VECTORS OF CONVERGENCE

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CEBRE

Each year the CNB publishes:

- *Analyses of Czech Republic's current economic alignment with euro area*
    - *Analytical document*
    - most recent: December 2018

- *Assessment of fulfilment of Maastricht convergence criteria and degree of economic alignment of Czech Republic with euro area –* published jointly with Ministry of Finance of Czech Republic

CNB's analysis: graphical summary

ECONOMIC ALIGNMENT OF EURO AREA COUNTRIES

- Convergence of euro area countries' wealth levels
- Public finance sustainability
- Business cycle alignment
- Monetary policy transmission (interest rate channel)
- Financial cycle alignment as captured by credit growth
- Inflation alignment

+ unfinished institutional reform

CZ: DIRECT ALIGNMENT INDICATORS

- Real economic convergence
- The Czech Republic's cyclical alignment with the euro area
- Structural similarity of the Czech economy to the euro area economy
- Trade links with the euro area
- Intensity of intra-industry trade with the euro area
- Ownership links with the euro area
- Financial cycle alignment
- Interest rate convergence vis-à-vis the euro area
- Volatility of the Czech currency against the euro
- Alignment of the Czech koruna with the euro

CZ: FISCAL POLICY

- Cyclically adjusted general government balance
- General government debt
- Procyclical effect of fiscal policy
- Long-term sustainability of public finances

CZ: THE LABOUR AND PRODUCT MARKETS

- Geographical mobility
- Activity rate
- Share of part-time jobs in employment
- Long-term unemployment rate
- Unemployment trap
- Labour market efficiency
- Competitiveness

CZ: THE BANKING SECTOR

- Capital position
- Profitability
- Liquidity position
- Credit risk
- Risks to the domestic banking sector related to the phase of the financial cycle

Year-on-year changes in real GDP
(%)

CZ —— EA ——
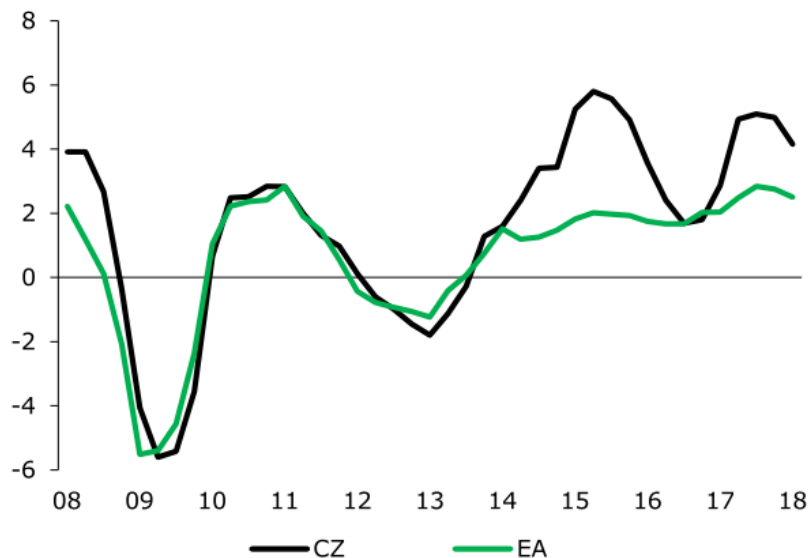
Source: Eurostat, CNB calculations.

Correlation coefficients of GDP with the euro area

■ 10% significance level ■ Correlation at time t
■ Correlation with lag t-1 ■ Correlation with lag t-2
◇ Adjusted for crisis
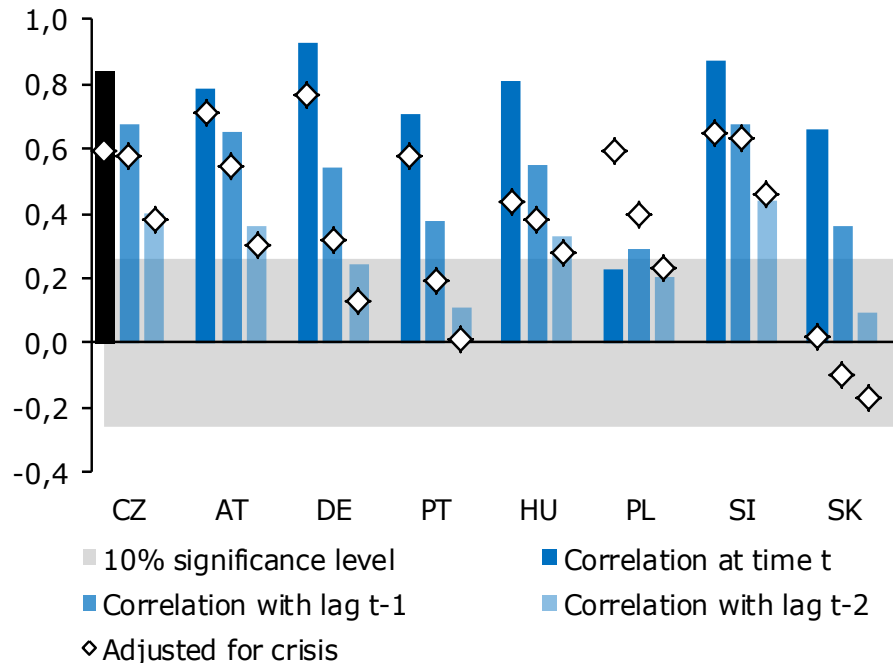
- Cyclical alignment with EA was particularly strong during economic crisis and has declined during recovery.
- Alignment remains relatively high, though, owing to strong trade links.

