



# RESPONSES TO MONETARY POLICY AND FINANCIAL SHOCKS IN NON-EURO AREA CESEE COUNTRIES

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Eastern European (CESEE) Countries  
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# Key questions

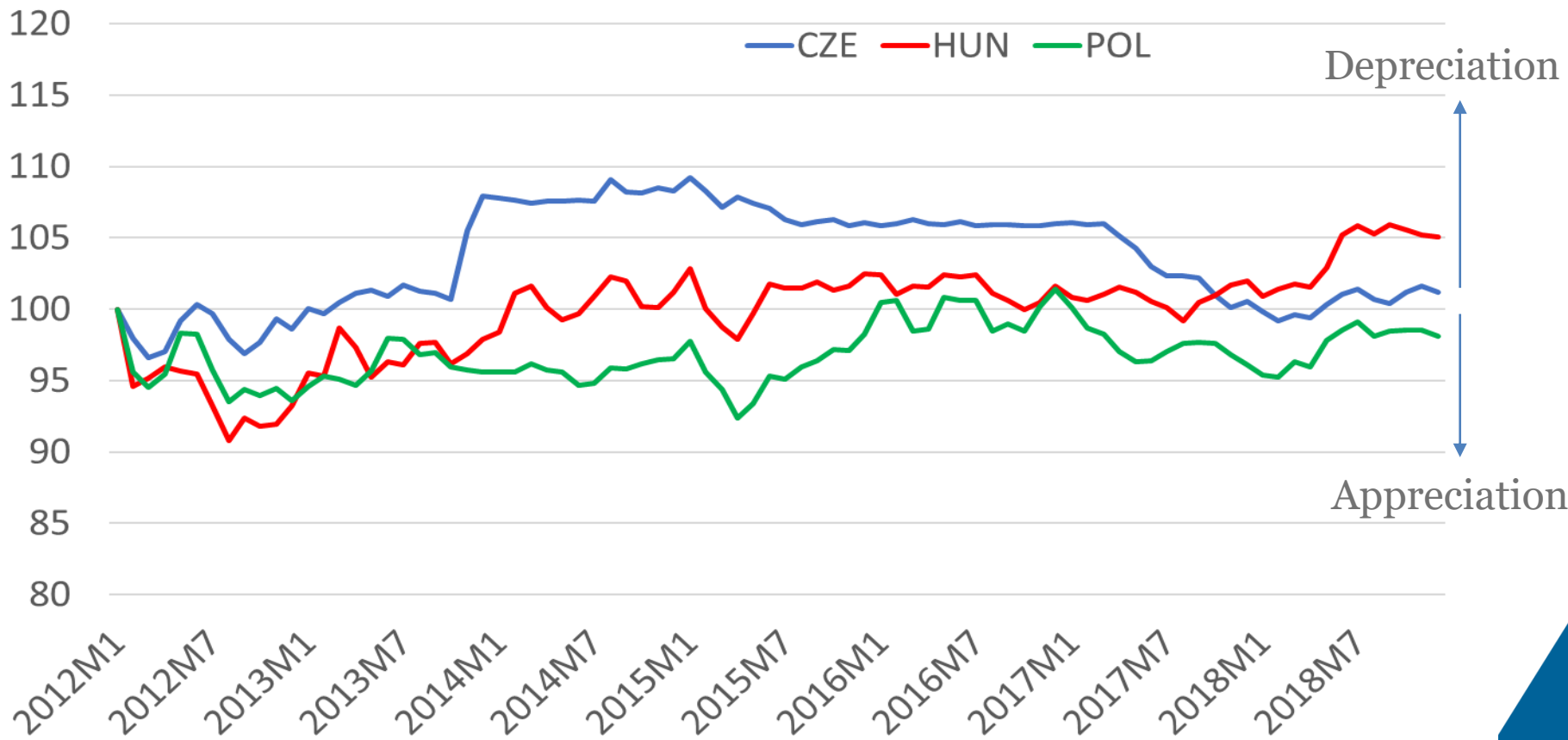
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- Monetary policy transmission through trade and financial integration: What does theory suggest?
- Empirical evidence on co-movements and spillovers for financial variables and real activity
- Policy levers when tensions appear between monetary policy, financial conditions and the economic position



## Nominal exchange rates, floating but have been relatively stable

Nominal euro exchange rate, index Jan 2012=100



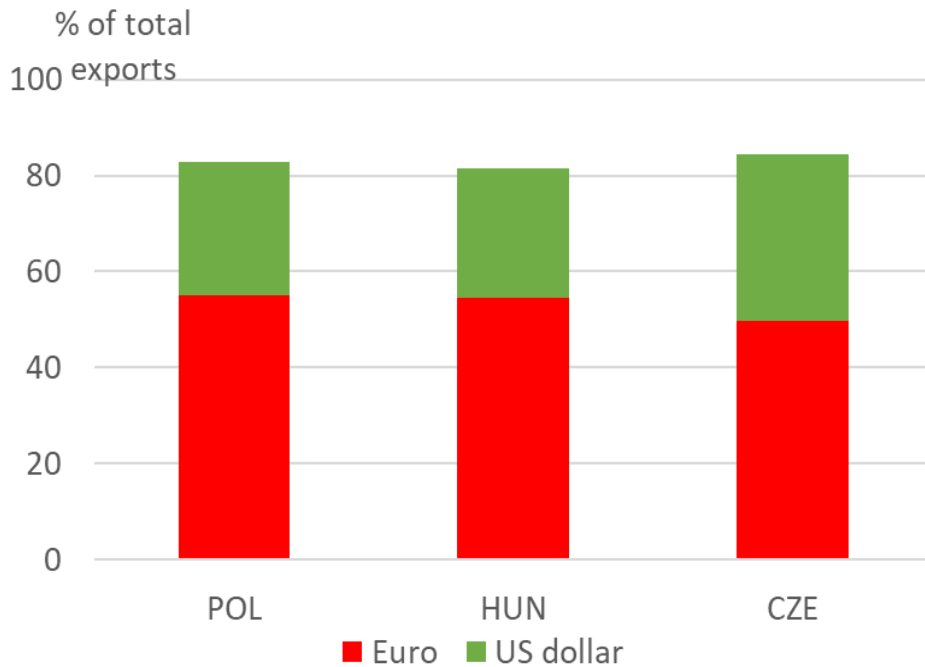
Note: According to the IMF de-facto classification of exchange rate regime in 2017, the Czech Republic maintained a soft peg (stabilised agreement) with the euro, Poland had a free floating regime and Hungary had a floating regime.

