



OESTERREICHISCHE NATIONALBANK

EUROSYSTEM

How does euro area monetary policy affect CESEE EU Member States?

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Oesterreichische Nationalbank

Monetary Policies in the New European Setting

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The views expressed do not necessarily represent the views of the OeNB or the ESCB!



Structure

International transmission channels of monetary spillovers

Real economic and financial linkages between CESEE EU Member States (MS) and the euro area

How have financial variables in CESEE EU MS developed in the context of the ECB's unconventional monetary policy measures?

How has the ECB's monetary policy affected the euro area and CESEE EU MS – an empirical assessment

Conclusion

International transmission channels of monetary spillovers

- **Aggregate demand channel:** monetary policy affects domestic demand and, thus, the demand for foreign goods.
 - **Exchange rate competitiveness channel:** monetary policy affects the exchange rate
 - Expenditure switching effects
 - **Financial channel:** monetary policy affects domestic financial conditions that may change abroad as well – dependent on the strength of the financial connections between the countries.
 - Via prices of assets, such as shares, bonds, housing (collateral)
 - Via internationally active banks and/or cross-border bank lending
 - Wealth effects via foreign currency borrowing
- ⇒ Credit booms and surges in capital inflows

Structure

International transmission channels of monetary spillovers

Real economic and financial linkages between CESEE and the euro area

How have financial variables in CESEE countries developed in the context of the ECB's unconventional monetary policy measures?

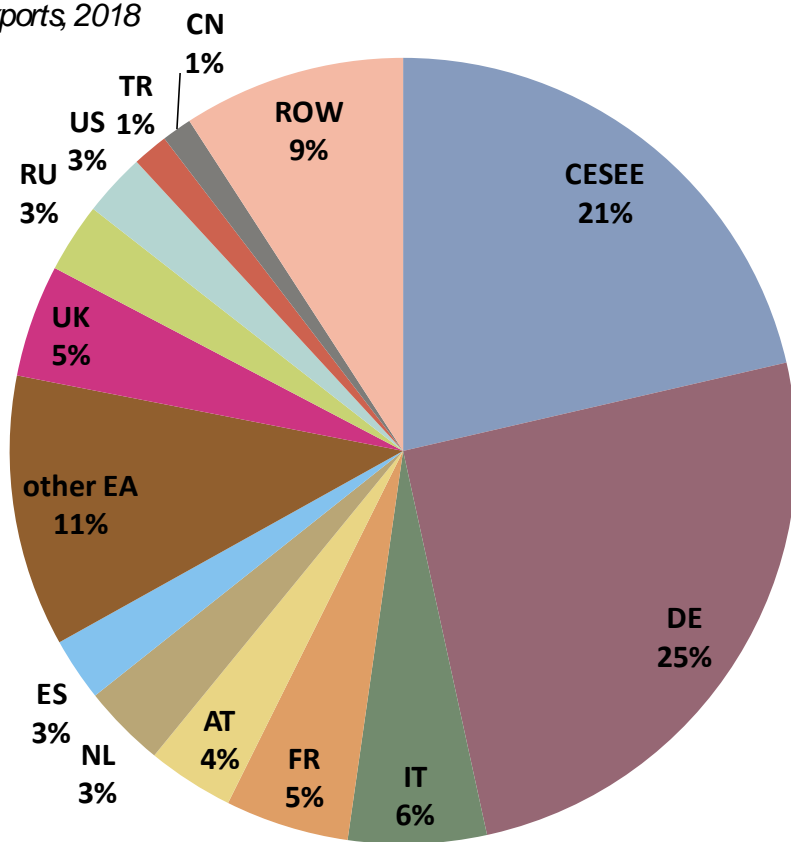
How has the ECB's monetary policy affected the euro area and selected CESEE countries – an empirical assessment

Conclusion

CESEE have strong trade links with the euro area and close intraregional ties

Export structure of CESEE-11

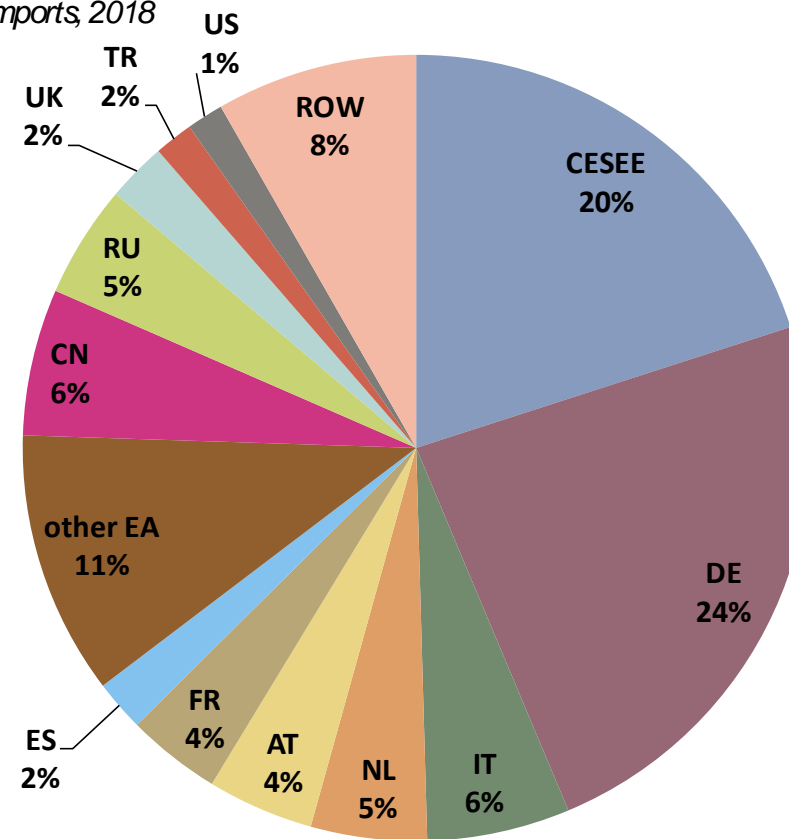
in % of total exports, 2018



Source: Eurostat.

Import structure of CESEE-11

in % of total imports, 2018

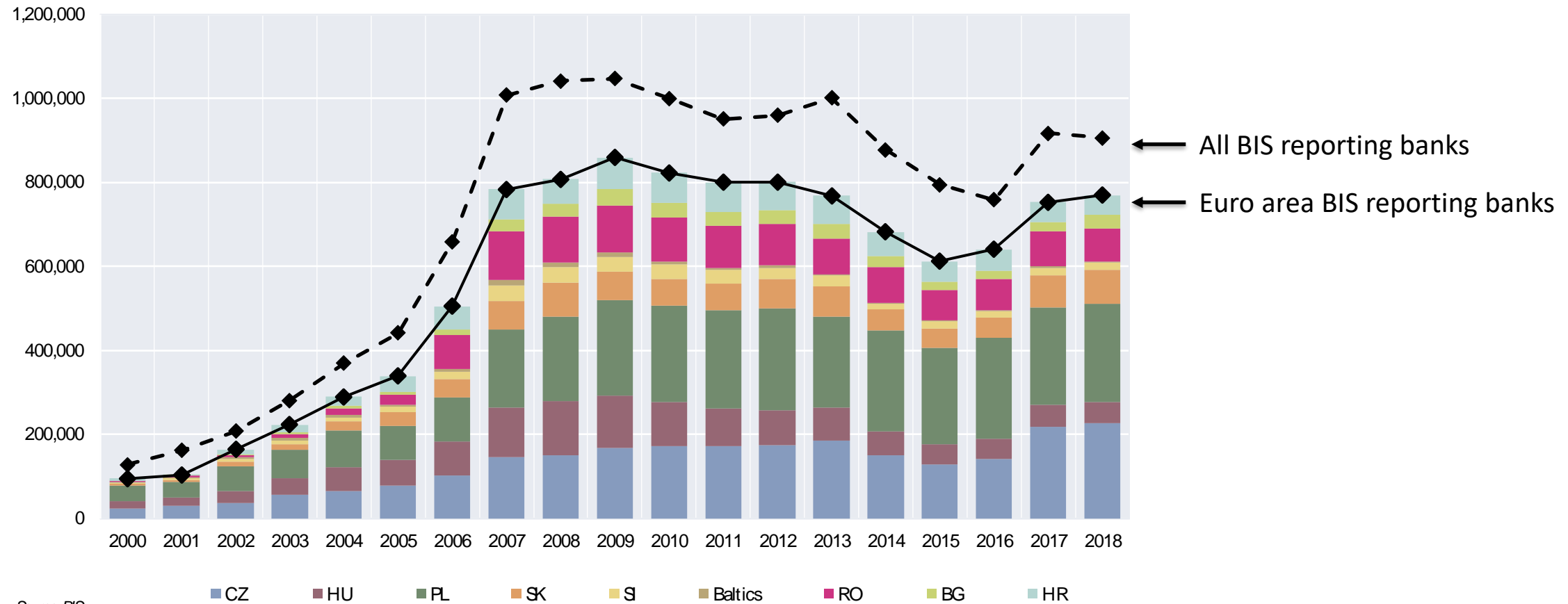


Source: Eurostat.

