by itself should not constitute a significant setback. However, the delay underscores anew the critical role of adhering to the path of strong fiscal consolidation, strengthening the institutional fiscal framework, and enhancing the flexibility of labor and product markets. Policy credibility on these fronts will be all the more crucial not only during the transition to the euro but in order to maximize the eventual gains from adopting it.
- 37. The financial sector appears to be in good health, but faces challenges. Ensuring that supervision remains proactive, risk-based, and forward-looking remains important in an environment of continued rapid credit growth. Supervision of rapidly expanding institutions and cooperation with foreign supervisors need to be strengthened. The recent integration of banking, insurance, and securities supervision under the CNB can bring welcome efficiency gains in the supervision of increasingly complex financial institutions.
- 38. A more flexible labor market is needed to enhance growth potential and the economy's resilience to shocks. The recent decision to phase out rent controls is welcome as it should help reduce geographical barriers and facilitate greater labor mobility. Reforms of social benefit entitlement programs would improve incentives to work and encourage labor participation. Improving labor market flexibility will require, in particular, reforms in the area of employment protection.
- 39. Further steps to improve the business climate would help preserve the attractiveness of the Czech Republic to investors. Recent legislative initiatives such as the new law to speed up the bankruptcy resolution process are therefore welcome.
- 40. It is proposed that the next Article IV consultation be held on the standard 12-month cycle.

Figure 1. Czech Republic: Growth Developments, 2001-06 1/ (Annual percent change, unless indicated otherwise)



Sources: Czech Statistical Office; Eurostat; and IMF staff estimates.

1/ All series are seasonally adjusted.

2/ Average for Hungary, Poland, the Slovak Republic, and Slovenia.

Strong fundamentals have supported a steady ...and low volatility. appreciation of the koruna... 15.0 115 Exchange Rate vs. Euro Exchange Rate vs. Euro Implied Volatility 1/ (In percent) (September 1, 2005=100) Hungary 110 13.0 Slovakia Czech 11.0 105 100 9.0 Poland 95 Hungar 90 85 3.0 Feb-06 Mar-06 Apr-06 May-06 Jun-06 Jul-06 Feb-06 Mar-06 Apr-06 May-06 Jun-06 Jul-06 International bond spreads have been low and Credit default swaps are low but vulnerable to stable, until a recent uptick. regional contagion. 0.6 60 Foreign Currency Bond Spreads 2/ Credit Default Swaps 3/ (In percent) (In basis points) 0.5 50 Hungary Hungary 0.4 40 0.3 30 20 0.2 Czech 0.1 10 Slovakia Czech Feb-06 Jul-06 Dec-05 Jan-06 Jun-06 Aug-06 Dec-03 Mar-04 Jun-04 Sep-04 Mar-05 Dec-05 Oct-05 Dec-04 Source: Bloomberg.

Figure 2. Czech Republic: Financial Indicators, 2003-06

1/ The volatility implied by the market price of a 1-month option contract based on a theoretical pricing model. Implied volatility includes future expectations of price movement, which are not reflected in historical volatility.

 $<sup>2\!/</sup>$  Spread of 5-year euro denominated international government bond versus 5-year Bund.

<sup>3/</sup> Five-year credit default swap spreads on sovereign debt.

Figure 3. Czech Republic: External Sector Developments, 2001-06 (In percent of GDP, unless otherwise indicated)



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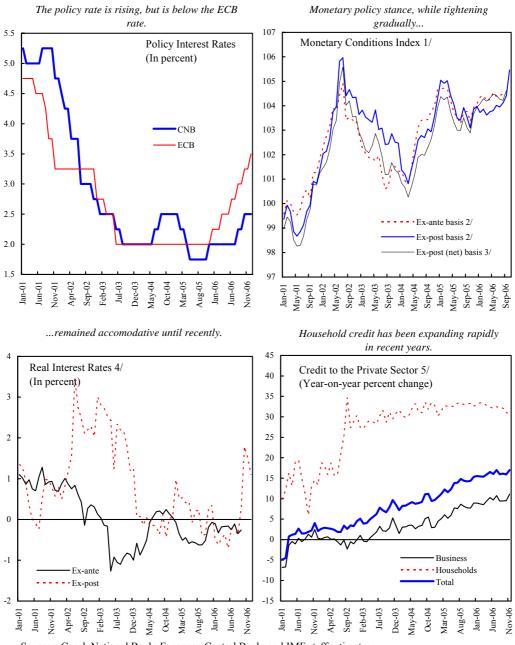


Figure 4. Czech Republic: Monetary Policy Indicators, 2001-06

Sources: Czech National Bank; European Central Bank; and IMF staff estimates.

- 1/ Weighted average of real short-term interest rate and real effective exchange rate (weights: 2/3 and 1/3, respectively). January 2000=100.
- 2/ Based on 1-year PRIBOR deflated by 12-month backward and forward-looking CPI inflation, respectively.
- 3/ Based on interest rate deflated by 12-month backward-looking inflation excluding effects of indirect tax and administered price changes.
- 4/ Ex post real interest rates are 1-year PRIBOR, deflated by 12-month CPI inflation; ex ante real interest rates are deflated by 12-month inflation expected in a survey conducted by the Czech National Bank Statistical Survey.
- 5/ Business and total adjusted for loan write-offs and changes in classification of financial institutions.

...and a squeeze in profitability margins, Despite continued appreciation of real exchange rates... strong productivity growth and... 130 150 Nominal and Real Exchange Rates Productivity and Profitability 145 vis-à-vis Trading Partners 1/ vis-à-vis Trading Partners 1/2/ 125 140 - Labor productivity 120 Profitability (inverse of PPI-Increase indicates 135 deflated ULC) appreciation 130 115 125 110 120 105 115 110 100 105 NEER 95 REER (CPI) 100 REER (ULC) 90 2001q3 2001q3 2003q3 2004q3 2000q3 2001q1 2002q3 2003q3 2004q3 2001g1 2002q1 2003q1 2004q1 2002q1 2003q1 ...stable wage costs have helped to maintain ...as shown by rising export market shares. competitiveness... Nominal Compensation per Employee, Market Share in EU-15 6/ 2000-06 3/ 45 1.3 (In Euros) 40 1.2 35 30 1.1 25 1.0 20 15 0.9 CEECs 4/ 10 Czech 0.8 5 Candidate countries 5/ 2001q1 2001q3 2000 2002 2003 2000q3 2001 2004 2000q1

Figure 5. Czech Republic: Competitiveness Indicators, 2000-2006 (2000q1=100, unless otherwise indicated)

Sources: AMECO; Eurostat; IMF, Direction of Trade Statistics; National Statistical Offices; and IMF staff estimates.

1/ Trade weights based on 2000-03 data for exports and imports of goods. Partner countries include: Austria, Belgium, France, Germany, Hungary, Italy, the Netherlands, Poland, Russia, the Slovak Republic, United Kingdom, and the United States.