Source: OECD database.

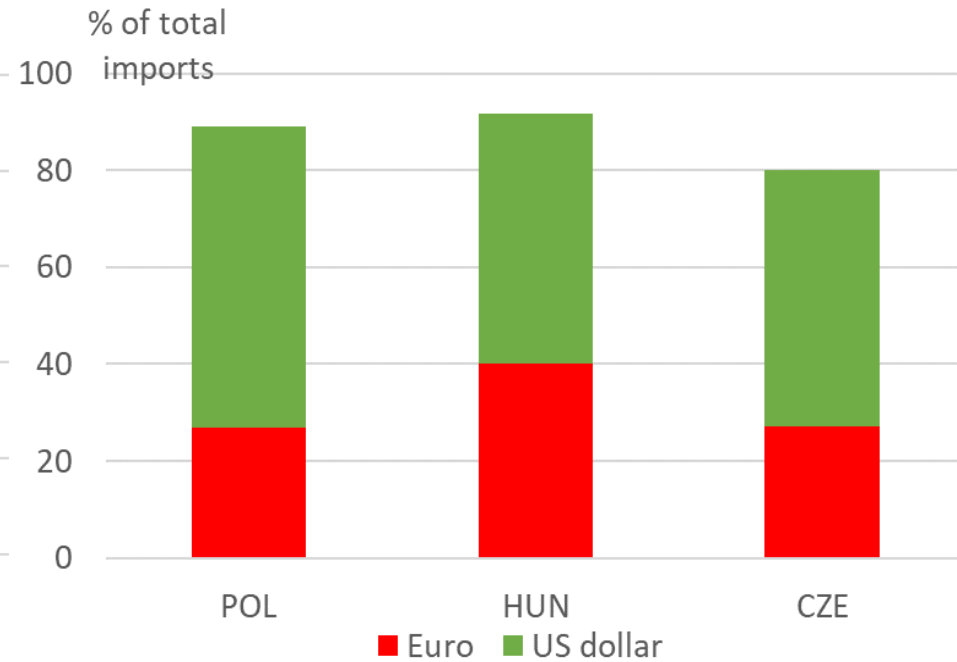


# The euro is the primary invoicing currency for CESEE exports

## A. Invoicing currencies of exports



## B. Invoicing currencies of imports



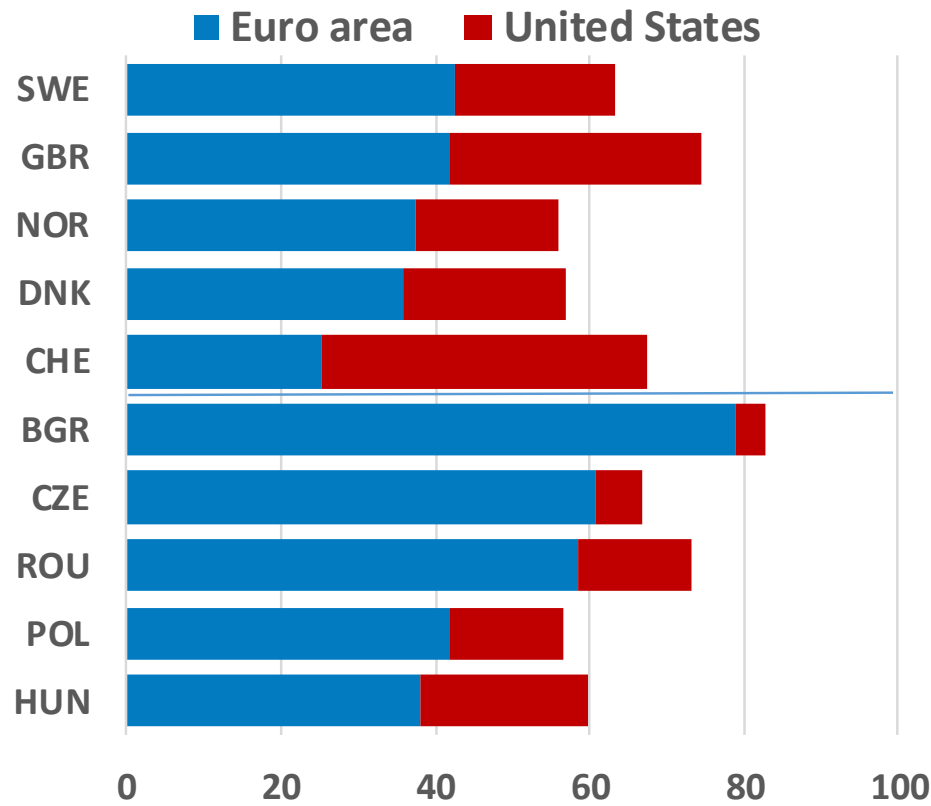
Note: Extra-EU merchandise trade by invoicing currency in 2018.

Source: Eurostat.



## CESEE countries have significant financial linkages with the euro area

Stock of portfolio liabilities (debt securities and equity) vis-à-vis the EA and the USA, % of total portfolio liabilities