GDP per capita at purchasing power parity versus the price level
(2017, EA = 100)

$$y = 0.828x + 14.916$$
$$R^2 = 0.7925$$
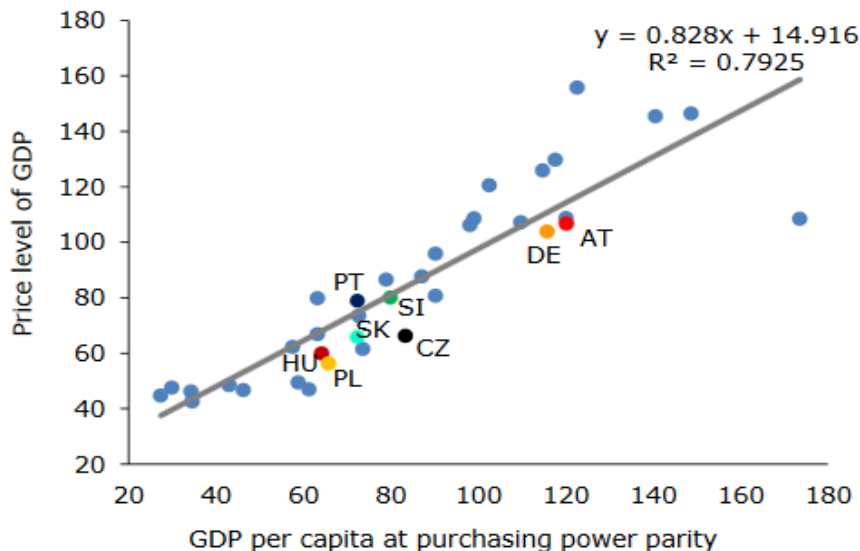
Source: Eurostat, CNB calculations.

Other indicators of long-term convergence
(2017, EA = 100)

- GDP per employed person at PPP
- Price level of household consumption
- Wages in PPP
- Wages in EUR
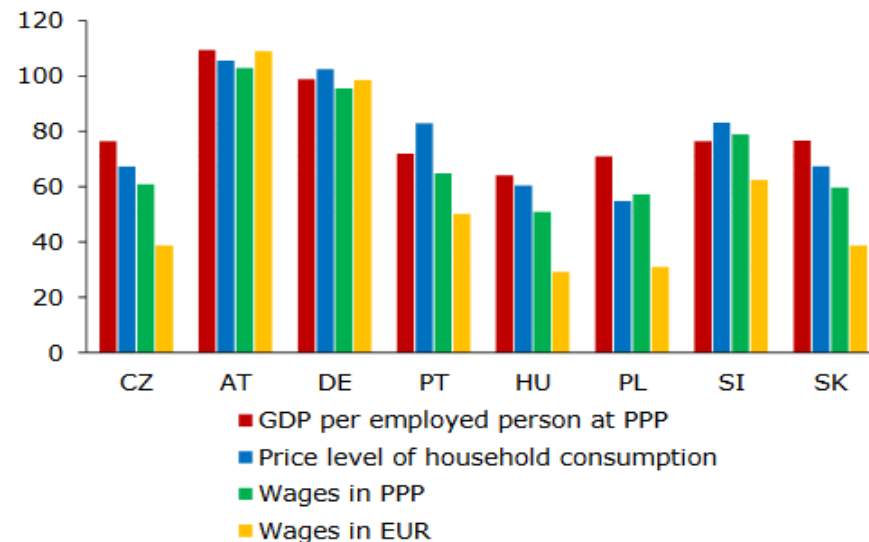
Source: Eurostat, European Commission, CNB calculations.

- Czech price level is below level corresponding to GDP per capita $\Rightarrow$ ample space for real exchange rate appreciation.
- Lower wage level compared to euro area average (60% of EA average in PPP and 40% in EUR terms $\Rightarrow$ incomplete convergence).
- CZ Inflation may increase after euro adoption due to catching-up process (nominal appreciation not possible any more).

CNB CZECH NATIONAL BANK

- In addition to the two policy documents, some CNB research output[*] may be relevant for the questions related to euro adoption

- Examples -- two recent WPs

  Jan Brůha, Jaromír Tonner: Independent Monetary Policy Versus a Common Currency: A Macroeconomic Analysis for the Czech Republic Through the Lens of an Applied DSGE Model, CNB WP 19/2018.

  - "euro adoption would have had positive effects on the levels of macroeconomic variables at the cost of an increase in nominal volatility"

  Jan Brůha, Oxana Babecká Kucharčuková: An Empirical Analysis of Macroeconomic Resilience: The Case of the Great Recession in the European Union, CNB WP 10/2017

  - "common currency is not a determinant of resilience to shocks, it is quality of institutions that matters"

[*] Note: unlike policy documents, the research outputs need not necessarily represent the institutional views

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