Banks' exposures vis-à-vis CESEE-11 still high despite deleveraging since 2009

Consolidated exposure of BIS reporting banks vis-a-vis CESEE-11

in USD mn, immediate borrower basis

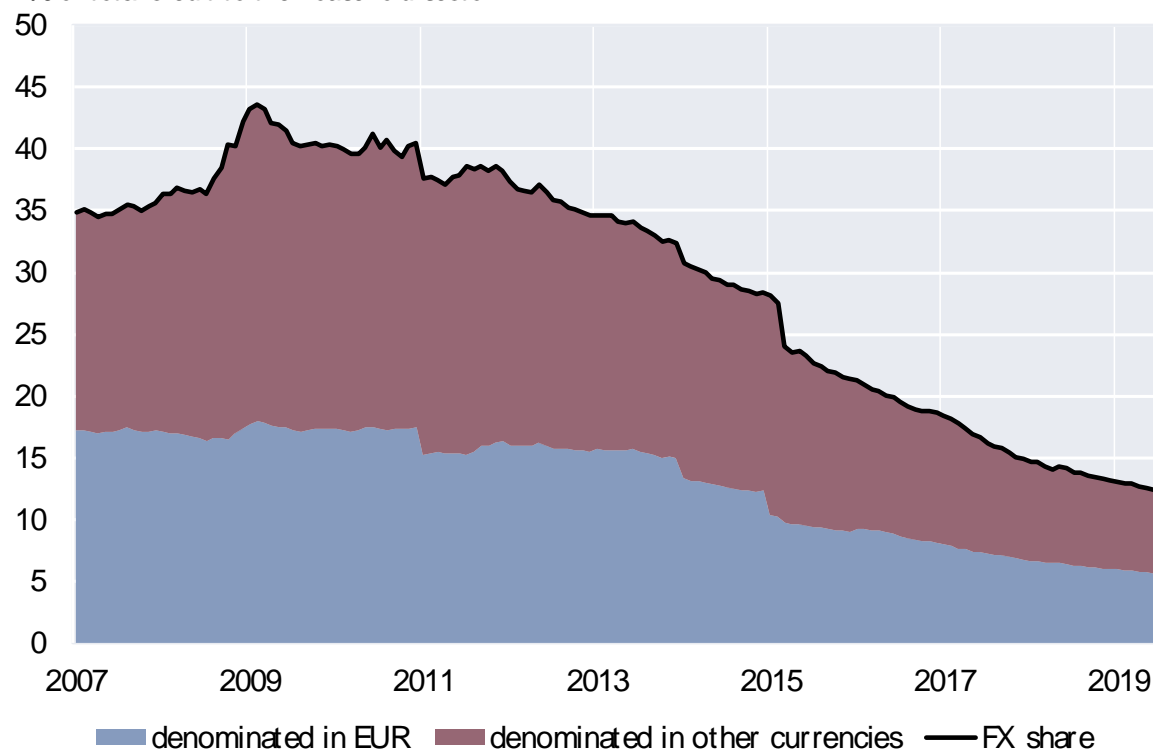


Source: BIS

Euro remains important in foreign currency lending – especially for corporate credit

CESEE-11: FX denominated credit to households

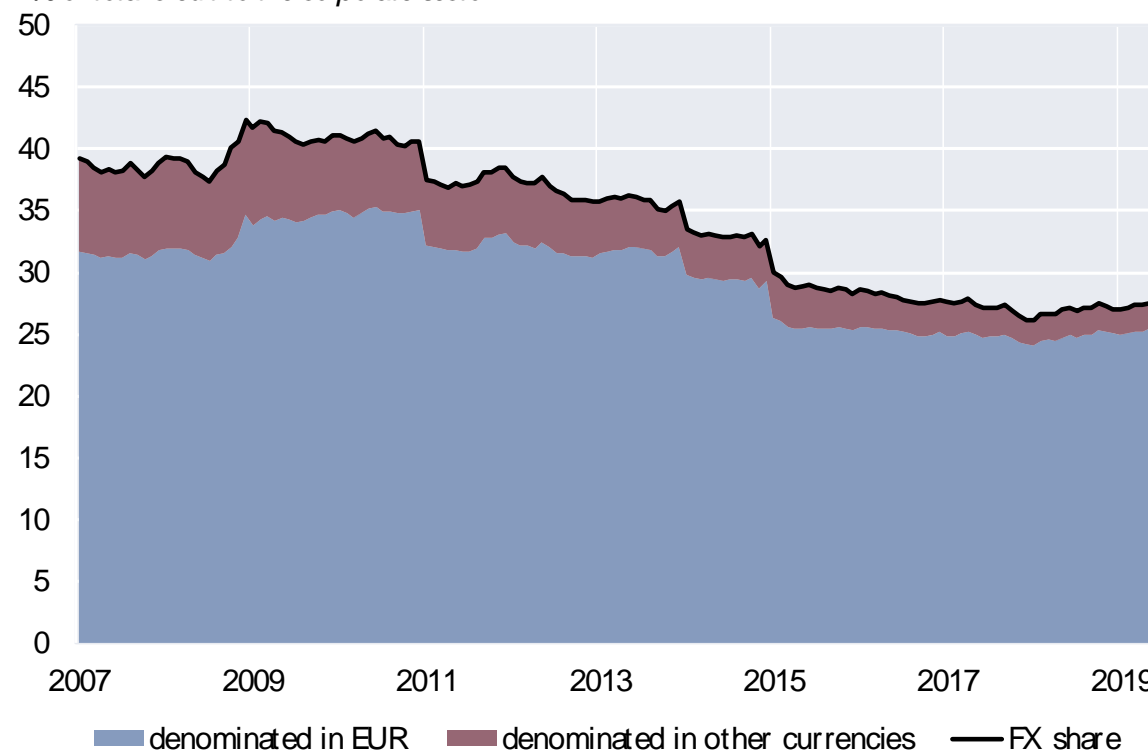
% of total credit to the household sector