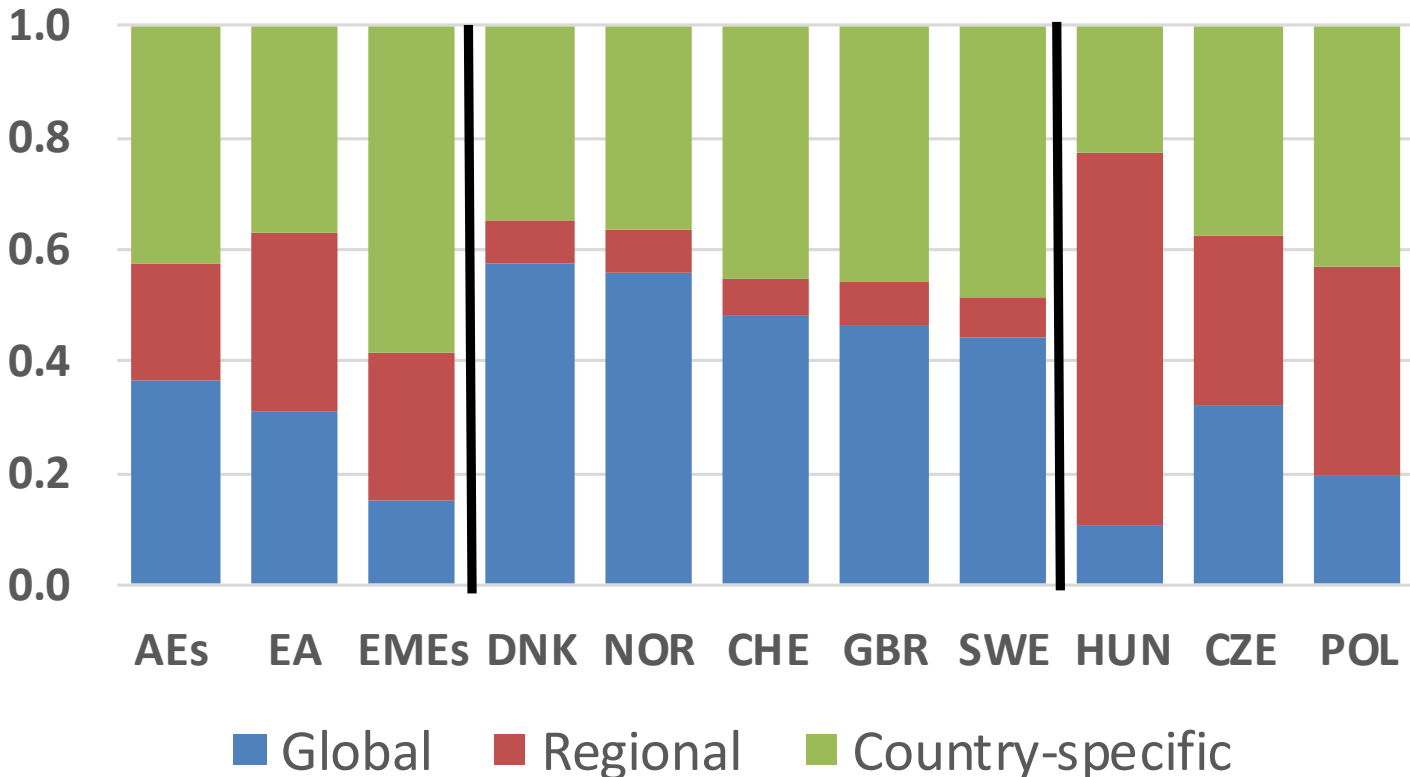


Source: IMF Coordinated Portfolio Investment Survey; IMF Coordinated Direct Investment Survey; and OECD calculations.



# Changes in CESEE government bond yields are strongly affected by the European regional factor

Contribution of factors to the variance of 10y government bond yields, as a share



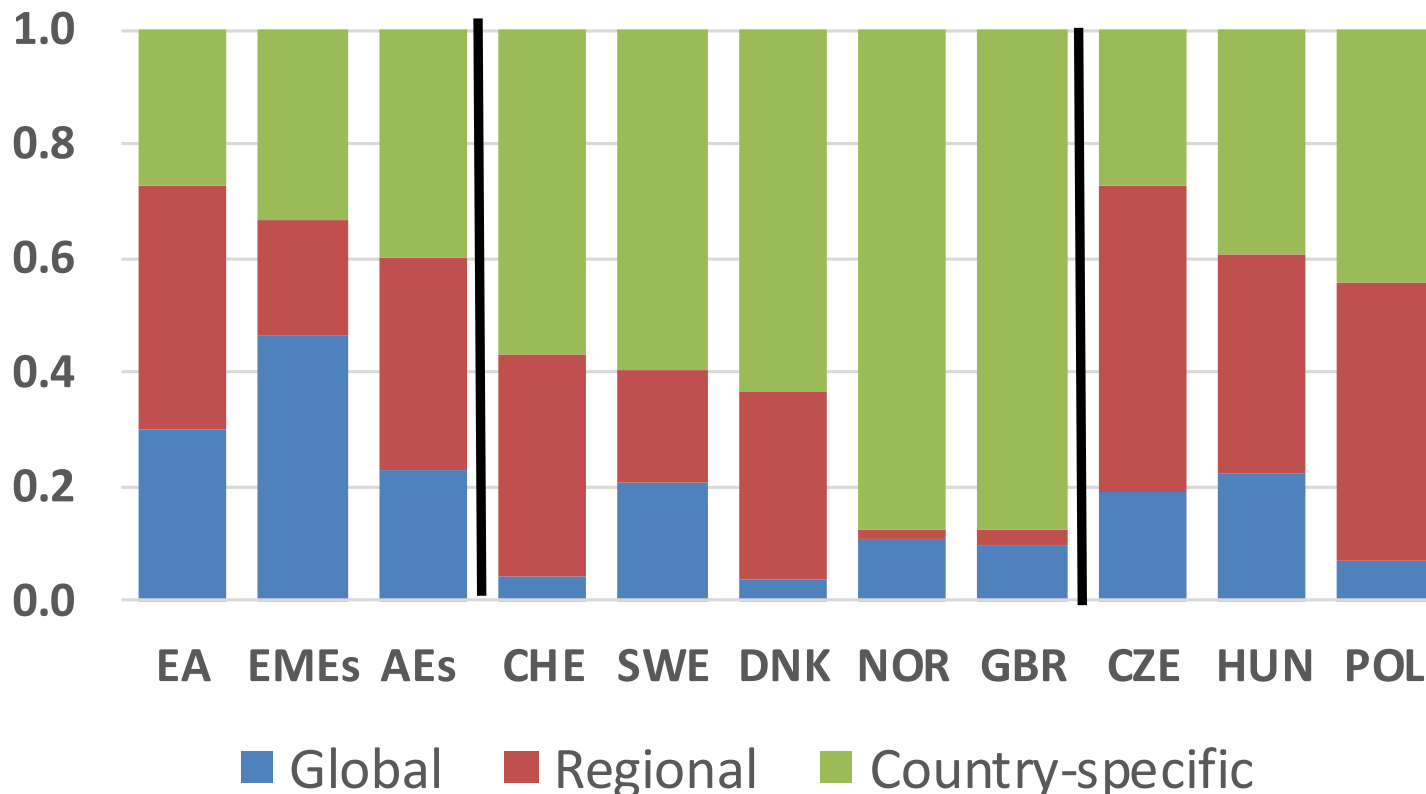
*Note:* Results for country groups (AEs, EA and EMEs) refer to the averages for relevant countries. Factors are estimated in a dynamic two-factor model (global and regional) at annual frequency with one lag. For European countries, the regional factor refers to mostly European (both advanced and emerging market) economies. Bond yields are first differenced to ensure stationarity. Estimations for 42 countries over 2010-17.