- 2/ In manufacturing. Czech data divided by data for partner countries.
- 3/ Data corresponds to total economy.
- 4/ Average for Hungary, Poland, the Slovak Republic, and Slovenia.
- 5/ Average for Bulgaria and Romania.
- 6/ EU-15 imports from the Czech Republic as a share of total imports from world, in percent.

Table 1. Czech Republic: Selected Economic Indicators, 2002-2007

	2002	2003	2004	2005	2006 Est.	2007 Proj.
Real economy (change in percent)						
Real GDP	1.9	3.6	4.2	6.1	6.0	4.8
Domestic demand	4.0	4.1	2.9	1.8	4.9	4.8
CPI (year average)	1.8	0.1	2.8	1.8	2.6	3.2
PPI (year average)	-0.5	-0.3	5.7	3.0	1.6	n.a.
Unemployment rate (in percent)						
Survey-based 1/	7.3	7.8	8.3	7.9	7.1	6.9
Registered 1/	9.2	9.9	9.2	8.9	8.1	7.9
Gross national savings (percent of GDP)	23.2	21.1	21.6	24.4	23.5	23.8
Gross domestic investments (percent of GDP)	28.7	27.4	27.6	26.5	27.8	28.1
Public finance (percent of GDP) 2/						
General government revenue	36.8	38.2	38.0	39.0	38.8	38.9
General government expenditure 3/	43.2	44.2	42.0	42.6	43.7	43.5
General government balance 3/	-6.5	-6.0	-4.0	-3.6	-4.8	-4.7
Adjusted to exclude grants to transformation institutions						
to cover costs related to management of bad assets	-3.9	-4.8	-3.3	-1.9	-3.7	-4.4
Targeted: adjusted balance excluding net lending 4/	-3.6	-3.9	-2.7	-1.6	-3.6	-4.2
General government debt	18.0	21.5	23.7	25.6	27.6	29.4
Including debt of the Czech Consolidation Agency	24.9	27.4	27.4	27.0	28.3	29.8
Money and credit (end of year, percent change)						
Broad money 5/	3.5	6.9	4.4	8.0	9.0	n.a.
Private sector credit (percent change, eop) 5/	-6.7	10.4	15.8	22.3	23.6	n.a.
Interest rates (in percent, year average)						
Three-month interbank rate	3.6	2.3	2.4	2.0	2.3	n.a.
Ten-year government bond 5/	4.9	4.1	4.8	3.5	3.8	n.a.
Balance of payments (percent of GDP)						
Trade balance	-2.9	-2.7	-1.0	1.4	1.4	1.3
Current account	-5.5	-6.2	-6.0	-2.1	-4.3	-4.2
Gross international reserves (US\$ billion)	23.7	27.0	28.4	29.6	31.8	33.8
Reserve cover (in months of imports of goods and services)	6.1	5.5	4.4	4.1	3.6	3.2
Exchange rate						
Nominal effective exchange rate, pa (2000=100) 5/	116.5	116.0	116.4	123.5	129.2	n.a.
Real effective exchange rate, pa (CPI-based; 2000=100) 6/	116.7	112.9	113.0	118.9	124.3	n.a.

Sources: Czech Statistical Office; Czech National Bank; Ministry of Finance; and Fund staff estimates and projections.

<sup>1/</sup> In percent of total labor force.

<sup>2/</sup> Staff estimates for 2006 and 2007.

 $<sup>3/\,</sup>Excluding\,privatization\,revenues\,of\,the\,\,National\,\,Property\,Fund\,\,and\,\,the\,\,Czech\,\,Land\,\,Fund,\,the\,\,sale\,\,of\,\,shares\,\,and\,\,voting\,\,rights$ 

by local governments, and the sale of Russian debt.

<sup>4/</sup> General government deficit excluding transfer to transformation institutions and net lending.

<sup>5/</sup> For 2006, data refer to November.

Table 2. Czech Republic: Balance of Payments, 2002-2007

	2002	2003	2004	2005	2006	2007 1/
Current account balance	-4264	-5785	-6512	-2574	-6029	-6850
Trade balance	-2239	-2519	-1047	1735	1911	2082
Exports	38469	48701	67239	78265	96583	115244
Imports	40709	51221	68286	76530	94672	113162
Nonfactor services	643	470	481	811	600	792
Receipts	7081	7789	9702	10767	11566	12973
Payments	6438	7319	9221	9957	10966	12181
Factor income (net)	-3579	-4285	-6139	-5940	-8318	-9203
Transfers	912	548	165	888	-222	-521
Capital account	-4	-3	-596	211	622	1195
Financial account balance	10617	5620	7282	6156	6747	6850
Direct investment, net	8282	1814	3941	10132	5263	5685
Portfolio investment, net	-1558	-1181	2229	-3003	-1500	-1500
Financial derivatives, net	-130	143	-146	-112	0	0
Other investment, net	4023	4844	1259	-972	2984	2665
Errors and omissions, net	262	609	86	86	800	0
Change in reserves 3/	-6612	-441	-261	-3879	-2140	-1195
Memorandum items:						
Current account (in percent of GDP)	-5.5	-6.2	-6.0	-2.1	-4.3	-4.2
Trade balance (in percent of GDP)	-3.0	-2.8	-1.0	1.4	1.4	1.3
Net foreign direct investment (in percent of GDP)	11.0	2.0	3.6	8.2	3.7	3.5
Gross official reserves						
(in months of the following year's imports of goods and	5.7	4.6	4.2	3.6	3.3	3.0
(as a ratio to the short-term debt by remaining maturity)	1.8	1.5	1.2	1.3	1.3	1.3
Terms of trade 2/	3.1	0.4	0.3	-1.8	-1.7	-0.1

Sources: Czech National Bank; and IMF staff projections.

<sup>1/</sup> IMF staff estimates or projections.

<sup>2/</sup> Goods and services.3/ Changes in reserves reflect off-market conversion of large privatization receipts and EU transfers and sales of accumulated interest.