Source: ECB

CESEE-11: FX denominated credit to corporates

% of total credit to the corporate sector

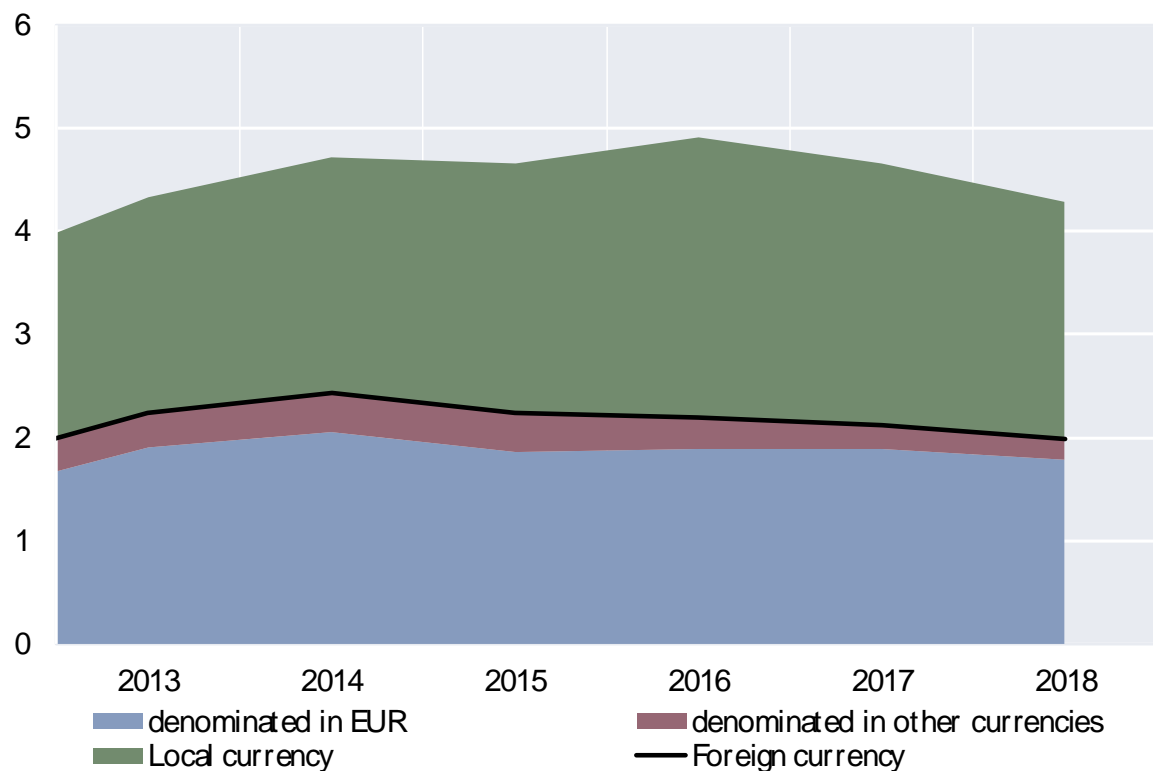


Source: ECB

.... as well as in capital markets

CESEE-11: Outstanding stocks of corporate bonds

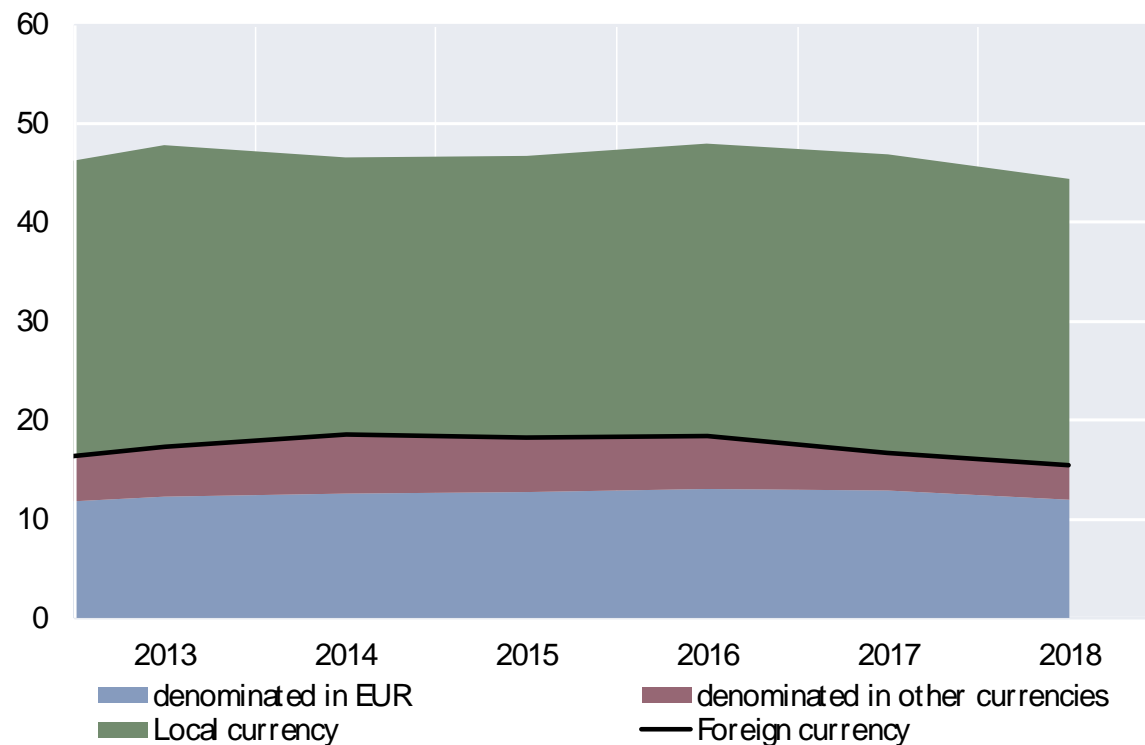
% of GDP



Source: ECB

CESEE-11: Outstanding stocks of general government bonds

% of GDP



Source: ECB

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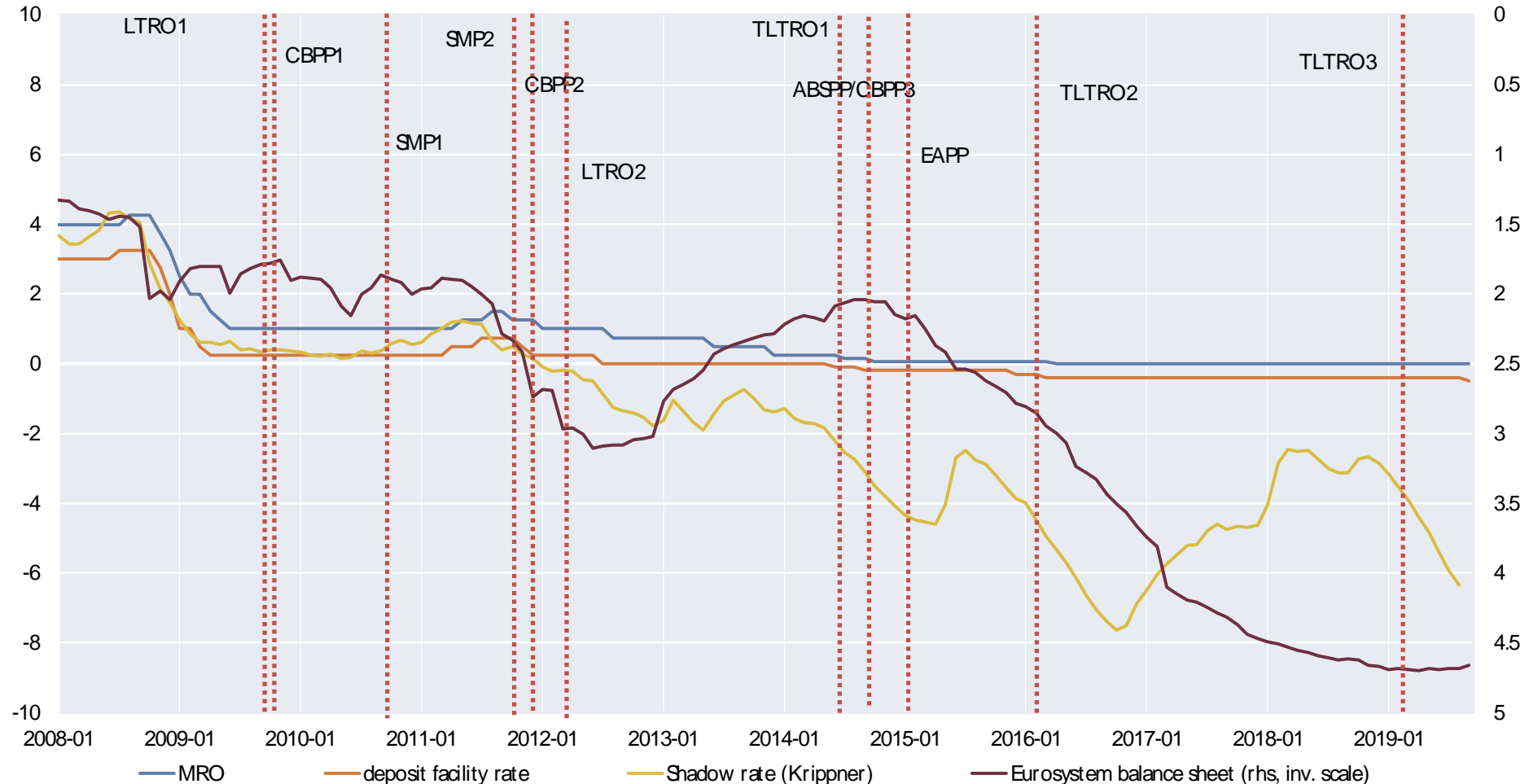
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Ongoing monetary accommodation in the euro area

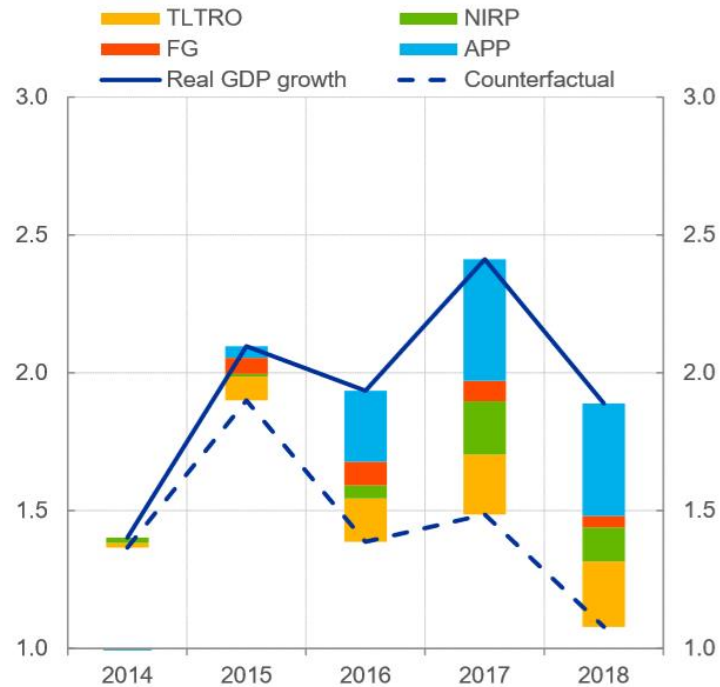
Non standard measures since 2008

Interest rates in % balance sheet in trillion EUR

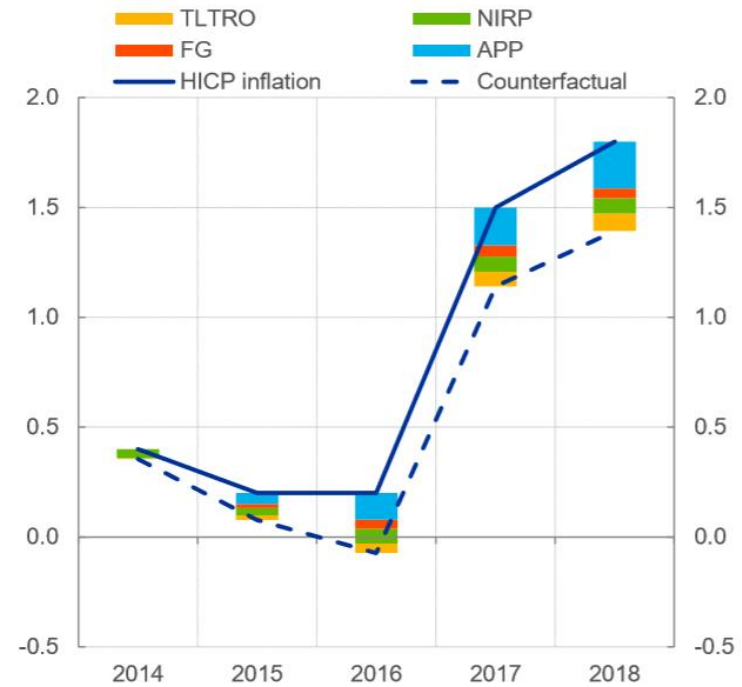


Impact of ECB nonstandard measures on growth and inflation

Contribution of ECB non-standard measures to real GDP growth 2014-2018
(year-on-year percentage changes)



Contribution of ECB non-standard measures to HICP inflation 2014-2018
(year-on-year percentage changes)



Sources: Rostagno, Altavilla, Carboni, Lemke, Motto, Saint-Guilhem, Yiangou (2019): A Tale of two Decades: The ECB's Monetary Policy at 20.

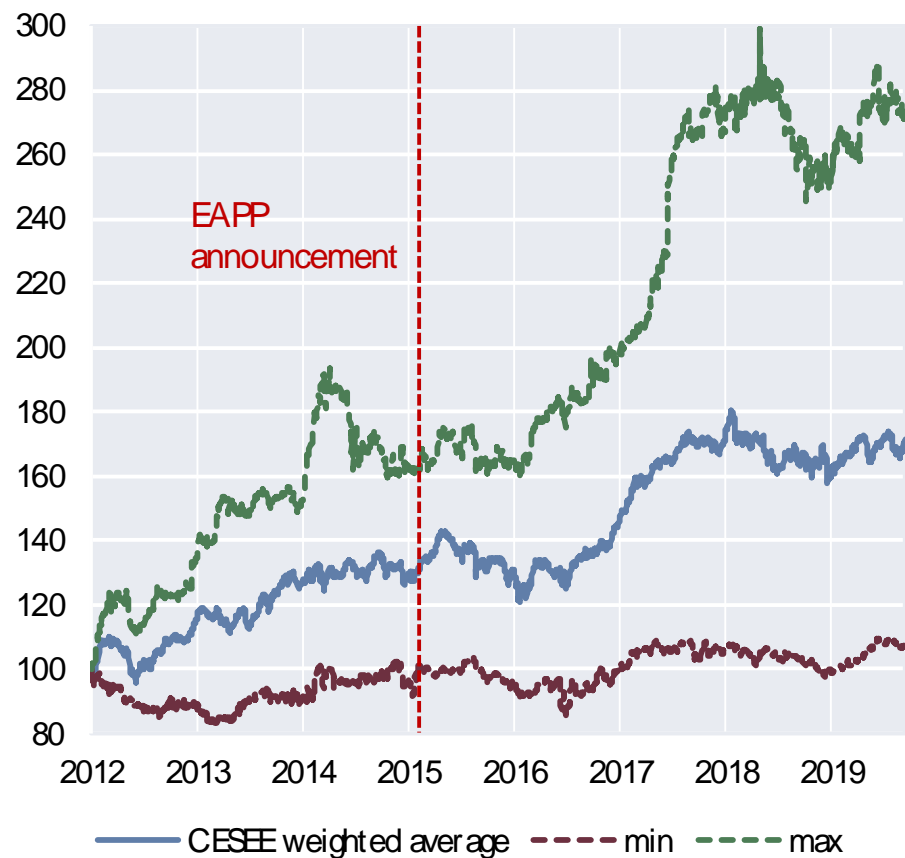
Notes: Shown is the impact of ECB non-standard measures on macro variables based on a macroeconomic model with financial variables conditioning on the yield curve impact shown on the previous slide.