*Source:* Maravalle and Rawdanowicz (2018), "Changes in Economic and Financial Synchronisation: A Global Factor Analysis", OECD Economics Department Working Papers, No. 1517.



# Changes in CESEE equity prices are also strongly affected by the European regional factor

Contribution of factors to the variance of equity prices, as a share

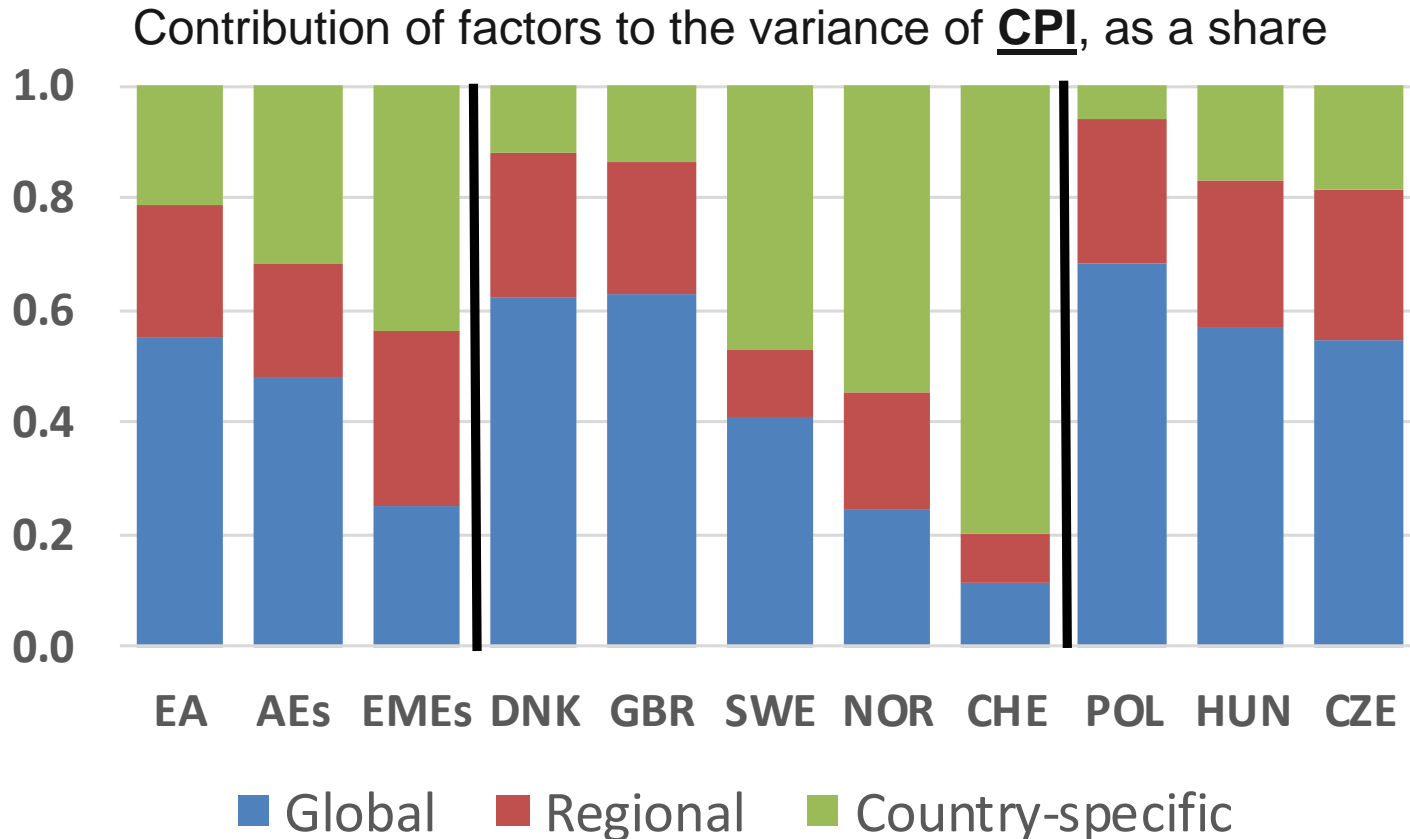


*Note:* Results for country groups (EA, EMEs and AEs) refer to the averages for relevant countries. Factors are estimated in a dynamic two-factor model (global and regional) at annual frequency with one lag. For European countries, the regional factor refers to mostly European (both advanced and emerging market) economies. A percentage change is applied to equity prices to ensure stationarity. Estimations for 42 countries over 2010-17.

*Source:* Maravalle and Rawdanowicz (2018), "Changes in Economic and Financial Synchronisation: A Global Factor Analysis", OECD Economics Department Working Papers, No. 1517.



# Fluctuations in CESEE domestic inflation are dominated by the global factor



*Note:* Results for country groups (EA, AEs and EMEs) refer to the averages for relevant countries. Factors are estimated in a dynamic two-factor model (global and regional) at annual frequency with one lag. For European countries, the regional factor refers to mostly European (both advanced and emerging market) economies. Estimations for 42 countries over 2010-17, using growth rates of headline CPI.