Table 3. Czech Republic: Consolidated General Government Budget, 2002-07 1/

	2002	2003	2004	2005	2006 2/	2007 2/
	(In percent of GDP)					
Total revenue and grants 3/	36.8	38.2	38.0	39.0	38.8	38.9
Total revenue	36.7	37.8	37.1	38.0	37.4	36.8
Current revenue	36.2	37.3	36.7	37.5	36.9	36.4
Tax revenue	33.8	34.7	34.6	35.6	34.6	34.6
Nontax revenue	2.4	2.6	2.1	1.9	2.4	1.8
Capital revenue	0.5	0.4	0.4	0.4	0.5	0.4
Grants, incl. EU compensation	0.1	0.5	0.9	1.1	1.4	2.1
Total expenditure and net lending 4/	43.2	44.2	42.0	42.6	43.7	43.5
excl. grants to transformation institutions	40.6	43.0	41.3	41.0	42.5	43.3
Total expenditure	43.0	43.3	41.6	42.3	43.6	43.3
Current expenditure	37.8	37.9	36.1	36.7	37.1	36.6
Goods and services	8.5	7.9	7.3	7.4	7.3	7.2
Interest payments	0.6	0.8	1.1	0.9	1.1	1.2
Transfers to households and nonfinancial enterprises	18.9	19.1	18.4	18.0	18.3	18.5
Transfers abroad, incl. EU	0.1	0.5	0.7	1.0	1.0	1.1
Subsidies	9.7	9.6	8.6	9.4	9.4	8.6
excluding grants to transformation institutions 5/	7.1	8.4	7.9	7.8	8.2	8.3
excluding semibudgetary organizations	2.3	2.6	2.3	2.5	2.6	3.1
Capital expenditure	5.2	5.5	5.6	5.7	6.5	6.7
Net lending (excl. privatization and the sale of Russian debt)	0.2	0.9	0.3	0.3	0.1	0.3
Overall balance 4/	-6.5	-6.0	-4.0	-3.6	-4.8	-4.6
Adjusted to exclude grants to transformation institutions						
to cover costs related to management of bad assets	-3.9	-4.8	-3.3	-1.9	-3.7	-4.4
Cyclically adjusted balance	-2.1	-3.1	-1.8	-0.9	-3.4	-4.2
Targeted: adjusted balance excluding net lending	-3.6	-3.9	-2.7	-1.6	-3.6	-4.2
Financing 5/						
Privatization receipts 6/	5.1	1.0	0.5	3.6	0.2	1.0
Proceeds from the sale of UMTS licences	0.0	0.0	0.2	0.0	0.0	0.0
Proceeds from the sale of Russian debt	0.8	0.0	0.0	0.0	0.0	0.0
Net increase in financial liabilities	0.5	5.0	3.3	0.0	4.7	3.7
Memorandum items						
Grants to transformation institutions to cover						
costs related to management of bad assets	2.6	1.2	0.7	1.6	1.1	0.2
General government debt 7/	18.0	21.5	23.7	25.6	27.6	29.4
Including debt of the Czech Consolidation Agency	24.9	27.4	27.4	27.0	28.3	29.8
General government balance, ESA95-based	-6.9	-6.7	-2.9	-3.6	-3.5	-4.0
General government debt, ESA95-based	28.8	32.6	32.7	31.2	n.a.	n.a.

Sources: Ministry of Finance and Fund staff estimates.

 $<sup>1/\,</sup>Includes \ the \ state \ budget, \ Czech \ Consolidation \ Agency, \ State \ Financial \ Assets, \ National \ Property \ Fund, \ extrabudgetary \ funds,$ social security funds, and local governments.

<sup>2/</sup> Preliminary estimates based on staff's GDP projections. Expenditure estimates exclude the effects of carryover spending.

<sup>3/</sup> Excluding revenues from UMTS licence sales.

<sup>4/</sup> Excluding privatization revenues of the National Property Fund, the Czech Land Fund, and the sale of shares and voting rights by the local governments.

<sup>5/</sup> IMF staff estimates.

<sup>6/</sup> Includes privatization receipts of the National Property Fund, the Czech Land Fund, and the sale of shares and voting rights by local governments.

7/ Includes liabilities of the state budget, extrabudgetary funds, social security funds, and local governments.

Table 4. Czech Republic: Medium-term Macroeconomic Scenario, 2002–2011 1/

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Real sector				(perc	ent growth)	1				
Real GDP	1.9	3.6	4.2	6.1	6.0	4.8	4.3	5.0	4.3	4.0
Consumption	3.5	6.3	0.9	1.9	3.1	3.3	3.1	3.1	3.1	3.2
Investment	4.8	-1.2	7.9	2.5	8.6	8.0	7.3	5.3	6.5	6.0
o/w fixed investment	5.1	0.4	4.7	3.6	7.3	6.8	6.7	6.4	6.2	6.2
Exports, goods and services	2.2	7.4	21.2	10.7	14.2	9.0	7.4	8.3	7.6	6.4
Imports, goods and services	5.0	8.0	18.2	5.0	12.8	9.0	7.6	7.2	7.6	6.5
CPI inflation	1.8	0.1	2.8	1.8	2.6	3.2	3.0	3.0	3.0	3.0
GDP deflator	2.8	0.9	3.5	0.9	0.8	2.5	2.6	2.9	2.7	2.9
Gross domestic savings 2/	23.2	21.1	21.6	24.4	23.5	23.8	24.2	25.3	25.7	26.0
Public	-2.1	-0.8	1.3	1.8	0.8	1.0	2.1	3.0	3.7	4.4
Private	25.3	22.0	20.3	22.6	22.7	22.8	22.1	22.3	21.9	21.7
Gross capital formation 2/	28.7	27.4	27.6	26.5	27.8	28.1	28.5	28.7	29.0	29.4
Public finances				(in per	cent of GD	P)				
Revenues	36.8	38.2	38.2	39.0	38.8	38.9	39.9	40.3	40.2	40.4
Expenditures	43.2	44.2	42.0	42.6	43.7	43.5	43.7	43.3	42.7	42.5
Overall balance	-6.5	-6.0	-4.0	-3.6	-4.8	-4.7	-3.8	-3.0	-2.5	-2.1
Adjusted balance	-3.9	-4.8	-3.3	-1.9	-3.7	-4.4	-3.8	-3.0	-2.5	-2.1
Cyclically adjusted	-2.1	-3.1	-1.8	-0.9	-3.4	-4.2	-3.6	-3.1	-2.6	-2.1
Targeted balance (adjusted balance excl net lending)	-3.6	-3.9	-2.7	-1.6	-3.6	-4.2	-3.5	-2.7	-2.2	-1.8
General government debt	18.0	21.5	23.7	25.6	27.6	29.4	31.3	31.9	32.3	32.3
Including debt of the Czech Consolidation Agency	24.9	27.4	27.4	27.0	28.3	29.8	31.3	31.9	32.3	32.3
Balance of payments				(in per	cent of GD	P)				
Current account balance	-5.5	-6.2	-6.0	-2.1	-4.3	-4.2	-4.4	-3.3	-3.4	-3.4
Trade balance	-2.9	-2.7	-1.0	1.4	1.4	1.3	1.1	1.9	1.9	1.7
Services balance	0.9	0.5	0.5	0.7	0.4	0.5	0.5	0.5	0.6	0.6
Net factor income	-4.7	-4.7	-5.7	-4.8	-5.9	-5.7	-5.7	-5.6	-5.6	-5.5
Current transfers	1.2	0.6	0.2	0.7	-0.2	-0.3	-0.2	-0.3	-0.2	-0.2
Financial account balance	14.1	6.1	6.6	4.6	4.2	4.2	4.4	3.3	3.4	3.4
Capital transfers	0.0	0.0	-0.6	0.2	0.4	0.7	1.3	1.8	1.9	1.9
Direct investment, net	11.0	2.1	3.7	8.1	3.7	3.5	3.4	3.2	3.2	3.2
o/w privatization revenue	5.2	0.9	0.5	0.9	0.1	0.0	0.0	0.0	0.0	0.0
Portfolio investment, net	-1.9	-1.4	2.1	-2.4	-1.1	-0.9	-0.9	-0.8	-0.7	-0.7
Financial derivatives, net	-0.2	0.1	-0.1	-0.1	0.0	0.0	0.0	0.0	0.0	0.0
Other investment, net	5.2	5.3	0.9	-1.0	1.5	1.6	1.8	0.9	0.9	0.9
Errors and omissions, net	0.2	0.6	0.2	0.4	0.6	0.0	0.0	0.0	0.0	0.0
Change in reserves (- increase) 3/	-8.8	-0.5	-0.2	-3.1	-0.9	-0.7	-1.3	-1.8	-1.9	-1.9

Sources: Czech Statistical Office, Czech National Bank, Ministry of Finance, and IMF staff estimates.

