

# 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*

## 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

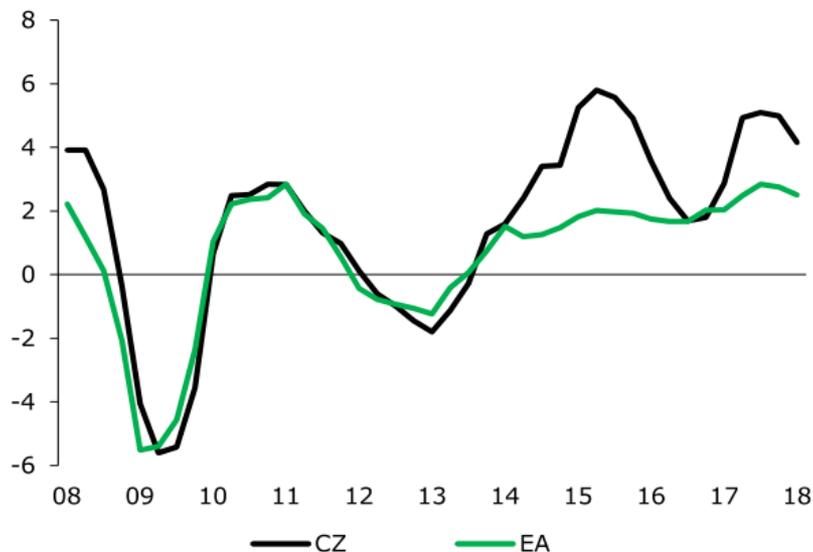
## CZ: THE LABOUR AND PRODUCT MARKETS

-  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

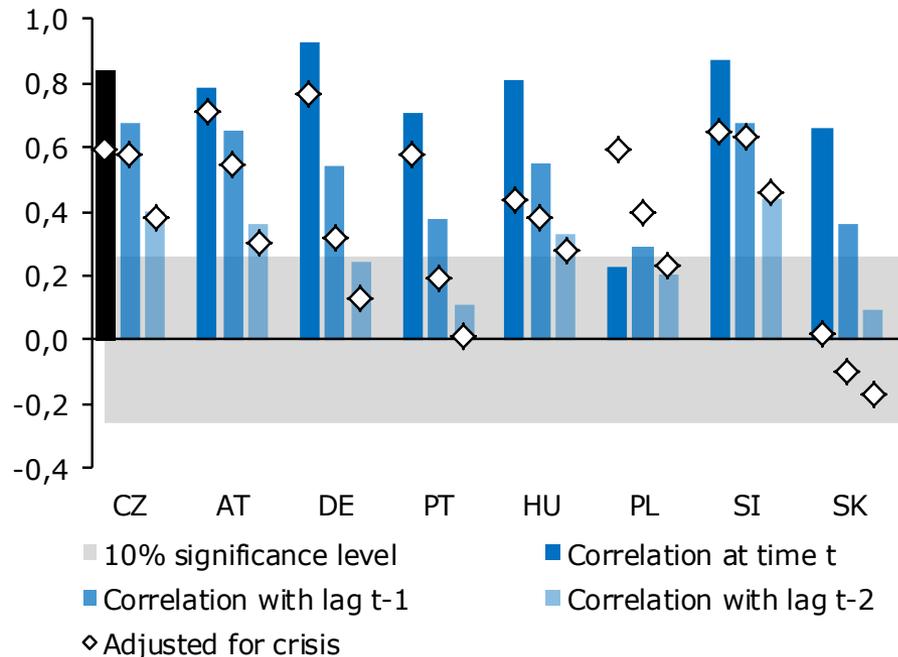
-  Capital position
-  Profitability
-  Liquidity position
-  Credit risk
-  Risks to the domestic banking sector related to the phase of the financial cycle

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



Source: Eurostat, CNB calculations.

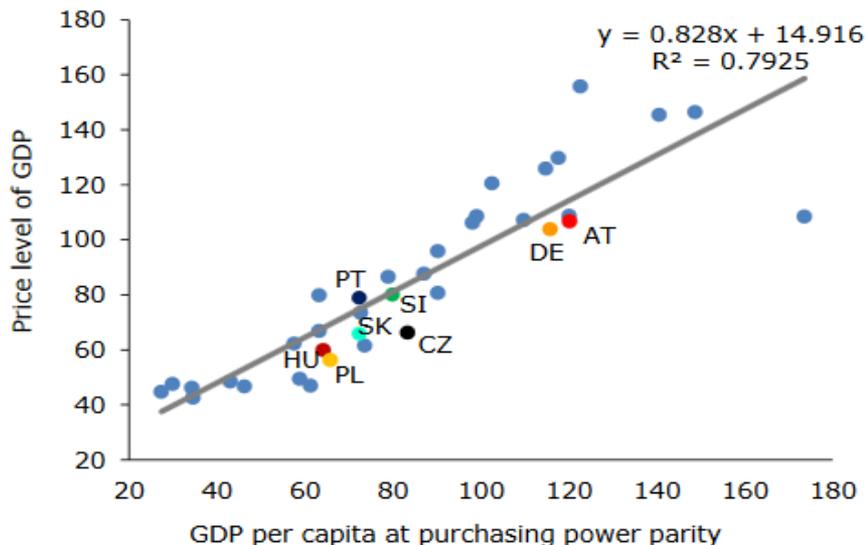
**Correlation coefficients of GDP with the euro area**



- Cyclical alignment with EA was particularly strong during economic crisis and has declined during recovery on back of independent monetary policy (including unconventional measures such as CNB's FX commitment).
- Alignment remains relatively high, though, owing to strong trade links.

## GDP per capita at purchasing power parity versus the price level

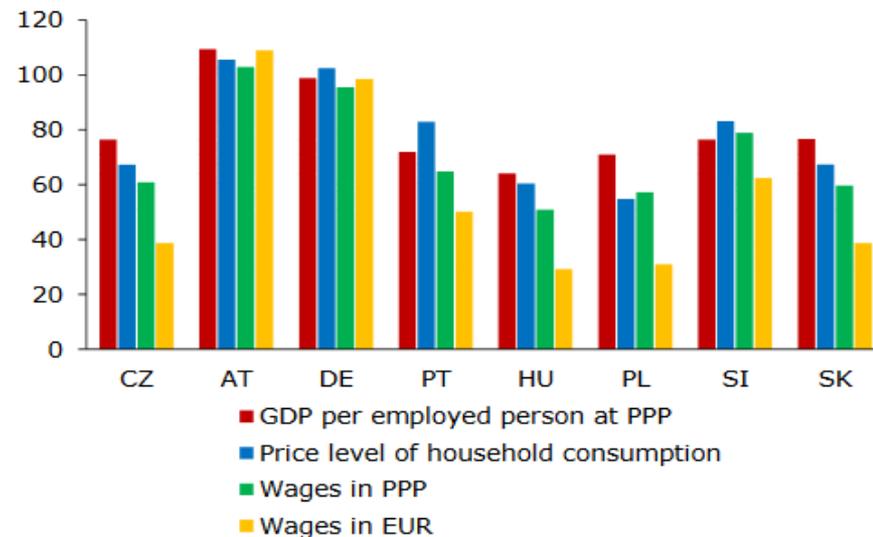
(2017, EA = 100)



Source: Eurostat, CNB calculations.

## Other indicators of long-term convergence

(2017, EA = 100)



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).

- In addition to the two policy documents, some CNB research outputs\* may be relevant to 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, research outputs do not necessarily represent institutional views

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