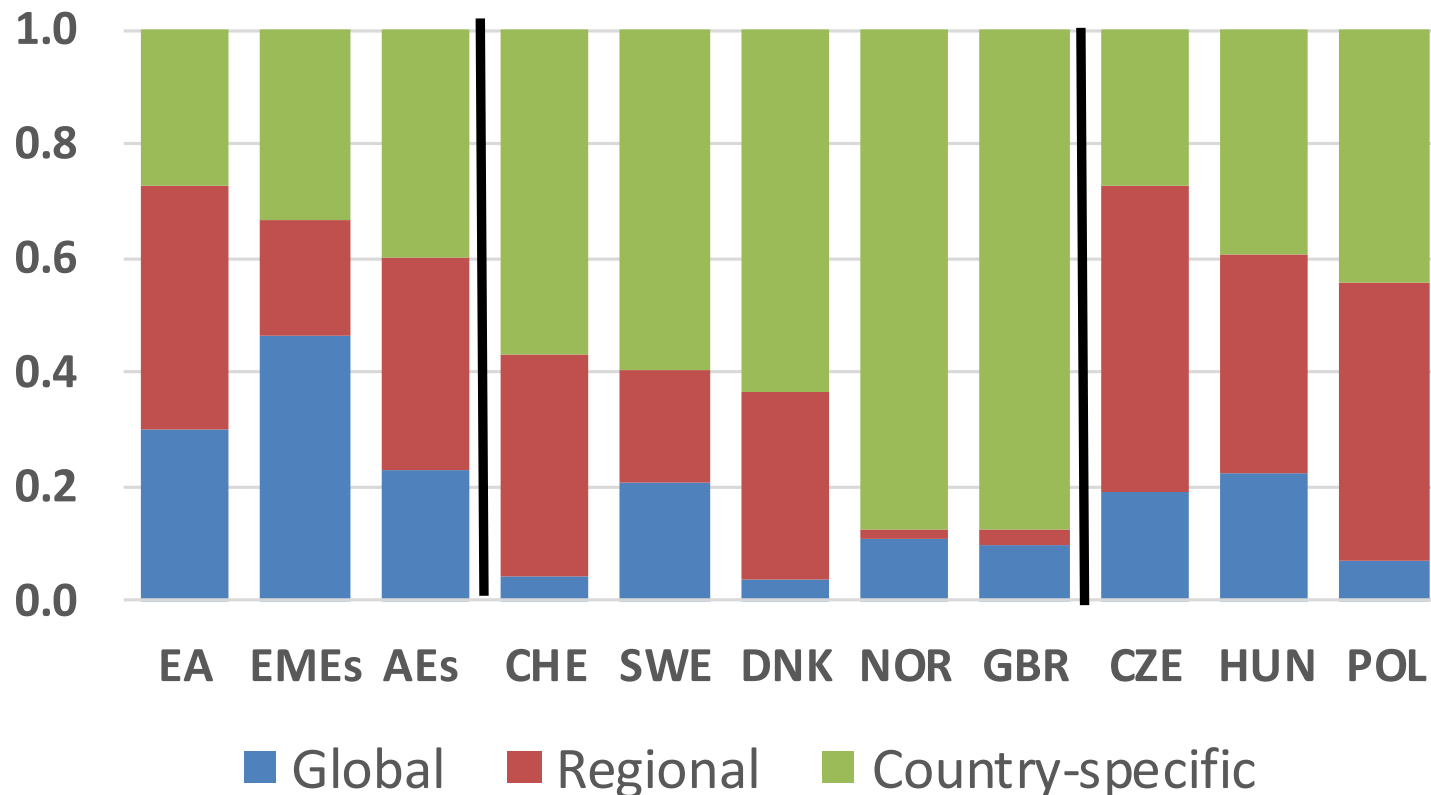
*Source:* Maravalle and Rawdanowicz (2018), "Changes in Economic and Financial Synchronisation: A Global Factor Analysis", OECD Economics Department Working Papers, No. 1517.





# Changes in CESEE GDP growth are strongly affected by the European regional factor

Contribution of factors to the variance of real GDP growth, as a share



*Note:* Results for country groups (EA, EMEs and AEs) refer to the averages for relevant countries. Factors are estimated in a dynamic two-factor model (global and regional) at annual frequency with one lag. For European countries, the regional factor refers to mostly European (both advanced and emerging market) economies. Estimations for 42 countries over 2010-17, using GDP growth rates.

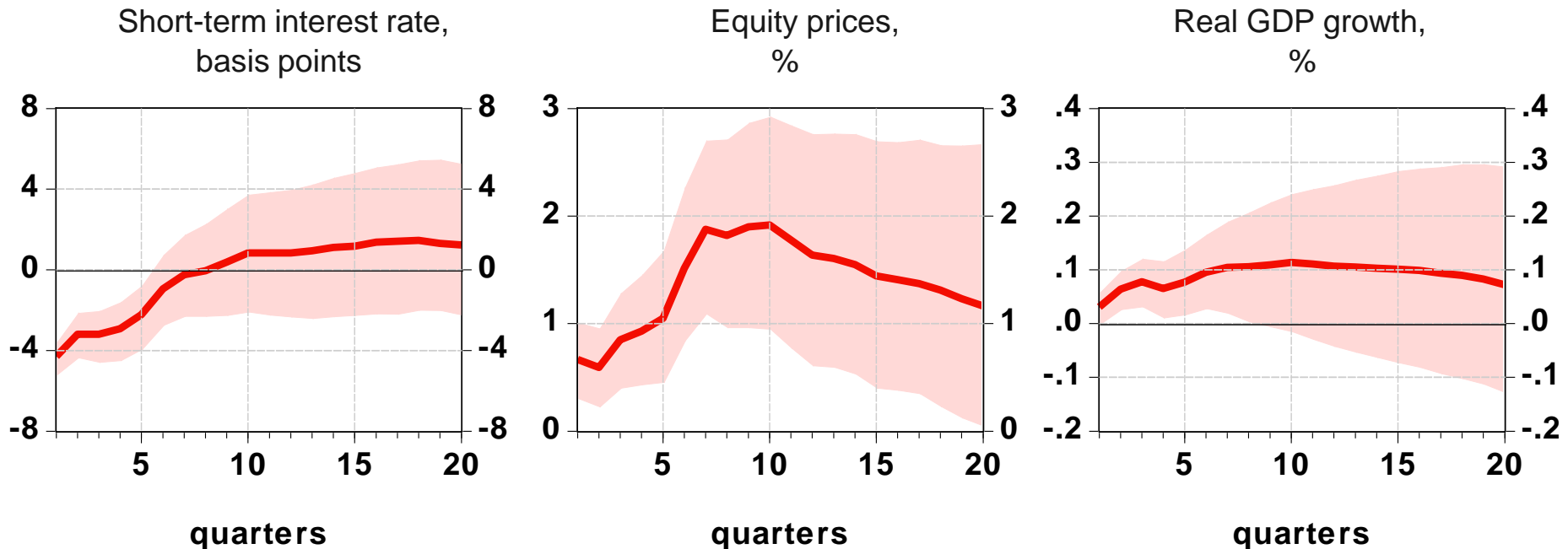
*Source:* Maravalle and Rawdanowicz (2018), "Changes in Economic and Financial Synchronisation: A Global Factor Analysis", OECD Economics Department Working Papers, No. 1517.