Altavilla, C. Monetary policy transmission mechanisms. 13th ECB Central Banking Seminar: Monetary policy in the euro area, Frankfurt am Main, 1 to 5 July 2019

Prices of selected financial assets increased notably

Equity prices in CESEE-11

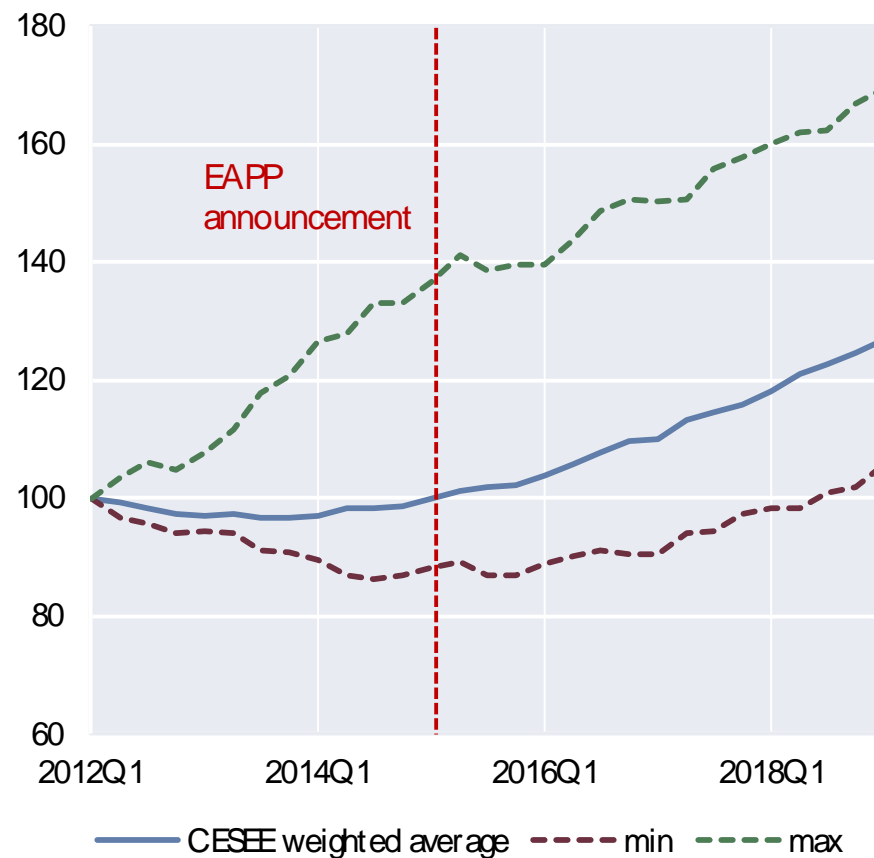
Index: Jan 2012 = 100



Source: Thomson Reuters, Eurostat, OeNB.

House prices in CESEE-11

Index: Q1 2012 = 100

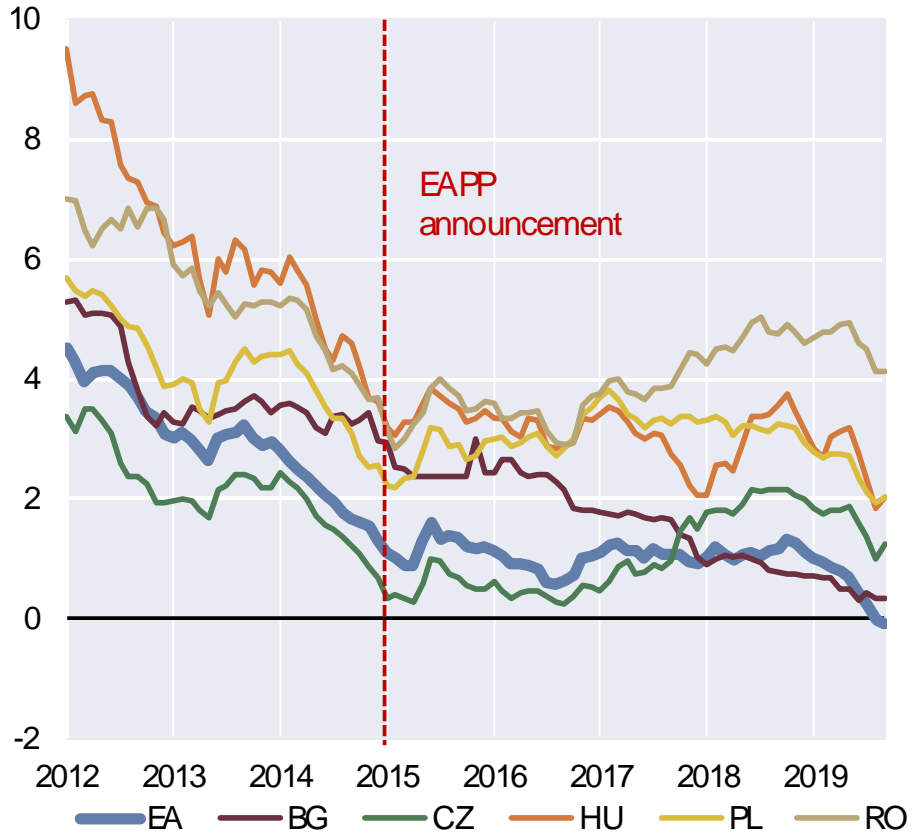


Source: Eurostat.

EAPP announcement shows no significant or longer-lived impact on exchange rates and bond yields in most of the countries

10Y government bond yields

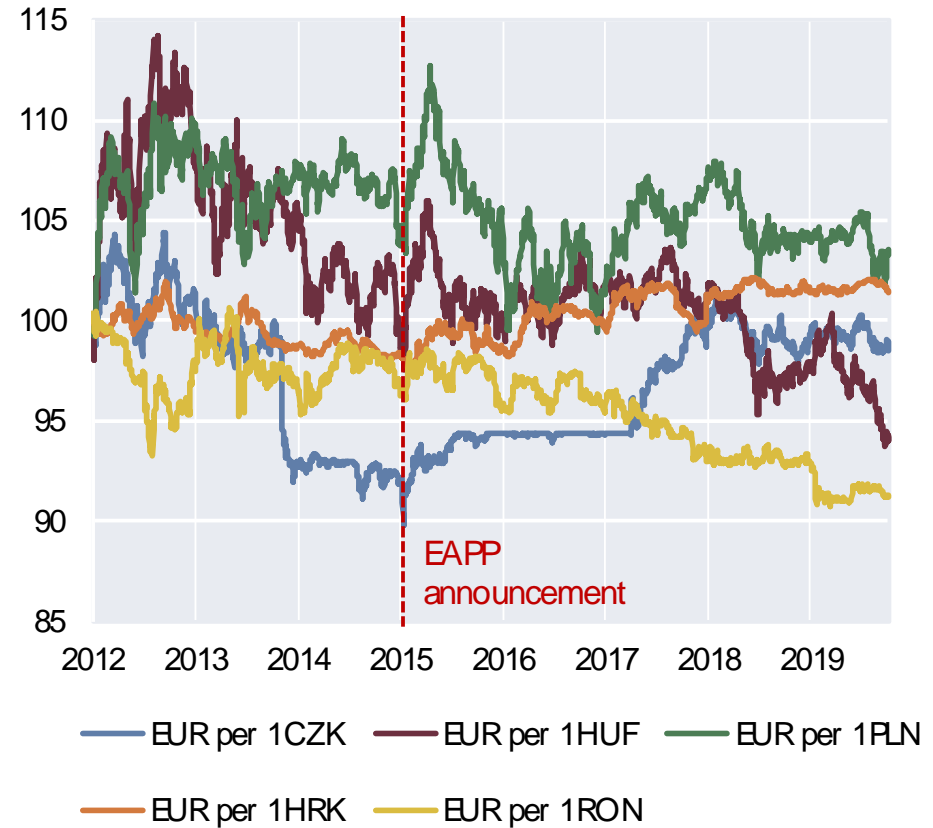
In %



Source: Eurostat.

Nominal exchange rates against the EUR

Index: 1.1.2011=100, rise denotes appreciation

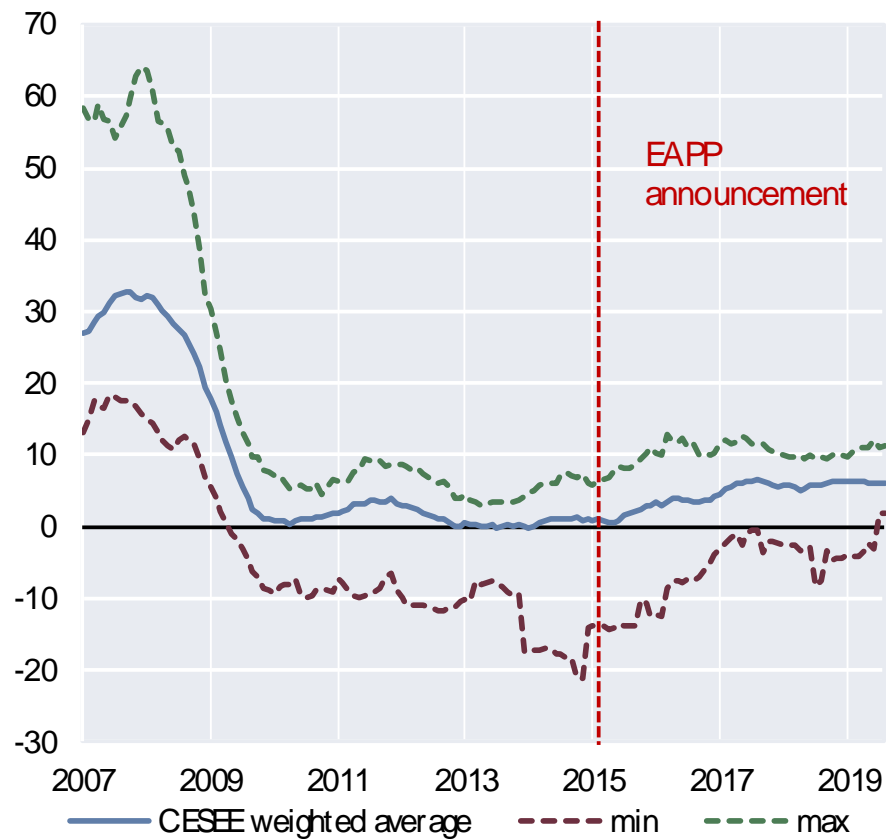


Source: Macrobond.