1/ Hyundai has recently started a major new automobile plant, which is expected to come on stream in late 2008. The economic effects of the Hyundai plant are difficult to estimate at this stage, but they are likely to be analogous to those of the Toyota Peugeot Citroën Automobile (TPCA) plant in 2005-06. These considerations explain the volatility in staff's medium-term projections for GDP growth and trade balance. 2/ In percent of GDP.

<sup>3/</sup> Changes in reserves reflect off-market conversion of large privatization receipts, EU transfers and sovereign bond proceeds, and sales of accumulated interest.

Table 5. Czech Republic: Selected Vulnerability Indicators

	2000	2001	2002	2003	<b>2004</b> 1/	<b>2005</b> 1/	2006 1/	Latest observation
Key Economic and Market Indicators								
Real GDP growth (in percent)	3.6	2.5	1.9	3.6	4.2	6.1	6.0	Proj
CPI inflation (period average, in percent)	4.0	4.7	1.8	0.1	2.8	1.8	2.6	Proj
Short-term (ST) interest rate (in percent) 2/	5.3	4.8	2.7	2.0	2.5	2.1	2.5	Dec-06
EMBI secondary market spread (bps, end of period) 3/					14.7	14.2	20.2	Dec-06
Exchange rate NC/US\$ (end of period)	37.8	36.3	30.1	25.7	22.4	24.6	20.9	Dec-06
External Sector								
Exchange rate regime			Mana	aged float	ing			
Current account balance (percent of GDP)	-4.7	-5.3	-5.7	-6.3	-6.0	-2.1	-4.3	Proj
Net FDI inflows (percent of GDP)	8.7	8.9	11.0	2.0	3.6	8.2	3.7	Proj
Exports (percentage change of US\$ value, GNFS)	7.7	13.0	12.5	24.0	36.2	15.7	21.5	Proj
Real effective exchange rate ( 2000 = 100)	100.0	106.4	118.7	116.8	118.3	125.2	132.4	Oct-06
Gross international reserves (GIR) in US\$ billion	13.1	14.5	23.7	27.0	28.4	29.6	31.8	Proj
GIR in percent of ST debt at remaining maturity (RM)	103.8	119.3	175.0	153.6	124.9	132.7	130.2	Proj
Total gross external debt (ED) in percent of GDP	38.1	36.2	35.8	38.2	41.8	36.8	37.0	Proj
o/w ST external debt (original maturity, in percent of total ED	42.1	42.6	38.7	40.1	34.0	31.4	31.5	Proj
ED of domestic private sector (in percent of total ED)	96.0	96.1	94.0	92.2	85.0	79.7	79.4	Proj
ED to foreign official sector (in percent of total ED)	8.8	9.0	8.8	9.6	8.6	9.0	9.0	Proj
Total gross external debt in percent of exports of GNFS	60.3	55.3	59.2	61.8	58.8	51.4	48.3	Proj
Gross external financing requirement (in US\$ billion) 4/	15.0	15.0	16.9	19.8	24.3	24.0	23.6	Proj
Public Sector (PS) 5/								
Overall balance (percent of GDP)	-4.1	-4.9	-6.5	-6.0	-4.0	-3.6	-4.8	Proj
Primary balance (percent of GDP)	-2.2	-1.9	-3.2	-4.0	-2.2	-1.1	-2.7	Proj
Debt-stabilizing primary balance (percent of GDP) 6/						-0.2	-0.3	Proj
Gross PS financing requirement (in percent of GDP) 7/	11.0	18.1	14.1	14.4	12.8	8.2	12.2	Proj
Public sector gross debt (PSGD, in percent of GDP)	15.2	17.2	18.0	21.5	23.7	25.6	27.6	Proj
Public sector net debt (in percent of GDP)	14.6	15.9	16.4	20.8	22.7	21.2	23.4	Proj
Financial Sector (FS) 8/								
Capital adequacy ratio (in percent)		15.4	14.3	14.5	12.6	11.9	11.3	Sep-06
NPLs in percent of total loans		13.4	8.1	4.9	4.1	4.3	4.1	Sep-06
Provisions in percent of NPLs		60.3	77.5	76.7	69.4	63.2	62.2	Sep-06
Return on average assets (in percent) 9/		0.7	1.2	1.2	1.3	1.4	1.3	Sep-06
Return on equity (in percent) 10/		16.6	27.4	23.8	23.3	25.2	23.8	Sep-06
FX deposits held by residents (in percent of total deposits)	12.9	12.5	9.6	9.2	9.3	9.4	9.2	Nov-06
FX loans to residents (in percent of total loans)	15.7	13.7	12.3	11.0	10.2	9.4	9.9	Nov-06
Credit to private sector (percent change)	-4.3	2.1	4.5	8.5	9.7	15.4	17.0	Nov-06
Memo item:								
Nominal GDP in billions of U.S. dollars	60.2	56.7	61.8	75.3	91.4	108.2	124.3	Proj

 $<sup>1/\,</sup>Staff\,estimates,\,projections,\,or\,latest\,available\,observations\,as\,indicated\,in\,the\,last\,column.$ 

<sup>2/</sup> One-month interbank offer rate (PRIBOR), eop.

 $<sup>3/\,\</sup>mbox{The Czech}$  Republic is not included in the EMBI index.

<sup>4/</sup> Current account deficit, amortization of medium and long term debt, plus short-term debt by remaining maturity.

<sup>5/</sup> Public sector covers: general government. The deficit measure excludes privatization revenues but includes transfers to CKA. The debt measure excludes CKA debt.

<sup>6/</sup> Based on averages for the last five years for the relevant variables (i.e., growth, interest rates).

<sup>7/</sup> Overall balance plus debt amortization.

<sup>8/</sup> Financial sector includes: commercial banks.

<sup>9/</sup> A ratio of net profit to average assets.

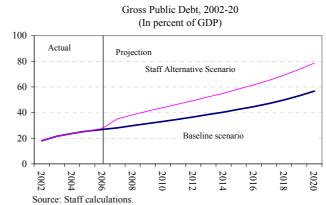
<sup>10/</sup> A ratio of net profit to average capital.

### Appendix I. Czech Republic: Medium-Term Fiscal and External Outlook

# **Fiscal Sustainability**

The Czech authorities plan a gradual fiscal consolidation, reversing the sharp increase in debt observed in the past. The plan seeks to achieve the 3 percent Maastricht threshold by 2009 whereby, the general government deficit declines by around ½ percent of GDP annually, and all of the Czech Consolidation Agency's (CKA) debt is fully assumed by the government by 2008. Repayments of risky guarantees by installments is also assumed.

