IMPACT OF THE CNB'S EXCHANGE RATE COMMITMENT:
PASS-THROUGH TO INFLATION

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Outline

• CNB’s exchange rate commitment as a monetary policy tool at the zero interest rate bound
• Exchange rate dynamics under the commitment
• Pass-through of the commitment
• Observed price level differential
• Summary
Exchange rate commitment

• In 2012 - 2013, the Czech economy was going through the longest recession in its history (impact of the weakening foreign demand and proceeding domestic fiscal consolidation):
  - decline of GDP (mainly due to falling consumption and investment)
  - increasing unemployment rate
  - decreasing real wages
  - weak consumer and business confidence

• Inflation decreased to the lower boundary of the tolerance band around the CNB’s 2% target and it was expected to fall to (or even below) zero.

Standard monetary policy tools reached their limits:

  *interest rates at technical zero*
  *forward guidance*
  *verbal FX interventions*
Exchange rate commitment

• To avoid deflation or long-term undershooting of the inflation target the Bank Board decided to start using the exchange rate as an additional instrument for easing the monetary conditions in November 2013:
  • "The CNB will intervene on the FX market to weaken the koruna so that the exchange rate is close to CZK 27/EUR."

• The exchange rate commitment is one-sided:
  • CNB will prevent excessive appreciation of the koruna exchange rate below CZK 27/EUR.
  • On the weaker side of the CZK 27/EUR level, the CNB is allowing the exchange rate to move according to supply and demand on the FX market.

• The CNB stands ready to intervene automatically, i.e. without the need for an additional decision of the Bank Board, and without any time or volume limits.

• Forward guidance – the commitment will not end up earlier than 2016H2
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The exchange rate since the decision

• **Announcement effect**: After the CNB’s policy announcement, koruna reached 27 CZK/EUR quickly, and has been moving at somewhat weaker levels since then.

• **Actual interventions only within few days after the policy decision of the CNB.** Further interventions in 2015H2.
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Pass-through of the commitment

Nominal ER depreciation → **Real ER depreciation** as nominal ER appreciation has been prevented.

**Positive inflation differential due to:**

- Higher import prices.
- Higher price of domestically produced goods due to demand pressures stemming from substitution of foreign imported goods by cheaper domestic alternatives.
- Boosted koruna profits of exporting firms with consequent upward pressures on wages.

**Expected future inflation** due to all the above

=> easing of monetary policy.
Estimated pass-through:

- Following CNB (2014), 5% depreciation should lead to 1.6% increase of prices in the Czech economy ceteris paribus.
- The estimate consistent with the literature on pass-through in a small open economy as for example Goldberg and Campa (2010).

The pass-trough is partial due to:

- Non-tradable prices as services (sticky prices).
- Exporters import for exports (import intensity of export), bringing a natural hedging.
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Observed price level differential

From November 2013 to October 2015

<table>
<thead>
<tr>
<th>Country</th>
<th>CPI</th>
<th>PPI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Czech Republic</td>
<td>1.1</td>
<td>-2.0</td>
</tr>
<tr>
<td>Euro area</td>
<td>0.6</td>
<td>-2.8</td>
</tr>
<tr>
<td>Wedge</td>
<td>0.5</td>
<td>0.8</td>
</tr>
</tbody>
</table>

Which is a lower differential than expected:

⇒ Is the pass-through lower? Is the commitment ineffective?

NOT NECESSARILY!

- We need to check for an initial over-appreciation, shocks with asymmetric effects, business cycle factors, etc.
- The pass-through might not be finished yet and it might be affected by the expected duration of the commitment.
- **PPI more suitable than CPI in the transmission channel as it is not affected by tax changes and regulated prices (examples: CZE health care fees, GER Renewable Energies Act).**
I. Initial over-appreciation

Several estimates points to initial over-appreciation around 1—3%:


- If the koruna was overvalued, a part of the NER depreciation could be “used up” by this re-alignment.
II. Asymmetric effects of the oil price shock

Producer prices in the areas of energy and intermediate goods in the euro area and the Czech Republic

- A more **significant drop of energy** and intermediate goods PPI compared to the euro area on the back the world oil prices drop.
- Similar effects might stem from the **abolition of EU milk quotas and the ban on food imports to Russia.**
III. Business cycle position

- Both economies suffered a negative output gap, nevertheless the Czech recession was markedly deeper.
- A faster recovery of the Czech economy.
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Conclusions

• In November 2013, the CNB introduced an exchange rate commitment in order to avoid long-term undershooting of the inflation target and/or deflation risks on the back of the zero interest rate bound.

• After 2 years of the commitment the differential between Czech and effective euro area price levels is about 0.5 and 0.8 percentage points.

• **Major factors hindering the effects of depreciation:**
  - Initial over-appreciation
  - Asymmetric effects of oil price shocks
  - More severe recession of the Czech economy
Thank you for your attention

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