# Shocks to the euro area interest rate tend to have significant effects on CESEE countries, financial and real

## Czech Republic

Impulse response function to a one-standard deviation positive shock to the euro area short-term interest rates



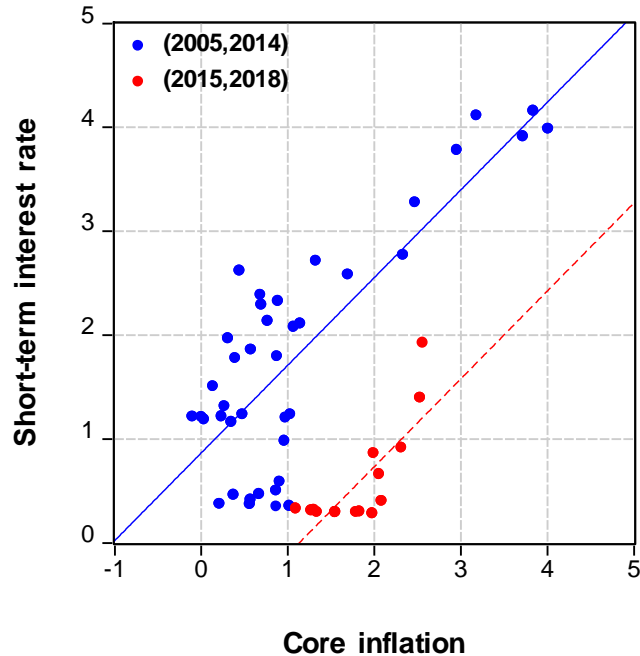
*Note:* Impulse response function to a one-standard deviation positive shock to the euro area short-term interest rate (i.e. easier financial conditions) based on the estimated large-scaled Bayesian VAR model (4 global variables, 5 euro area variables & 10 domestic variables) containing key macroeconomic and financial variables. Estimation sample is 1999-2018 for Hungary, 2000-2018 for the Czech Republic and 2001-2018 for Poland, all at quarterly frequency.