Under the baseline scenario, assuming the fiscal consolidation plan is implemented, the medium term debt outlook is favorable. The stock of government debt is projected to stay below 35 percent of GDP. Lower fiscal deficits and strong growth have contributed to the stable outlook. Under the standard adverse shock scenarios to growth, interest rate, and exchange rate, public debt should be sustainable in the medium term, remaining below the Maastricht ceiling of 60 percent of GDP (Table A1 and Figure A1).



Notes: Baseline scenario assumes medium term deficits of 3 percent. Staff alternative scenario incorporates healthcare debt (10 bill. CZK), ecological guarantees (85 bill. CZK), risky guarantees (97 bill. CZK), and fiscal deficit higher by 1 percent of GDP compared to baseline.

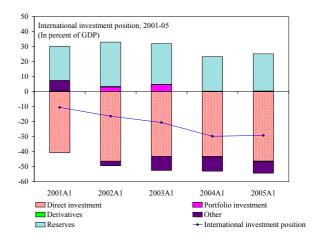
Nevertheless, recent evidence of waning commitment to fiscal reform suggests that the medium term debt dynamics could worsen considerably. The pre-election social benefits package would cost in excess of 1½ percent of GDP over 2007-08, while consolidation measures to achieve the medium term deficit target are yet to be identified. In addition, significant risks are associated with contingent liabilities (government guarantees stood at 14 percent of GDP at end-2005, excluding ecological guarantees associated with environmental cleanup of privatized companies and CKA guarantees). Aside from a large bank guarantee, on which an arbitration case is pending, outstanding guarantees of about 3 percent of GDP are considered high risk. A sizable debt in the health insurance companies also remains. Incorporating these high risk contingent liabilities and assuming a higher deficit of 1 percentage points relative to the baseline in line with 2007 budget levels, debt would reach nearly 45 percent of GDP by 2010. Over the longer term, aging pressures are set to undermine debt sustainability, with debt levels projected to reach 80 percent of GDP by 2020.

### **External Sustainability**

**Recent external developments are favorable**. Owing to the exceptionally strong export performance, trade balance recorded a surplus and current account deficit narrowed significantly. The international investment position shows a modest net liability position equal to around 30 percent of GDP, reflecting large stock of inward FDI. Robust FDI

inflows, exchange rate appreciation, and real GDP growth continued to provide enough room to run a current account deficit without an increase in external debt.

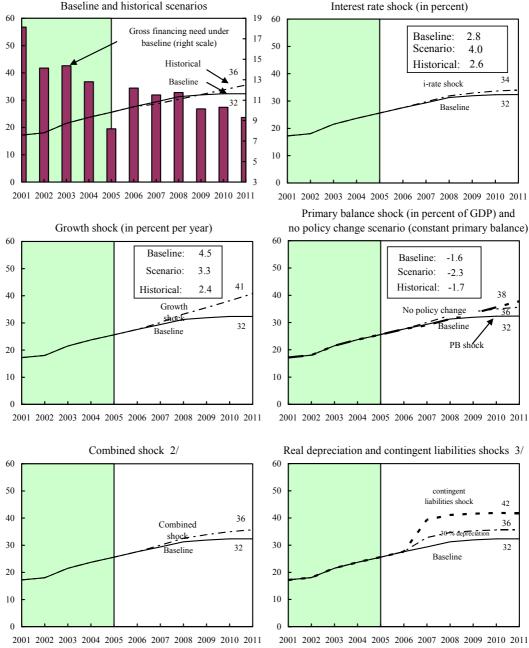
External sustainability does not appear to be a significant concern over the medium term. Vulnerability analysis suggests that the current account deficit is well within the debt-stabilizing range of about 4 ½ percent of GDP (Table A2). Even under adverse conditions with a



growth slowdown and a decline in FDI, external debt remains below 30 percent of GDP in 2011. Bound tests indicate a largely manageable external debt ratio at around 40 percent of GDP in the face of combined shocks from higher interest rate, lower growth and a worsened current account.

Figure A1. Country: Public Debt Sustainability: Bound Tests 1/
(Public debt in percent of GDP)

Baseline and historical scenarios Interest rate shock (in pe



Sources: International Monetary Fund, Country desk data, and staff estimates.

<sup>1/</sup> Shaded areas represent actual data.Individual shocks are permanent one-half standard deviation shocks. Figures in the boxes represent average projections for the respective variables in the baseline and scenario being presented. Ten-year historical average for the variable is also shown.

<sup>2/</sup> Permanent 1/4 standard deviation shocks applied to real interest rate, growth rate, and primary balance.

<sup>3/</sup> One-time real depreciation of 30 percent and 10 percent of GDP shock to contingent liabilities occur in 2006, with real depreciation defined as nominal depreciation (measured by percentage fall in dollar value of local currency) minus domestic inflation (based on GDP deflator).

Table A1. Country: Public Sector Debt Sustainability Framework, 2000-2010 (In percent of GDP, unless otherwise indicated)