Credit growth gained speed and foreign banks slowly started to provide new capital to the region

Credit growth in CESEE-11

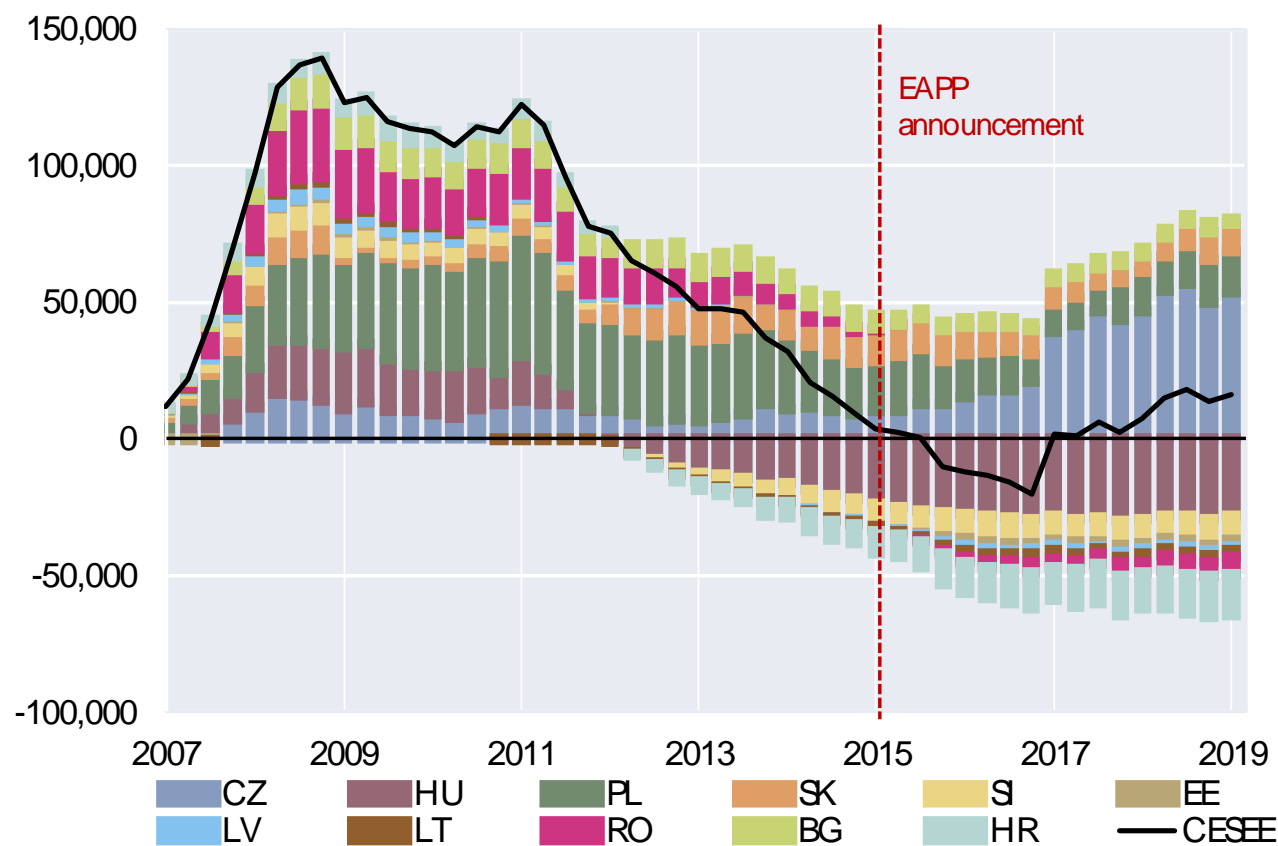
Nonbank private sector, yoy in % adjusted for exchange rate changes



Source: National central banks, Eurostat, OeNB

Banking sector capital flows from euro area to CESEE-11

USD mn, cumulated quarterly flows

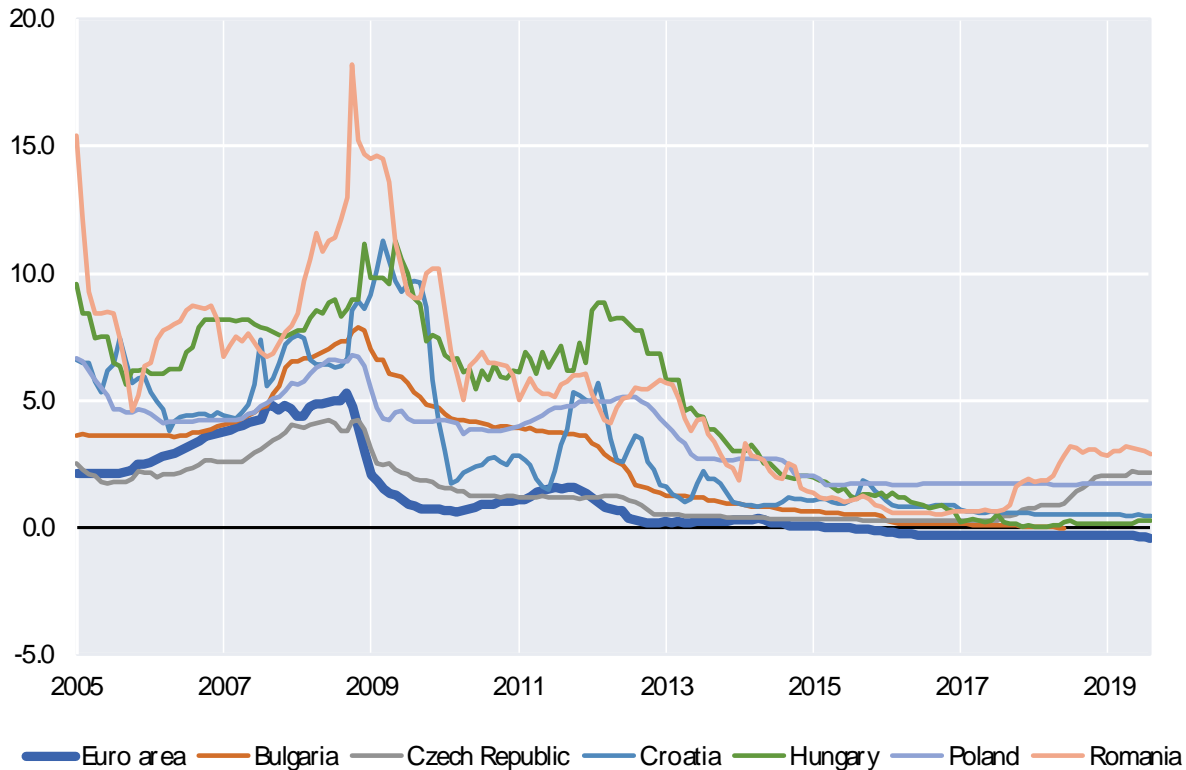


Source: BIS locational statistics, exchange rate adjusted changes

Strong correlation of short-term rates, CESEE rates tend to follow euro area rates

Short-term interest rates

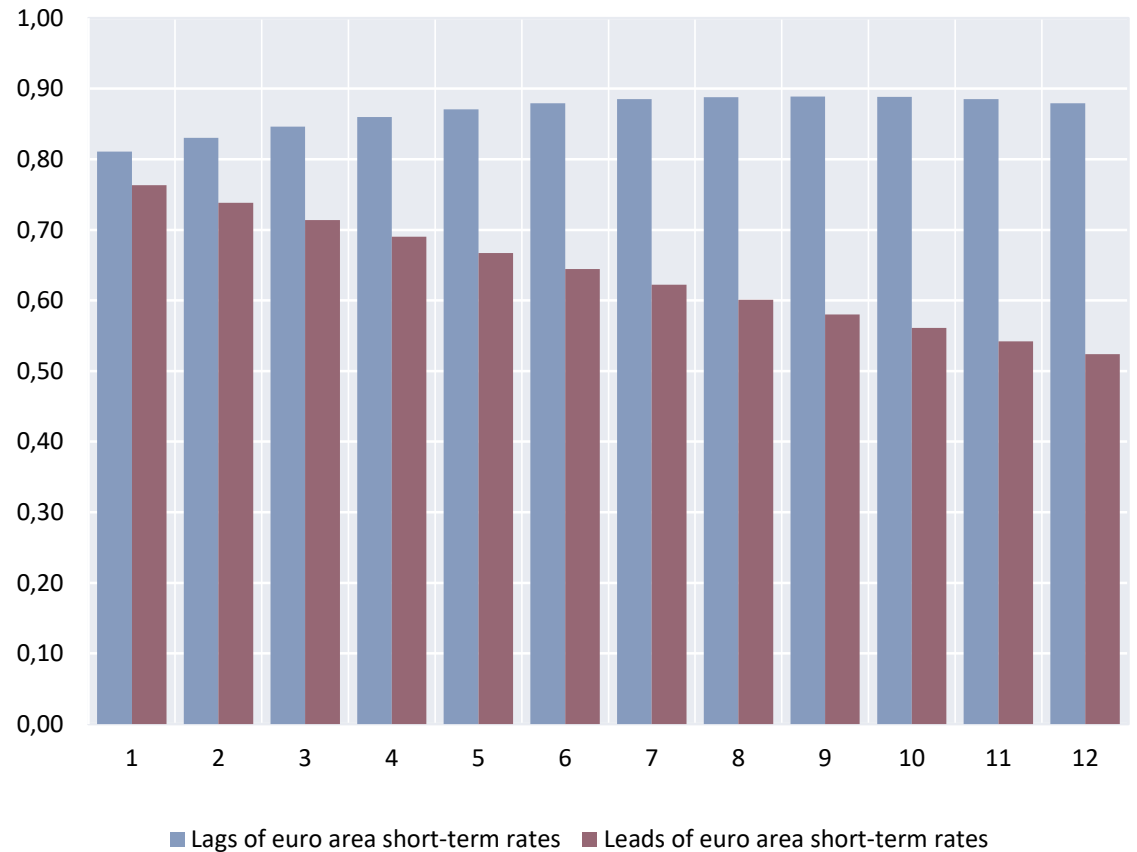
3-month money market rates in %



Source: Macrobond.