*Source:* OECD calculations

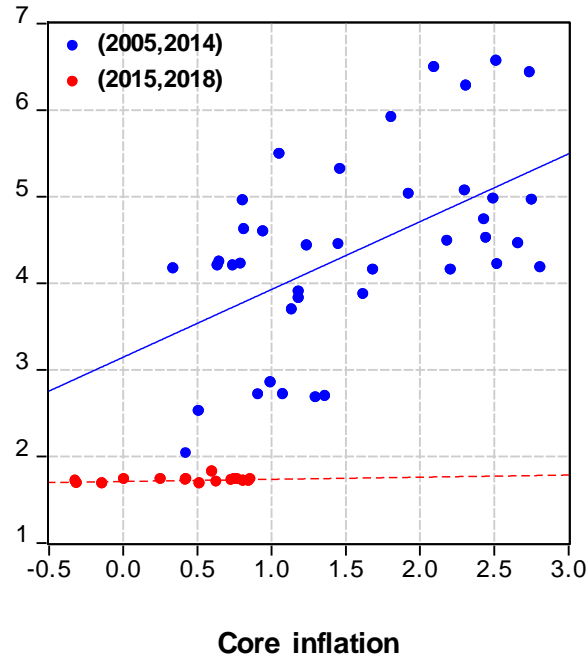


# Short-term CESEE interest rate have been less responsive to domestic conditions recently

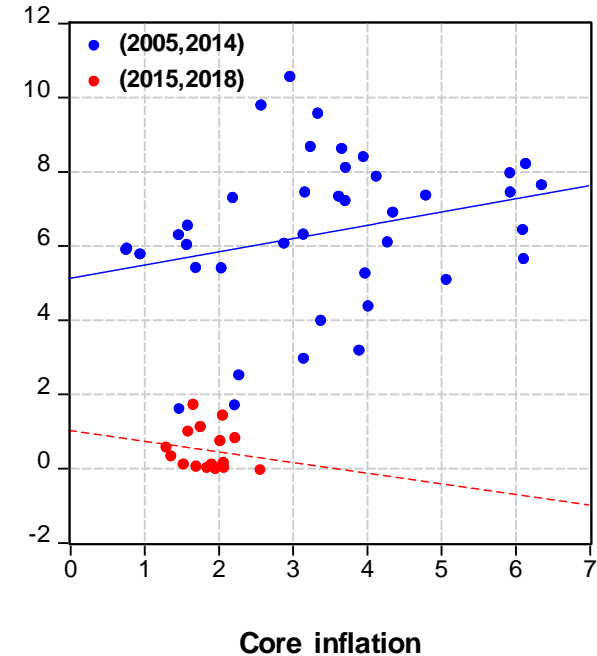
Czech Republic



Poland



Hungary

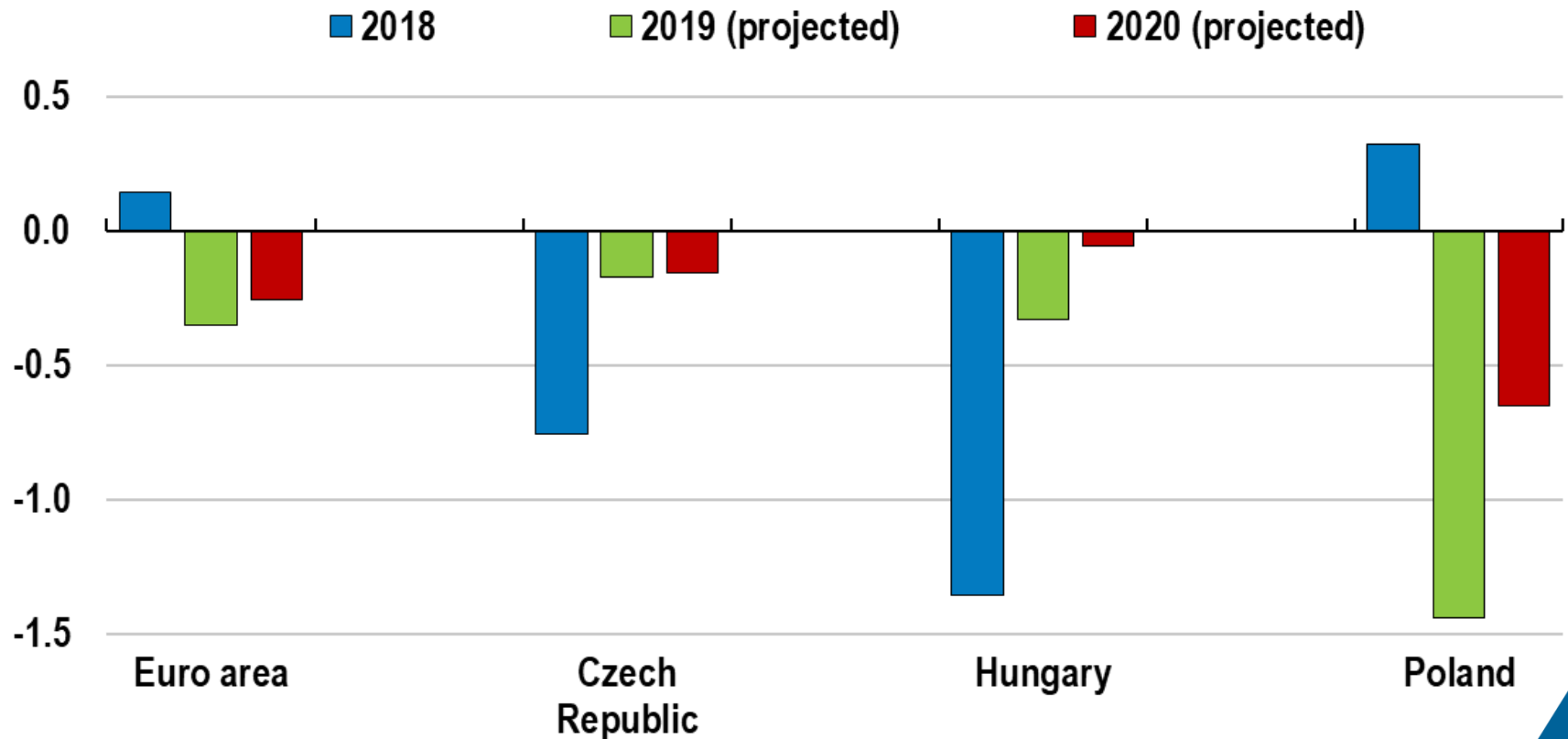


Source: OECD Economic Outlook 105 database.



## The fiscal stance is pro-cyclical (too loose) in some CESEE countries

Change in the underlying primary balance  
% of potential GDP





# Conclusion

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- Strong evidence of transmission of monetary and financial conditions from the EMU to non-euro area CESEE countries
- Monetary policy is constrained, especially with stable exchange rates
- To the extent that the policy-mix may create domestic imbalances, there may be some scope to use fiscal policy in a more counter-cyclical way (tightening), thus helping with more gradual monetary tightening



# Sources

## [OECD Economic Outlook](#)



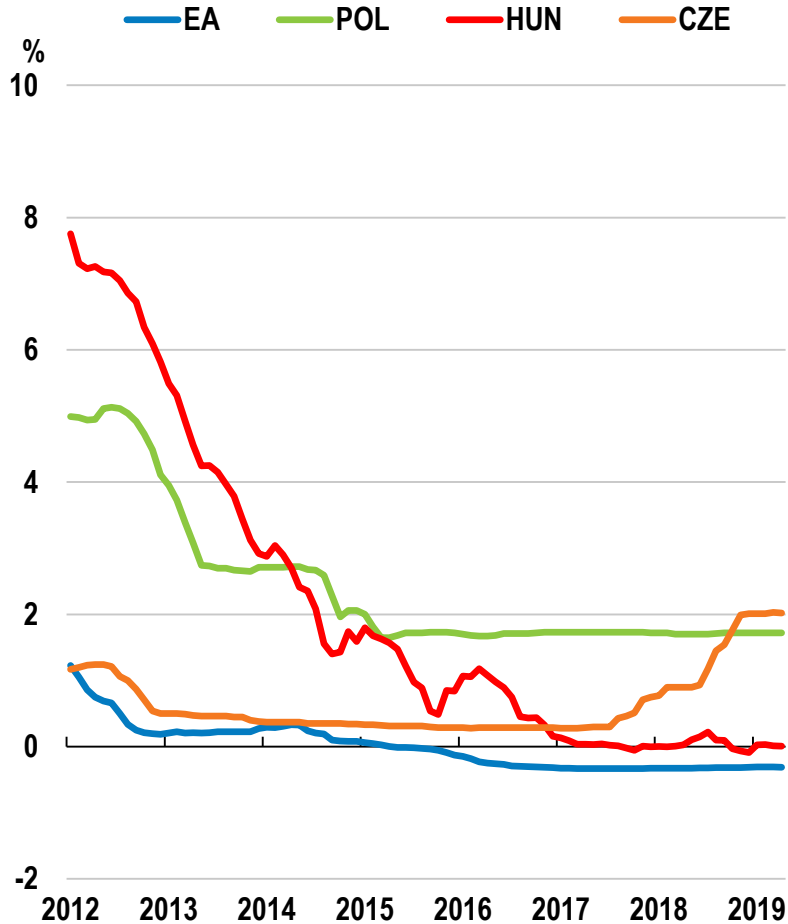
## [ECOSCOPE blog](#)