			Actual			Projections						
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	Debt-stabilizing
												primary balance 9/
1 Baseline: Public sector debt 1/	17.2	18.0	21.5	23.7	25.6	27.6	29.4	31.3	31.9	32.3	32.3	-0.
o/w foreign-currency denominated	1.3	1.5	2.6	5.5	7.2	7.5	7.3	6.9	6.4	6.5	6.5	
2 Change in public sector debt	2.0	0.8	3.5	2.2	1.9	2.0	1.8	1.9	0.7	0.4	0.0	
3 Identified debt-creating flows (4+7+12)	-1.0	-2.3	2.8	0.8	-2.7	2.0	1.5	1.9	0.7	0.4	0.0	
4 Primary deficit	1.9	3.2	4.0	2.2	1.1	2.7	3.1	2.3	1.3	0.8	0.4	
5 Revenue and grants	36.1	36.8	38.2	38.0	39.0	38.8	38.9	39.9	40.3	40.2	40.4	
6 Primary (noninterest) expenditure	38.0	40.0	42.3	40.2	40.1	41.5	42.0	42.1	41.6	41.1	40.8	
7 Automatic debt dynamics 2/	-0.3	-0.4	-0.2	-0.8	-0.2	-0.6	-0.6	-0.4	-0.7	-0.4	-0.4	
8 Contribution from interest rate/growth differential 3/	-0.2	-0.1	0.0	-0.5	-0.7	-0.6	-0.6	-0.4	-0.7	-0.4	-0.4	
9 Of which contribution from real interest rate	0.1	0.2	0.6	0.4	0.6	0.8	0.6	0.8	0.8	0.9	0.8	
10 Of which contribution from real GDP growth	-0.3	-0.3	-0.6	-0.8	-1.3	-1.4	-1.2	-1.2	-1.4	-1.3	-1.2	
11 Contribution from exchange rate depreciation 4/	-0.1	-0.2	-0.2	-0.3	0.5							
12 Other identified debt-creating flows	-2.6	-5.1	-1.0	-0.5	-3.6	-0.1	-1.0	0.0	0.0	0.0	0.0	
13 Privatization receipts (negative)	-2.6	-5.1	-1.0	-0.5	-3.6	-0.1	-1.0	0.0	0.0	0.0	0.0	
14 Recognition of implicit or contingent liabilities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
15 Other (specify, e.g. bank recapitalization)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
16 Residual, including asset changes (2-3) 5/	3.0	3.1	0.6	1.4	4.6	0.0	0.2	0.0	0.0	0.0	0.0	
Public sector debt-to-revenue ratio 1/	47.6	49.0	56.2	62.4	65.5	71.1	75.6	78.4	79.3	80.4	80.1	
Gross financing need 6/	18.1	14.1	14.4	12.8	8.2	12.2	11.5	11.7	10.1	10.3	9.3	
in billions of U.S. dollars	11.2	10.6	13.1	13.8	10.2	17.2	18.6	20.4	19.1	20.9	20.2	
Scenario with key variables at their historical averages 7/ Scenario with no policy change (constant primary balance) in 2005-2010						27.6 27.6	28.6 29.0	30.3 31.3	32.0 33.3	33.8 35.6	35.5 37.8	0.0
Key Macroeconomic and Fiscal Assumptions Underlying Baseline												
Real GDP growth (in percent)	2.5	1.9	3.6	4.2	6.1	6.0	4.8	4.3	5.0	4.3	4.0	
Average nominal interest rate on public debt (in percent) 8/	6.0	3.9	4.5	5.5	3.9	4.3	4.9	5.6	5.8	5.6	5.7	
Average real interest rate (nominal rate minus change in GDP deflator, in percent)	1.2	1.1	3.5	2.0	2.9	3.5	2.4	3.0	2.9	3.0	2.8	
Nominal appreciation (increase in US dollar value of local currency, in percent)	4.3	20.3	17.5	14.7	-9.0							
Inflation rate (GDP deflator, in percent)	4.9	2.8	0.9	3.5	0.9	0.8	2.5	2.6	2.9	2.7	2.9	
Growth of real primary spending (deflated by GDP deflator, in percent)	2.7	7.4	9.4	-0.9	5.9	9.7	6.0	4.5	3.7	2.9	3.3	
Primary deficit	1.9	3.2	4.0	2.2	1.1	2.7	3.1	2.3	1.3	0.8	0.4	

<sup>1/</sup> The coverage of public sector is the general government using data for gross debt.

<sup>2/</sup> Derived as  $[(r - \pi(1+g) - g + \alpha \epsilon(1+r)]/(1+g+\pi+g\pi))$  times previous period debt ratio, with r = interest rate;  $\pi =$  growth rate of GDP deflator; g = real GDP growth rate;  $\alpha =$  share of foreign-currency denominated debt; and  $\epsilon =$  nominal exchange rate depreciation (measured by increase in local currency value of U.S. dollar).

<sup>3</sup>/ The real interest rate contribution is derived from the denominator in footnote 2/ as  $r - \pi$  (1+g) and the real growth contribution as -g.

<sup>4/</sup> The exchange rate contribution is derived from the numerator in footnote 2/ as  $\alpha \epsilon (1+r)$ .

<sup>5/</sup> For projections, this line includes exchange rate changes.

<sup>6/</sup> Defined as public sector deficit, plus amortization of medium and long-term public sector debt, plus short-term debt at end of previous period.

<sup>7/</sup> The key variables include real GDP growth; real interest rate; and primary balance in percent of GDP.

<sup>8/</sup> Derived as nominal interest expenditure divided by previous period debt stock.

<sup>9/</sup> Assumes that key variables (real GDP growth, real interest rate, and other identified debt-creating flows) remain at the level of the last projection year.

Table A2. Czech Republic: External Debt Sustainability Framework, 2001-11
(In percent of GDP, unless otherwise indicated)

			Actual								Proje	ctions		
	2001	2002	2003	2004	2005			2006	2007	2008	2009	2010	2011	
									I.	Baseline F	rojections			Debt-stabilizing non-interest current account 7/
External debt	36.2	35.8	38.2	41.8	36.8			37.0	34.0	32.7	31.1	29.8	28.6	-4.6
Change in external debt	-1.9	-0.3	2.3	3.6	-5.0			0.2	-3.0	-1.4	-1.6	-1.3	-1.2	
Identified external debt-creating flows (4+8+9)	-6.2	-11.5	-2.4	-3.2	-11.3			-2.7	-3.5	-0.7	-1.8	-1.5	-1.3	
Current account deficit, excluding interest payments	3.6	4.1	4.7	4.5	0.7			3.0	3.1	3.2	2.3	2.3	2.4	
Deficit in balance of goods and services	2.5	2.1	2.2	0.5	-2.0			-151.4	-156.6	-160.5	-163.2	-167.3	-169.8	
Exports	65.5	60.5	61.8	71.1	71.6			76.6	79.2	81.0	82.8	84.9	86.1	
Imports	68.0	62.6	64.1	71.6	69.6			-74.8	-77.4	-79.4	-80.3	-82.5	-83.7	
Net non-debt creating capital inflows (negative)	-8.3	-10.7	-2.4	-3.3	-7.9			-5.0	-6.2	-3.8	-3.6	-3.6	-3.6	
Automatic debt dynamics 1/	-1.5	-4.9	-4.7	-4.4	-4.1			-0.7	-0.4	-0.2	-0.4	-0.2	-0.1	
Contribution from nominal interest rate	1.7	1.5	1.6	1.5	1.3			1.3	1.2	1.1	1.1	1.0	1.0	
Contribution from real GDP growth	-0.9	-0.6	-1.1	-1.4	-2.2			-1.9	-1.5	-1.3	-1.5	-1.2	-1.1	
Contribution from price and exchange rate changes 2/	-2.3	-5.9	-5.2	-4.6	-3.2									
Residual, incl. change in gross foreign assets (2-3) 3/	4.3	11.1	4.8	6.8	6.3			2.9	0.6	-0.6	0.2	0.2	0.1	
External debt-to-exports ratio (in percent)	55.3	59.2	61.8	58.8	51.4			48.3	43.0	40.3	37.5	35.1	33.2	
Gross external financing need (in billions of US dollars) 4/	15.0	16.9	19.8	24.3	24.0			26.3	29.2	30.9	30.2	31.3	32.5	
in percent of GDP	24.2	22.5	21.6	22.4	19.3	10-Year	10-Year	18.6	18.1	17.8	16.0	15.5	15.0	
						Historical	Standard							Projected
Key Macroeconomic Assumptions						Average	Deviation							Average
Real GDP growth (in percent)	2.5	1.9	3.6	4.2	6.1	2.6	2.2	6.0	4.8	4.3	5.0	4.3	4.0	4.7
GDP deflator in US dollars (change in percent)	6.4	19.5	17.1	13.7	8.3	6.2	9.9	7.2	9.5	3.0	3.1	3.0	3.4	4.9
Nominal external interest rate (in percent)	4.8	5.1	5.6	4.7	3.6	4.5	0.6	3.9	3.7	3.6	3.6	3.6	3.6	3.7
Growth of exports (US dollar terms, in percent)	13.0	12.5	24.0	36.2	15.7	12.7	11.3	21.5	18.6	9.9	10.7	10.0	9.0	13.3
Growth of imports (US dollar terms, in percent)	12.0	12.2	24.2	32.4	11.6	11.6	10.7	-222.1	18.7	10.2	9.6	10.2	9.2	-27.4
Current account balance, excluding interest payments	-3.6	-4.1	-4.7	-4.5	-0.7	-3.2	1.9	-3.0	-3.1	-3.2	-2.3	-2.3	-2.4	-2.7
Net non-debt creating capital inflows	8.3	10.7	2.4	3.3	7.9	5.4	3.0	5.0	6.2	3.8	3.6	3.6	3.6	4.3
A. Alternative Scenarios								1	II. Stress T	ests for E	cternal Del	ot Ratio		Debt-stabilizing non-interest current account 7/
A1. Key variables are at their historical averages in 2007-11 5/								37.0	37.3	33.9	31.6	29.2	26.9	-6.5
A2. Country-specific shock in 2007, with reduction in GDP growth and FDI (re	lative to baseline) 6/							37.0	34.8	33.9	33.1	32.3	31.4	-4.1
3. Bound Tests														
31. Nominal interest rate is at historical average plus two standard deviations in	2006 and 2007							37.0	34.7	34.0	32.3	31.0	29.8	-4.7
32. Real GDP growth is at historical average minus two standard deviations in 2								37.0	36.1	36.4	34.3	32.6	30.9	-5.2
33. Change in US dollar GDP deflator is at historical average minus two standa		nd 2007						37.0	42.3	46.8	43.3	40.4	37.5	-6.8
34. Non-interest current account is at historical average minus two standard dev								37.0	38.0	40.3	38.4	36.9	35.4	-4.9
B5. Combination of B1-B4 using one standard deviation shocks								37.0	42.5	46.8	44.6	42.8	41.1	-6.2
B6. One time 30 percent nominal depreciation in 2006								37.0	50.3	46.6	43.1	40.1	37.2	-6.8

