Present Conditions, Monetary Policy and Outlook for Economy and Investments in the Czech Republic

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• Monetary policy – regimes, current situation and outlook, planned changes of the Czech monetary policy framework
• Exchange rate – regimes, interaction with inflation targeting, ERM II
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Current state of the Czech economy (i)

- Czech economy is a “post-transition” country - the process of transition from a centrally planned economy started in 1991, major transition steps were achieved by 2001 (including privatisation of major banks).
- However, further reforms are needed in the area of pension system, tax system and health care.
- Nominal convergence and real appreciation of the Czech currency vis-a-vis euro (or Deutsche Mark respectively) has been fast for most of the period since 1991.
- However, real convergence towards eurozone was sluggish or absent in the nineties. Sustained real convergence has emerged only after 2000.
Current state of the Czech economy (ii)

• Combination of both real and nominal convergence implies rather fast growth rates of GDP in terms of euros/dollars.
• E.g. GDP per capita in terms of USD was only 3000 USD in 1991, but it reached 15000 USD in 2006.

Currently, the business cycle is peaking in the Czech Republic with GDP growth rates about 6% (for the third consecutive year) and unemployment below 7%.

Source: EUROSTAT and CNB calculations
Since 1991, three monetary regimes were in place:

- a) fixed exchange rate combined with monetary targeting (up to 1996)
- b) monetary targeting (1996-1997)
- c) inflation targeting (since 1998 to present)
Monetary policy (ii)
Fixed ER and monetary targeting regime

• The combination of a fixed exchange rate and monetary targeting became untenable in mid-nineties as financial flows were more and more liberalised and foreign investors gained confidence in CZK

• Fixed exchange rate and higher interest rates on CZK implied massive inflows of (usually short-term) capital → strong appreciation pressures →

• → the CNB had to intervene (buy USD, Deutsche Marks…) in order to prevent a strong nominal appreciation of CZK →

• → growth of monetary aggregates, the FX interventions had to be sterilised by withdrawing excessive CZK liquidity (which was due to FX interventions) →

• → beginning of the current system, under which the central bank does not supply liquidity but it is constantly withdrawing liquidity from the banking system
Monetary policy (iii)
Withdrawing of excess liquidity

- Consequences of “liquidity-withdrawing” system:
  - a) money demand fluctuations are swiftly accommodated (commercial banks can easily increase or reduce their 2-week deposits with the CNB);
  - b) loan aggregates as well as other assets of commercial banks can grow at rates markedly different from money growth rates (see the balance sheet scheme).

- Because of similar reasons some other post-transition countries have “liquidity-withdrawing” system, although the amount of withdrawn liquidity is smaller, e.g. Slovakia, Poland, Hungary; Greece had it before entering the eurozone.
Monetary policy (iv)

Monetary targeting

- The quantity equation was valid in the transition countries in the sense that their inflation rates corresponded to growth rates of broad money minus GDP growth rates.
- **BUT** money demand stability in the Czech Republic holds only in longer-term averages; y-o-y fluctuations of money demand were in a range of +/-10% →
- → strict monetary targeting could have become a destabilizing policy.
- → inflation targeting (IT) regime was adopted as of 1998.
The inflation targeting (IT) regime was adopted at a time when this regime was relatively new worldwide; both the target and the way to achieve it is set by the CNB.

Peculiarity of IT in the Czech Republic is that it was chosen as a method of disinflation from inertial double digit inflation rates down to single digit inflation rates.

Theoretically, IT as a method of disinflation should reduce the costs of disinflation measured e.g. by “sacrifice ratio”.

Empirically it was not confirmed – disinflation in 1998 and 1999 was accompanied by a recession and increases in unemployment (probably, IT was not credible enough at the beginning to influence expectations directly).
Monetary policy (vi)

Results of inflation targeting in the Czech Republic

- Inflation has never overshooted the target
- In most cases, inflation was below the targeted band
Monetary policy (vii)
Reasons for anti-inflationary bias

There are several possible explanations of the CNB’s anti-inflationary bias, e.g.:

- Unexpectedly strong real but also nominal appreciation of CZK vis-à-vis euro; interactions of exchange rate fluctuations and inflation targeting
- Anti-inflationary preferences trying to gain confidence for the then new inflation targeting regime; and maybe anti-inflationary bias of the original, old prediction model, which could be developed only gradually and improved to its current state
- The Czech economy is a price taker and low inflation in the global economic environment
Monetary policy (viii)
Current situation and outlook

- Current headline inflation close to the target of 3%
- Surprisingly, Czech IRs have been below euro IRs for 2 years (Czech IRs are currently 3rd lowest in the world following yen and CHF rates)
- To some extent, CZK a source of “carry trades”; but otherwise no substantial changes to the workings of monetary policy
In close future, the CNB will implement several changes to its IT framework. Among the most important are the following ones:

- **Inflation target will be reduced down from 3% to 2% as of 2010;** this value is already usual for other inflation targeters, also it is more in line with expected value of Maastricht inflation criterion.
- **For forecasting purposes a new “G3” model is being developed.** It is an advanced multi-sector model with optimizing agents, wage and price stickiness, endogenous MP etc.
- **Changes in communication of MP decisions aiming at higher transparency:**
  1. model consistent interest rate path will be published in quantitative form (up to now only verbal indication) – similar to New Zealand, Norway, Sweden
  2. votes cast by individual board members will be published (up to now only a ratio of votes without names is published) – similar to UK, Sweden, Hungary, Poland
Recapitulation of exchange rate (ER) regimes in the Czech Republic:

b) Central parity with a floating band +/- 7.5% (February 1996 – May 1997)
c) Float (May 1997 to present)

- Real appreciation of CZK vis-à-vis Germany was 5% p.a. on average in 1993-2006.
- Current equilibrium real appreciation of CZK estimated at about 2.5-3% p.a.
- Balassa-Samuelson effect is present but cannot explain the whole size of real appreciation
- Improving terms of trade (probably due to faster quality increases in tradable sector) have their role in real appreciation
• After 1999, inflation rates have dropped sufficiently and real appreciation has implied gradual nominal appreciation of CZK vis-à-vis euro and USD.

• Nominal ER is exposed to fluctuations; the more variable nominal ER is, the higher risk premium is demanded by investors – i.e. yields in terms of € are higher in the CEE countries than in eurozone (see below).
Paradox of inflation targeting in a small open economy

- In order to have independent monetary policy and therefore also independent IT (as a form of monetary policy), a floating ER with “sufficient” variability (fluctuations) is needed (otherwise domestic IRs would have to be the same as in eurozone).
- These fluctuations of ER cannot, by definition, be predicted by central bank.
- BUT in a small open economy ER fluctuations pass through into inflation rates. Furthermore, the ER pass-through is much faster than the affect of potential IR changes.
- → the central bank’s possibilities to eliminate the pass-through are limited.
- → ER fluctuations can adversely affect fulfilment of inflation targets but at the same time they are a condition for independent IT.
• The Czech Republic wants to stay in the ERM II for the shortest possible time period, i.e. approx. 2 years before eurozone entry
• The issue of “Impossible Trinity“ – the more is ER managed, the more limited is domestic monetary policy
• Example: current situation in the Baltic states – credible currency boards → perfect ER stability, BUT also higher inflation rates (due to absence of nominal appreciation)

<table>
<thead>
<tr>
<th>HICP inflation in %</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estonia</td>
<td>4,1</td>
<td>4,4</td>
</tr>
<tr>
<td>Lithuania</td>
<td>2,7</td>
<td>3,8</td>
</tr>
<tr>
<td>Latvia</td>
<td>6,9</td>
<td>6,6</td>
</tr>
<tr>
<td>Inflation criterion</td>
<td>2,5</td>
<td>2,9</td>
</tr>
</tbody>
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FDI in the Czech Republic (i)

- Net inward position of FDI in the Czech Republic surpassed € 50 billion by the end of 2006, i.e. more than € 5000 per capita
Investment in the Czech Republic (ii)

Factors of FDI inflows:

- A) relatively low wage costs in terms of euros (USD) – **BUT** this is changing, real wages have doubled since 1991 + substantial real appreciation → average wages in terms of euros have risen sevenfold since 1991
- B) relatively low corporate income tax rates compared to “home countries”
- C) geographical position, EU membership, investment incentives, etc.

<table>
<thead>
<tr>
<th>Country</th>
<th>Corporate income tax rate</th>
</tr>
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<tbody>
<tr>
<td>Austria</td>
<td>25%</td>
</tr>
<tr>
<td>Belgium</td>
<td>34%</td>
</tr>
<tr>
<td><strong>Czech Republic</strong></td>
<td><strong>24%</strong></td>
</tr>
<tr>
<td>France</td>
<td>33,30%</td>
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<tr>
<td>Germany</td>
<td>38,30%</td>
</tr>
<tr>
<td>Italy</td>
<td>33%</td>
</tr>
<tr>
<td>Netherlands</td>
<td>29,60%</td>
</tr>
<tr>
<td>UK</td>
<td>30%</td>
</tr>
<tr>
<td>USA</td>
<td>35%</td>
</tr>
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Average nominal monthly wage in euros

![Graph showing average nominal monthly wage in euros from 1991 to 2006]
Investment in the Czech Republic (iii)

- FDI - beneficial for growth, employment, trade etc. but also generate deficits in CA income balance currently reaching more than 5 % GDP → GNP growth rates lag behind GDP growth rates

- Portfolio investments are sensitive on IR differentials → net outflows from the Czech Republic

![Graph showing deficit in income balance and net FDI in % GDP over years 1993 to 2006. The graph indicates a trend where the deficit in income balance and net FDI are both positive and have increased over time.]
General outlook

- The Czech economy will continue to converge to eurozone both in real and in nominal terms but probably in lower pace
- Consolidation of public finance will have to take place sooner or later
- Monetary policy will remain within the IT framework for the moment, euro adoption NOT before 2012
- FDI inflow will continue but rising wages and real appreciation may change structure and character of incoming FDI
Thank you for your attention

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