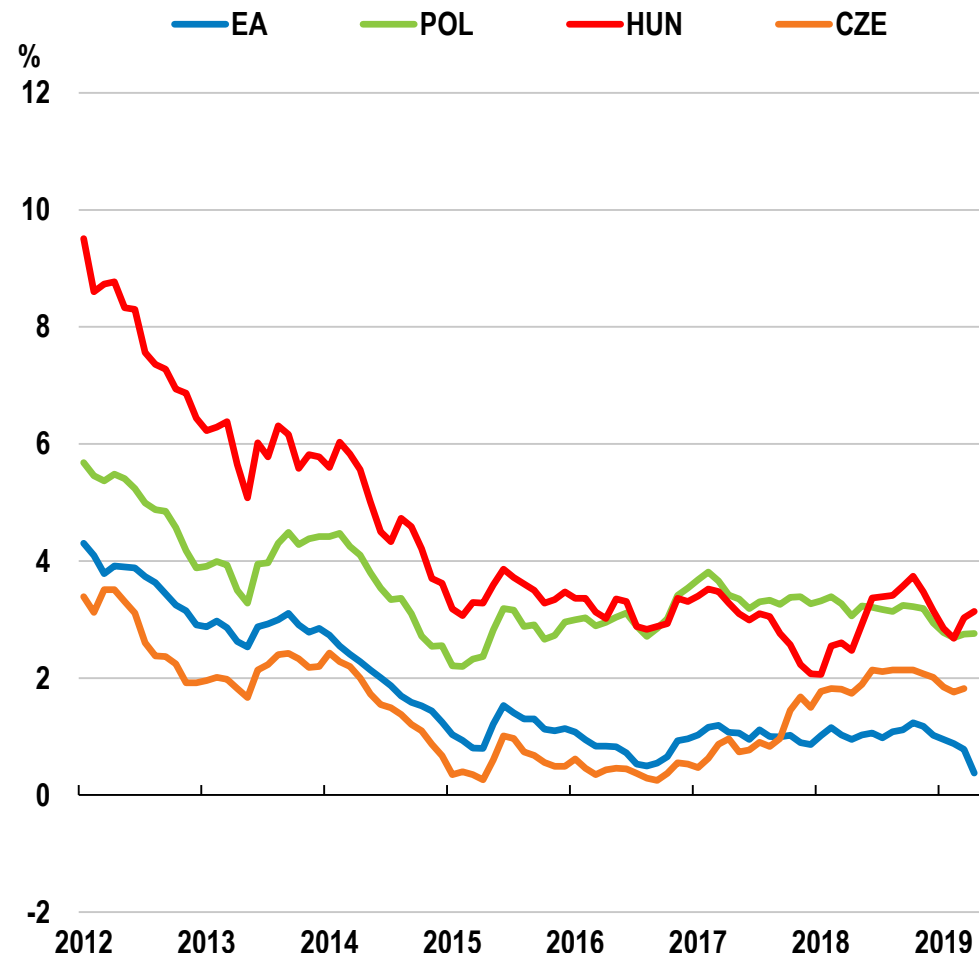


# Evolution of interest rates in the euro area and CESEE countries

## A. Short-term interest rates



## B. 10-year government bond yields



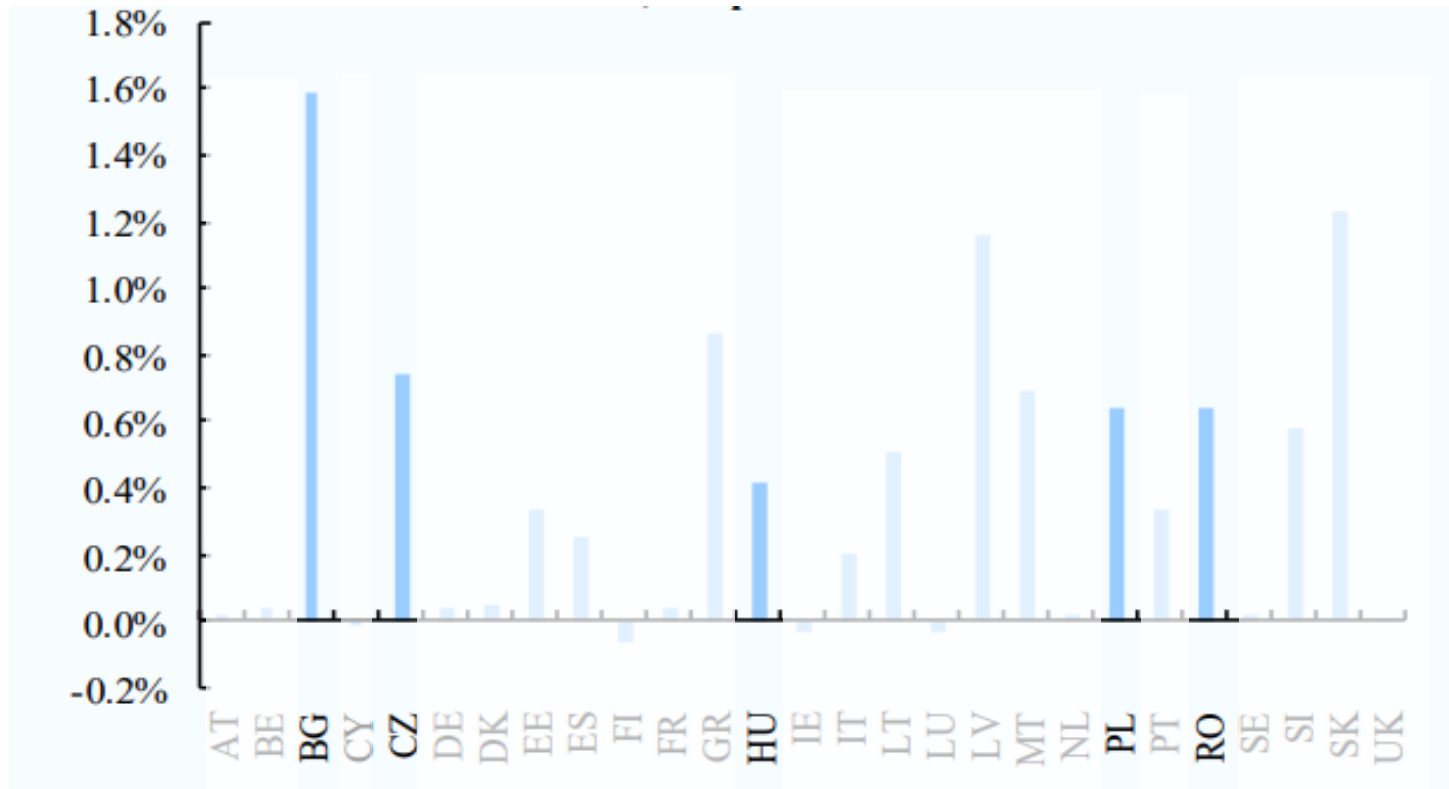
Note: Short-term rates are defined as the 3-month interbank offer rate.

Source: Refinitiv.



# European Structural Funds have a significant impact on CESEE countries' growth

Total estimated impulse of EISF to GDP growth over 2019-2020, compared to 2018 GDP



Source: European Commission.