 $<sup>1/\</sup> Derived \ as \ [r-g-\rho(1+g)+\epsilon\alpha(1+r)]/(1+g+\rho+g\rho) \ times \ previous \ period \ debt \ stock, \ with \ r=nominal \ effective \ interest \ rate \ on \ external \ debt; \ \rho=change \ in \ domestic \ GDP \ deflator \ in \ US \ dollar \ terms, \ g=real \ GDP \ growth \ rate, \ g=real \ gp=real \ gp=re$ 

 $<sup>\</sup>varepsilon$  = nominal appreciation (increase in dollar value of domestic currency), and  $\alpha$  = share of domestic-currency denominated debt in total external debt.

<sup>2/</sup> The contribution from price and exchange rate changes is defined as  $[-p(1+g) + \epsilon \alpha(1+r)]/(1+g+p+g)$  times previous period debt stock.  $\rho$  increases with an appreciating domestic currency ( $\epsilon > 0$ ) and rising inflation (based on GDP deflator).

<sup>3/</sup> For projection, line includes the impact of price and exchange rate changes.

<sup>4/</sup> Defined as current account deficit, plus amortization on medium- and long-term debt, plus short-term debt at end of previous period.

<sup>5/</sup> The key variables include real GDP growth; nominal interest rate; dollar deflator growth; and both non-interest current account and non-debt inflows in percent of GDP.

<sup>6/</sup> GDP growth stabilizes to 2.5 percent and FDI is lower by \$1 billion compared to baseline.

<sup>7/</sup> Long-run, constant balance that stabilizes the debt ratio assuming that key variables (real GDP growth, nominal interest rate, dollar deflator growth, and non-debt inflows in percent of GDP) remain at their levels

# INTERNATIONAL MONETARY FUND

# CZECH REPUBLIC

# **Staff Report for the 2006 Article IV Consultation—Informational Annexes**

# Prepared by the European Department

# February 6, 2007

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# Appendix I. Czech Republic: Fund Relations

(As of December 31, 2006)

I. **Membership Status**: Joined 1/01/1993; Article VIII

II.	<b>General Resources Account</b>	SDR Million	% Quota
	Quota	819.30	100.0
	Fund holdings of currency	745.22	90.96
	Reserve position in Fund	74.08	9.04
III.	SDR Department:	SDR Million	% Allocation
	Holdings	11.03	N/A

# IV. Outstanding Purchases and Loans: None

## V. Financial Arrangements:

		Expira-	Amount	Amount
	Approval	tion	Approved	Drawn
<u>Type</u>	Date	Date	(SDR Million)	(SDR Million)
Stand-by	3/17/1993	3/16/1994	177.00	70.00

## VI. **Projected Obligations to Fund**: None

# VII. Exchange Rate Arrangement:

The currency of the Czech Republic is the Czech koruna, created on February 8, 1993 upon the dissolution of the currency union with the Slovak Republic, which had used the Czechoslovak koruna as its currency. From May 3, 1993 to May 27, 1997, the exchange rate was pegged to a basket of two currencies: the deutsche mark (65 percent) and the U.S. dollar (35 percent). On February 28, 1996, the Czech National Bank widened the exchange rate band from ±0.5 percent to ±7.5 percent around the central rate. On May 27, 1997, managed floating was introduced. In the 2004 edition of the *Annual Report on Exchange Arrangements and Exchange Restrictions*, the de facto exchange rate regime of the Czech Republic was classified as managed floating with no pre-announced path for the exchange rate. Since 2002, the CNB has not engaged in direct interventions in the foreign exchange market. International reserves have been affected by the off-market purchases of large privatization receipts and EU transfers and the sales of the accumulated interest. On January 10,

2007, the exchange rate of the Czech koruna stood at CZK 21.35 per U.S. dollar.

The Czech Republic has accepted the obligations of Article VIII and maintains an exchange system that is free of restrictions on the making of payments and transfers for current international transactions. The Czech Republic maintains exchange restrictions for security reasons, which have been notified to the Fund for approval (see most recently, EBD/07/1, 01/08/2007) under the procedures set forth in Executive Board Decision No. 144-(52/51).

### VIII. Last Article IV Consultation:

The last Article IV consultation with the Czech Republic was concluded on August 1, 2005. The staff report and PIN were published on August 6, 2005.