Correlation of short-term interest rates

Correlation of CESEE short-term rates with lags and leads of euro area short-term rates.



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Effects of euro area monetary policy on CESEE – what do we know?

Studies **differ in econometric design** and **modeling of the euro area monetary policy shock**

Main takeaways from the literature:

- **Positive effects on output, weaker effects on inflation** (*Babecká Kucharčuková et al., 2016; Horváth and Voslářová, 2017; Potjagailo, 2017; Feldkircher et al., 2019*).
- **Spillovers** tend to be of **similar size as domestic euro area effects** (*Babecká Kucharčuková et al., 2016; Hájek and Horváth, 2016, 2018; Potjagailo, 2017*), but some cross-country variation.
- **Strongest effects in Baltics** (*Benecka et al., 2018; Burriel and Galesi, 2018*), **weakest in SEE** (*Hájek and Horváth, 2016, 2018; Moder, 2019*).
- **Knock-on effects** account for **large fraction of overall size of spillover** effect (*Burriel and Galesi, 2018*); these are especially important for the Baltics (*Benecka et al., 2018*).

Main findings of recent OeNB study (*Feldkircher et al., 2019*):

- **Transmission** of spillovers through an **exchange rate channel** (appreciation of local CESEE currencies against the euro) and a **broad financial channel** (decrease in CESEE long-term yields, increase in equity prices and private credit).

Assessing spillovers using a new metric of monetary policy

- We use the **monetary policy surprises** from Altavilla et al. (2019), which are extracted from **high-frequency movements of the yield curve** around press releases and conferences on the ECB's monetary policy decisions
- Altavilla et al. (2019) exclusively consider euro area-specific reactions of selected macroeconomic and financial quantities → no information on international spillovers
- We estimate **spillover effects** with a **multi-country panel VAR model** using Bayesian techniques
- Allows for clustering countries in different country groups, namely euro area core, periphery and CESEE countries
- The surprises are scaled to yield a **100bp reduction in the euro area term spread**

Impact of ECB monetary policy measures on the output gap

Output gap (based on industrial production)

Reaction after 1, 2 and 3 years

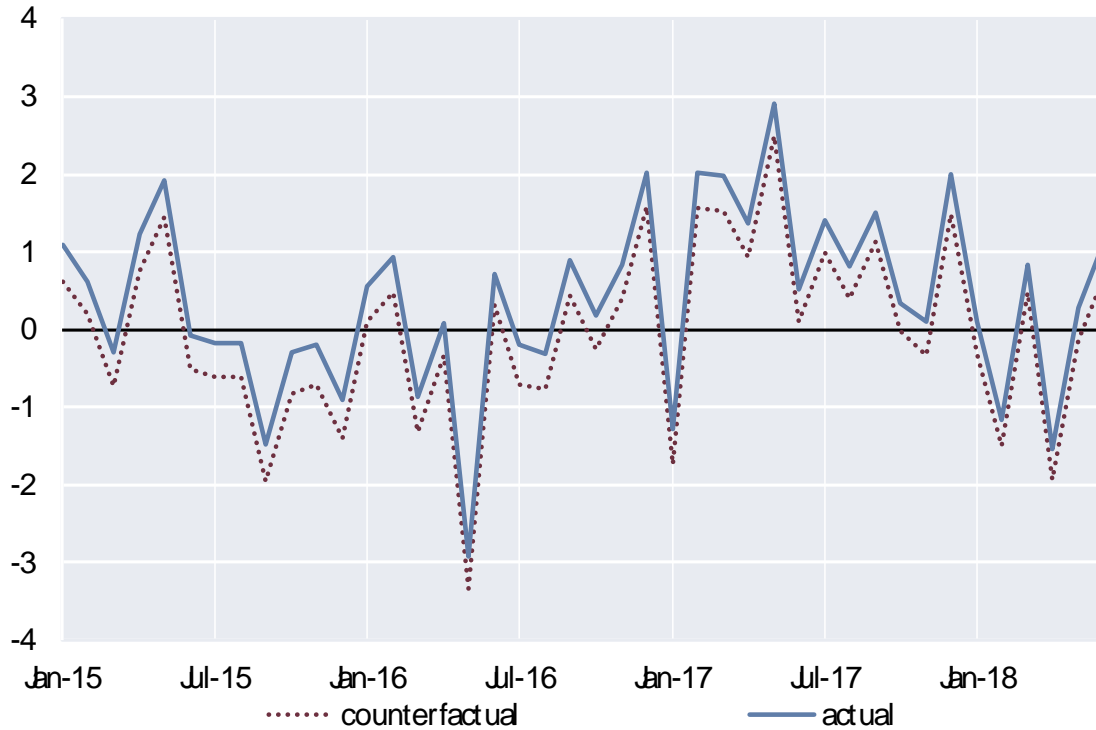


Source: Own calculations

Counterfactual exercise: The role of the ECB's monetary policy since 2015

BG: Cyclical component of industrial production

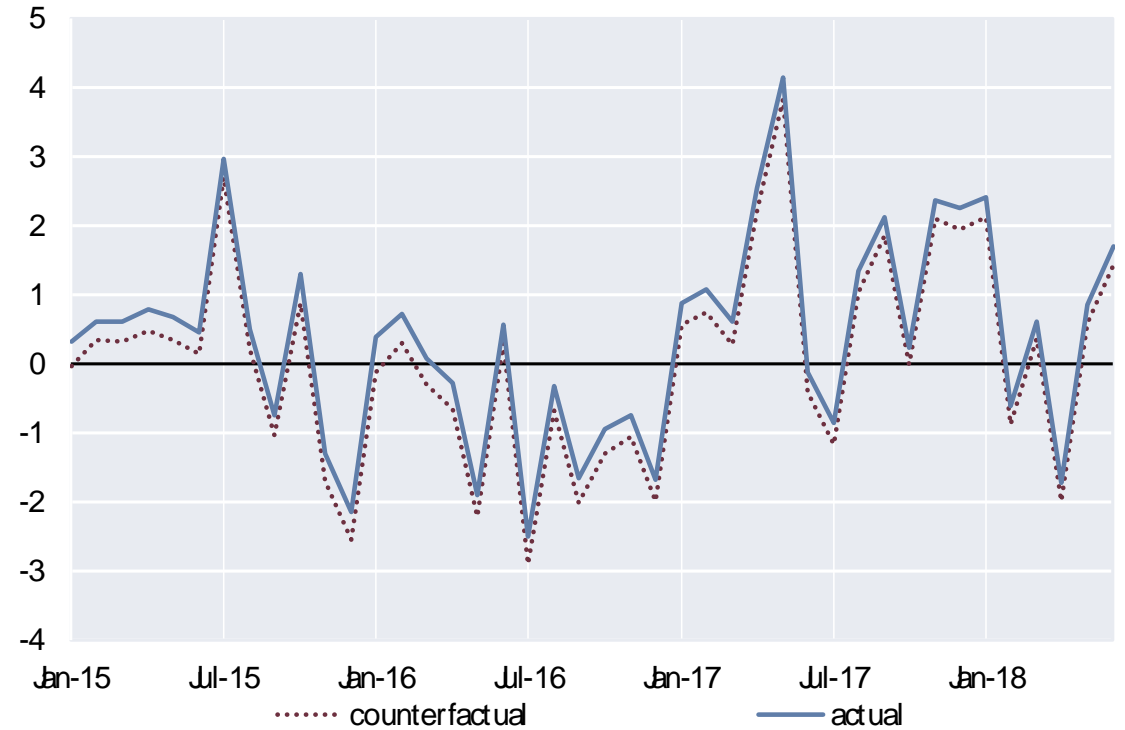
in % of industrial production



Source: Own calculations.

CZ: Cyclical component of industrial production

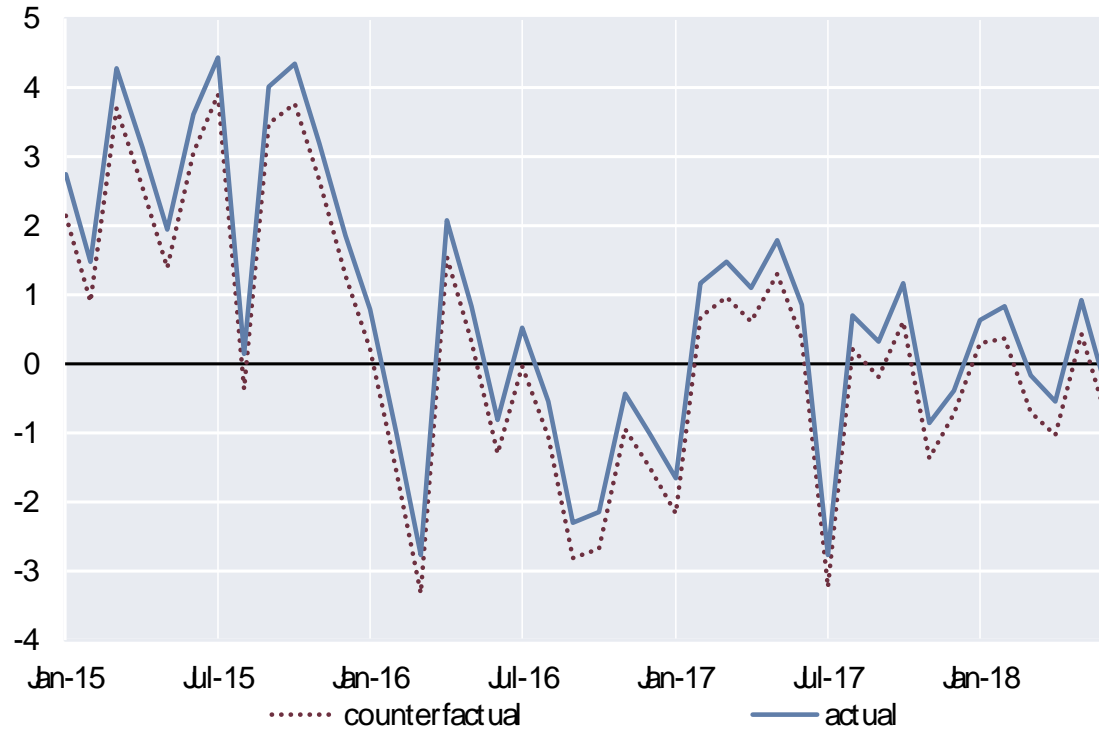
in % of industrial production



Source: Own calculations.