IX. **Technical Assistance**: See attached table.

X. **Implementation of HIPC Initiative**: Not Applicable

XI. Safeguards Assessments: Not Applicable

Czech Republic: Technical Assistance, 1991–2005

Department	Timing	Purpose
FAD	Dec. 1991–Sept. 1993 March 1993	Regular visits by FAD consultant on VAT administration
	September 1993	Public financial management
	November 1993	Follow-up visit on public financial management
	January 1994	Follow-up visit on public financial management
	July 1994	Follow-up visit on public financial management
	May 1995	Follow-up visit by FAD consultant on VAT
	June 1995	administration
	June-July 1999	Follow-up visit on public financial management
		Follow-up visit by FAD consultant on VAT
		administration
		Medium-term fiscal framework
MFD	February 1992	Monetary management and research, foreign exchange operations, and banking supervision
	June 1992	Monetary research
	July 1992	Long-term resident expert assignment in the area of
		banking supervision (financed by EC-PHARE;
		supervised by the Fund)

	December 1992 and	Bond issuance and monetary management
	February 1993	
	November 1993	Follow-up visit on bond issuance and monetary
		management and management of cash balances
	April 1994	Data management and monetary research
	January 1995	Foreign exchange laws (jointly with LEG) and external liberalization
	May 1995	Monetary operations
	May 1995	Banking system reform
	May 1996	Economic research
	April 1997	Banking legislation
	February-June 1999	Monetary research—inflation targeting
	June 1999	Integrated financial sector supervision (with WB)
RES	September 1999	Inflation targeting (financed by MFD)
	June–August 2000	Inflation targeting (financed by MFD)
	February–March 2005	Inflation targeting (financed by MFD)
STA	May 1993	Money and banking statistics
	February 1994	Balance of payments
	April 1994	Government finance
	November 1994	Money and banking statistics
	January–February 1999	Money and banking statistics
	May 2002	Monetary and financial statistics
	February 2003	Implementing GFSM 2001
	November 2006	GFSM 2001 Pilot Project

## **Appendix II. Czech Republic: Statistical Issues**

- 1. Data provision to the Fund is adequate for surveillance. The Czech Republic is in observance of the Special Data Dissemination Standard (SDDS) and meets the SDDS specifications. Statistical metadata are posted on the Fund's Dissemination Standards Bulletin Board. While availability of economic data is timely, reporting to STA is less current, especially for foreign trade and the national accounts.
- 2. While data quality is generally adequate, the authorities are taking measures to improve data accuracy.
- National accounts data are subject to certain weaknesses. Value added in the small-scale private sector is likely to be underestimated, as the mechanisms for data collection on this sector are not yet fully developed and a significant proportion of unrecorded activity stems from tax evasion. Discrepancies between GDP estimates based on the production method and the expenditure method are large and are subsumed under change in stocks. Quarterly estimates of national accounts are derived from quarterly reports of enterprises and surveys. The estimates are subject to bias because of nonresponse (while annual reporting of bookkeeping accounts is mandatory for enterprises, quarterly reporting is not) and lumping of several expenditure categories in particular quarters by respondents. Large swings in individual components of spending and the overall GDP from quarter to quarter also bring into question the reliability of the quarterly data.
- Recently, revisions to procedures for processing export data have brought external trade statistics close to the practice in the EU. However, a continued weakness of foreign trade statistics is the unavailability of fixed base price indices for exports and imports; these indices are currently presented on the basis of the same month of the previous year.
- Monetary survey data provided to the European Department are generally adequate for policy purposes. However, large variations in the interbank clearing account float, especially at the end of the year, require caution in interpreting monetary developments. The CNB has made a major effort to identify the causes of these variations and adjust the data. In 2002, to meet EU statistical conventions, the CNB implemented the European Central Bank's (ECB) framework for collecting, compiling, and reporting monetary data. The data published in *IFS* is based on monetary accounts derived from the ECB's framework. The same set of accounts also forms the basis for monetary statistics published in the CNB's bulletins and on the website, which are thereby effectively harmonized with the monetary statistics published in *IFS*, although the presentation in *IFS* differs somewhat from the CNB's.
- Annual fiscal data on *ESA-95* basis has been prepared by the Czech Statistical Office. Quarterly data for non-financial accounts have also been compiled and quarterly financial accounts are being prepared. The Ministry of Finance uses the *ESA-95*

methodology for the Convergence Program targets. The *ESA-95* methodology differs from the national (fiscal targeting methodology) in terms of the coverage of the institutions (for example, the CKA is included in the central government under ESA definition) and basis of recording due to the inclusion of accrued financial transactions and other accrual items (for example, called guarantees). The Ministry of Finance is participating in the Fund's pilot project to transition to *GFSM 2001*.

• Annual data published in the *Government Finance Statistics Yearbook* cover operations of the general government, excluding "semibudgetary" organizations, which operate at both the central and local government levels, and it also excludes a number of state extrabudgetary institutions and special funds. The most important of these institutions are the Czech Consolidation Agency and its subsidiaries, the Czech Collection Company, the Railway Infrastructure administration, the Public-Private-Partnership Centre, and public universities. Monthly fiscal data published in *International Financial Statistics (IFS)* cover state budget accounts.

# **Czech Republic: Table of Common Indicators Required for Surveillance**

As of January 22, 2007

	Date of latest observation	Date received	Frequency of data <sup>6</sup>	Frequency of reporting <sup>6</sup>	Frequency of publication <sup>6</sup>
Exchange Rates	12/31/06	1/8/07	М	М	M
International Reserve Assets and Reserve Liabilities of the Monetary Authorities <sup>1</sup>	11/31/06	12/07/06	D	M	M
Reserve/Base Money	12/01/06	12/11/06	10 days	10 days	10 days
Broad Money	11/30/06	12/27/06	M	M	M
Central Bank Balance Sheet	11/30/06	12/27/06	M	M	M
Consolidated Balance Sheet of the Banking System	Nov 2006	12/15/06	М	М	M
Interest Rates <sup>2</sup>	12/31/06	1/10/07	M	M	M
Consumer Price Index	Dec 2006	1/07	M	M	M
Revenue, Expenditure, Balance and Composition of Financing <sup>3</sup> – General Government <sup>4</sup>	Dec 2006	Jan 2007	A	A	A
Revenue, Expenditure, Balance and Composition of Financing <sup>3</sup> – Central Government	Dec 2006	Jan 2007	A	A	A
Stocks of Central Government and Central Government- Guaranteed Debt <sup>5</sup>	Sep 2006	Jan 2007	A	A	A
External Current Account Balance	2006 Q3	Dec 2006	Q	Q	Q
Exports and Imports of Goods and Services	Oct 2006	11/24/06	M	М	M
GDP/GNP	2006 Q3	Dec 2006	Q	Q	Q
Gross External Debt	2006 Q3	Dec 2006	Q	Q	Q

<sup>&</sup>lt;sup>1</sup>Includes reserve assets pledged or otherwise encumbered as well as net derivative positions.

<sup>&</sup>lt;sup>2</sup>Both market-based and officially-determined, including discount rates, money market rates, rates on treasury bills, notes and bonds.

<sup>&</sup>lt;sup>3</sup> Foreign, domestic bank, and domestic nonbank financing.

<sup>&</sup>lt;sup>4</sup> The general government consists of the central government (budgetary funds, extra budgetary funds, and social security funds) and state and local governments. Data for the state budget are available with monthly frequency and timeliness, while data on some extra budgetary funds are available only on an annual basis.

<sup>&</sup>lt;sup>5</sup> Including currency and maturity composition.

<sup>&</sup>lt;sup>6</sup> Daily (D); Weekly (W); Monthly (M); Quarterly (Q); Annually (A); Irregular (I); Not Available (NA).