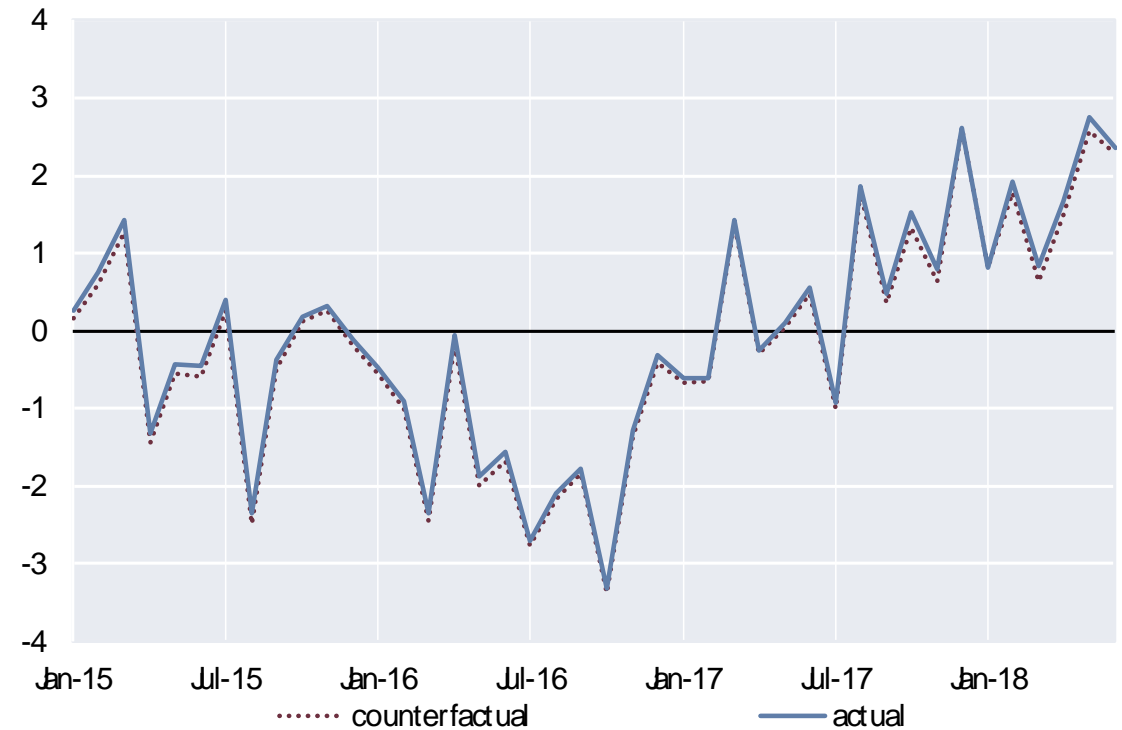
Counterfactual exercise: The role of the ECB's monetary policy since 2015

HU: Cyclical component of industrial production
in % of industrial production



Source: Own calculations

PL: Cyclical component of industrial production
in % of industrial production



Source: Own calculations

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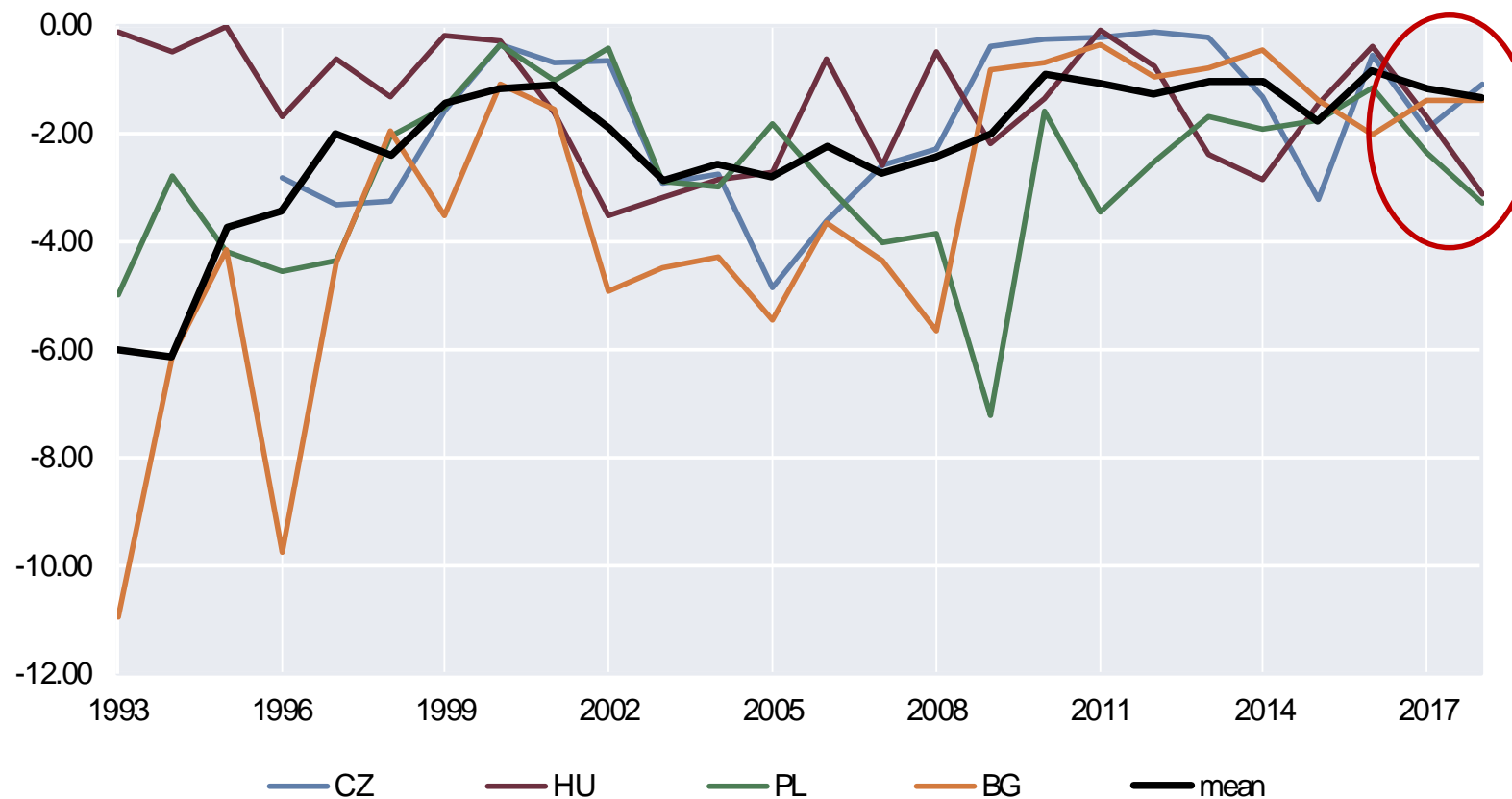
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Business cycles have become more synchronized with the euro area

Business cycle synchronization with the euro area

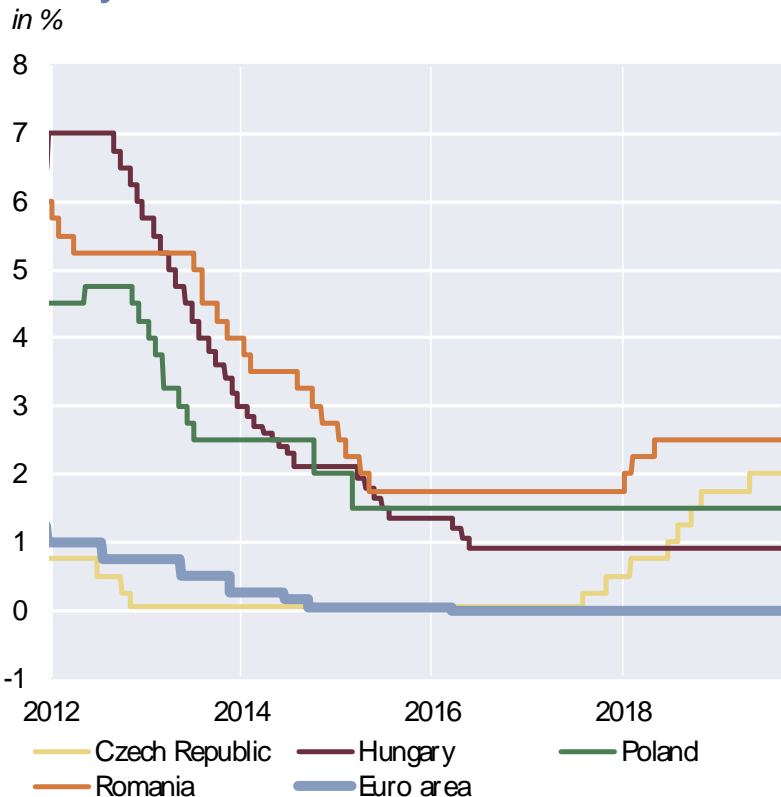
Opposite of absolute differences of annual growth rates to euro area growth rates, in percentage points.



Source: IMF.

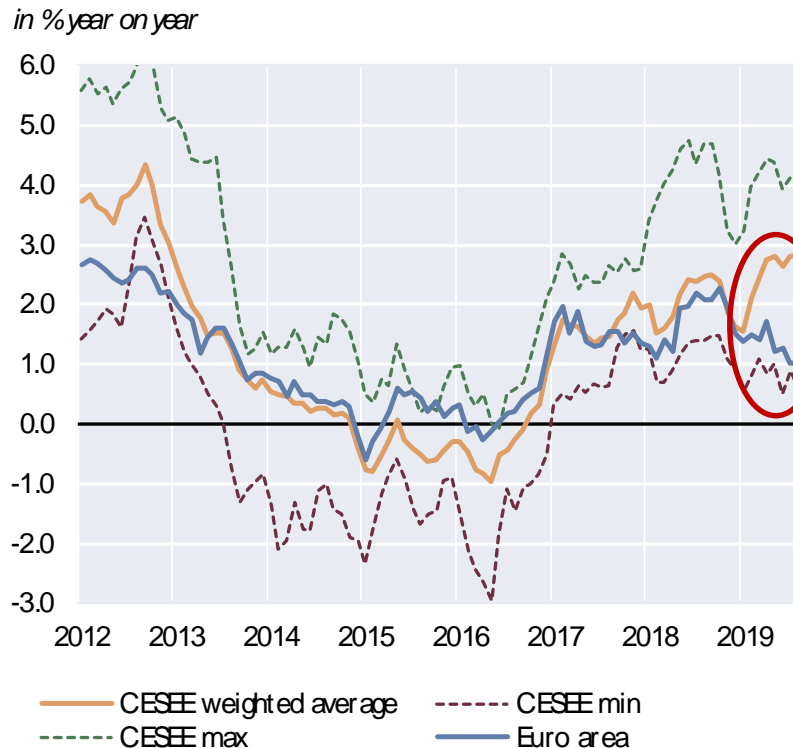
.... but inflation (and output gap) dynamics have diverged recently

Policy rates in selected CESEE countries



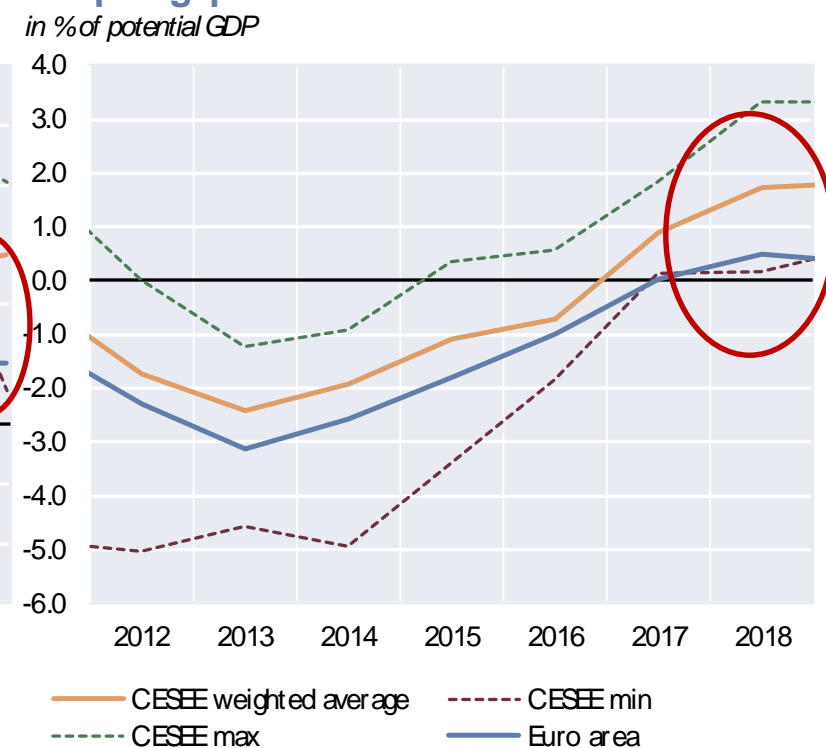
Source: Macrobond

Inflation in selected CESEE countries



The CESEE aggregate includes BG, CZ, HR, HU, PL and RO.
Source: Eurostat.

Output gap of selected CESEE countries



The CESEE aggregate includes BG, CZ, HR, HU, PL and RO.
Source: AMECO.

Danke für Ihre Aufmerksamkeit

Thank you for your attention

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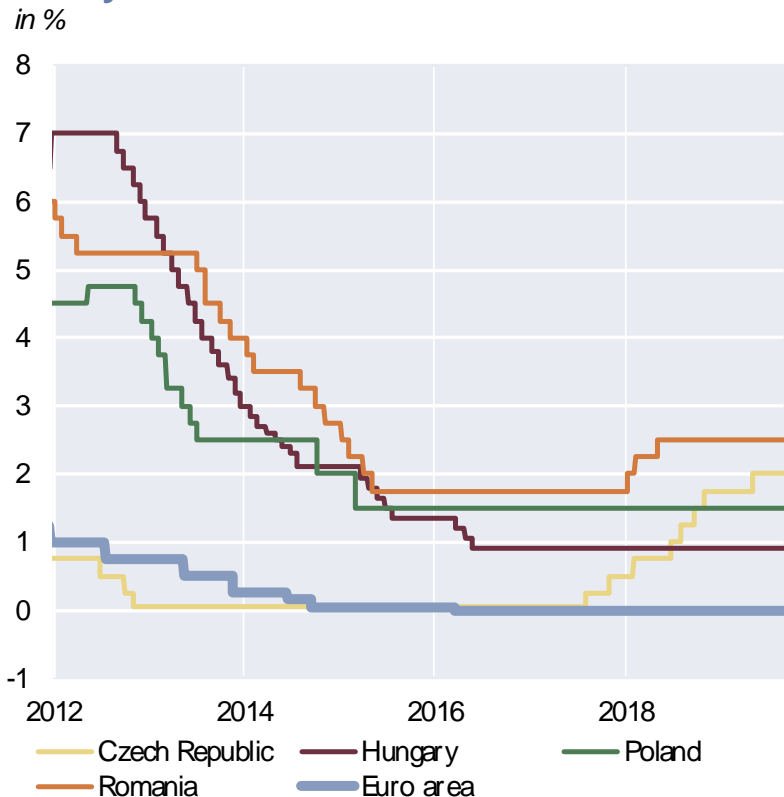
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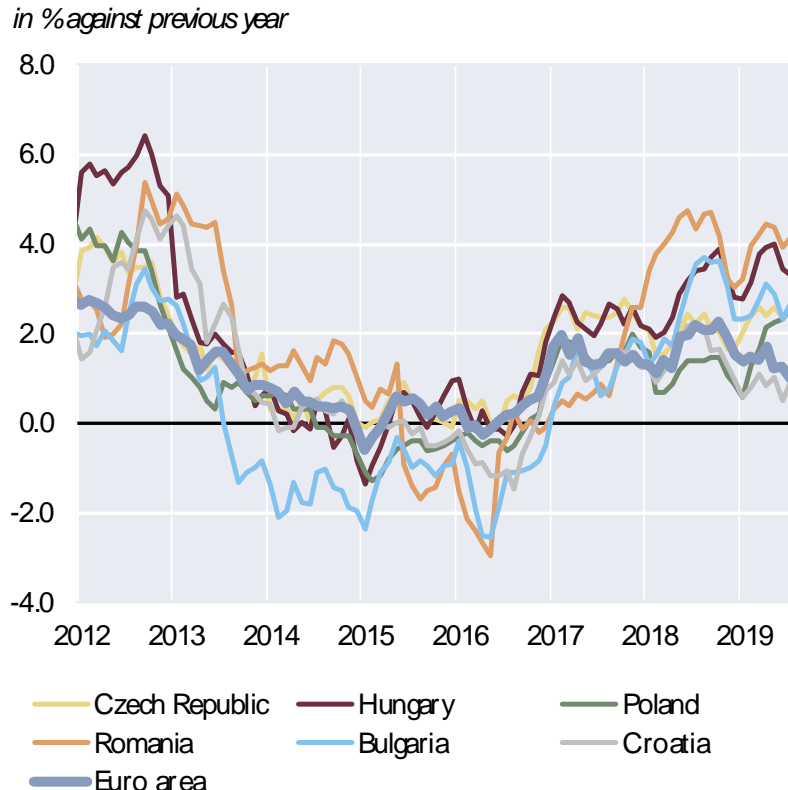
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Policy rates in selected CESEE countries



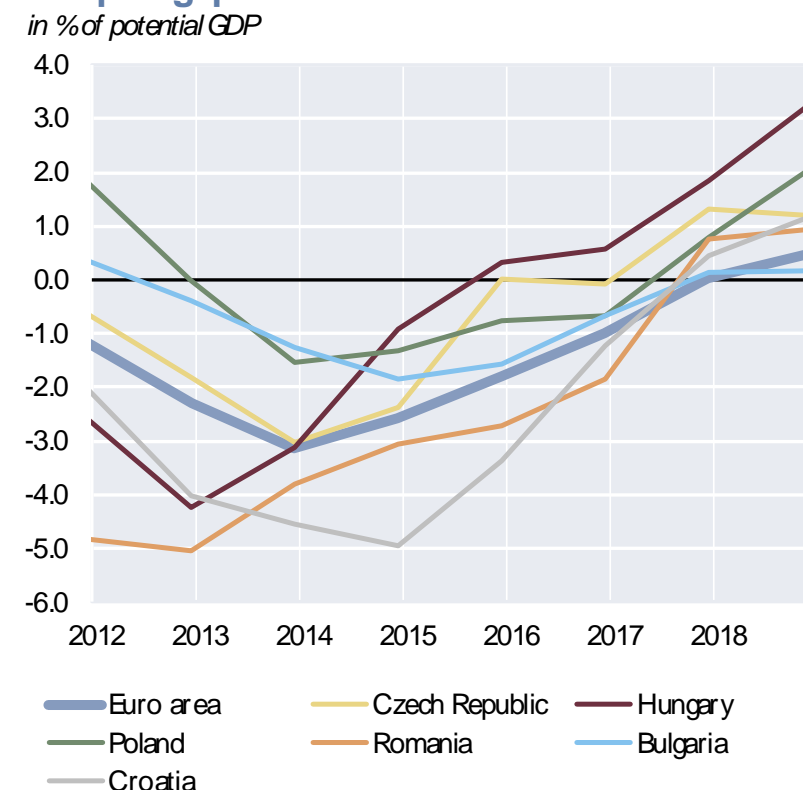
Source: Macrobond

Inflation in selected CESEE countries



Source: Eurostat.

Output gap of selected CESEE countries



Source: AMECO.