



EUROPEAN CENTRAL BANK

EUROSYSTEM

Monetary policy spillovers to CESEE

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*With thanks to I. Moder

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Introduction

- Ongoing discussion on **international effects** (i.e. spillovers) of **standard** and **non-standard monetary policy measures** of large advanced economies (mainly ECB and Fed)
- **CESEE countries are closely interlinked with the euro area**
 - Large presence of euro area headquartered banks and high financial euroisation
 - High trade integration and sizable remittance flows
- **Renewed interest** in spillovers of non-standard monetary policy measures **due to the monetary policy response to the COVID-19 shock**

How to measure monetary policy spillovers

- Which shock? Difference between monetary policy **systematically reacting** to a demand shock and a **monetary policy shock**
- Monetary policy shock: akin to a **sudden change** in the monetary policy rule (Leeper and Zha 2003)
- Methodological improvements in measuring monetary policy shocks in recent years
 - High frequency identification combined with sign and magnitude restrictions

US-Euro area monetary policy spillovers



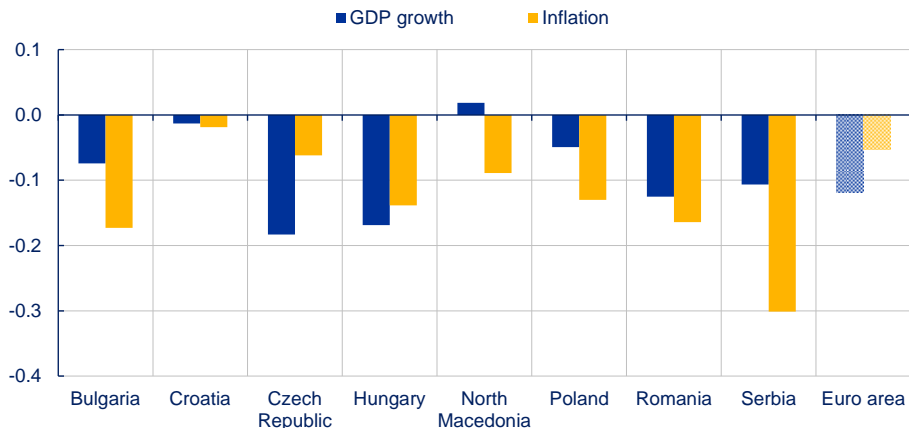
- Ca' Zorzi et al. (2020) (ECB Discussion Paper) compare the international transmission of US and ECB monetary policy shocks
- The effects are small on prices in both directions, but Fed shocks have large effects on euro area financing conditions (financial channel)
- Both the ECB and the Fed influence activity in EME, but the Fed more so

Conventional ECB monetary policy affects economic conditions in CESEE countries

- Most of the **literature** finds **evidence** for **spillovers** of **conventional euro area monetary policy on CESEE**
- But results **heterogeneous** across countries and **depend on model and specifications** used
- **Little evidence** on **transmission channels**

Peak response to a *contractionary* euro area interest rate shock

(percentage points)

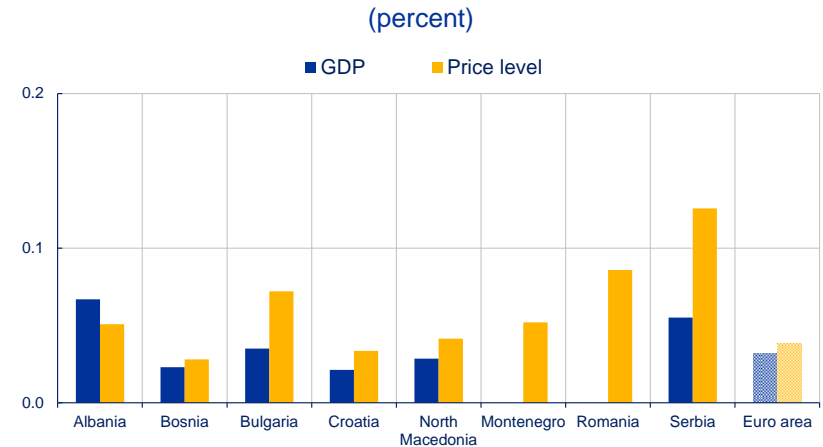


Source: ECB calculations based on ECB Working Paper No 2416. Note: The chart shows the peak (most negative) response of impulse responses to a 3bps MRO shock within the first 12 quarters after the shock. The contractionary euro area monetary shock is identified via sign restrictions on the MRO rate (+), euro area GDP growth (-) and euro area inflation (-), leaving the respective CESEE countries unrestricted.

Limited available research also points to spillovers from ECB non-standard measures

- **Research** on non-standard monetary policy measures **complicated by identification issues**
- **Some evidence for spillovers** of ECB **non-standard measures** on CESEE economic conditions (Moder 2017)
- Literature also finds **spillovers on financial conditions**

Peak response to an *expansionary* Eurosystem balance sheet shock



Source: ECB calculations based on Moder (2017). Note: The chart shows maximum responses to a 0.9% Eurosystem balance sheet shock within 24 months after the shock. The non-standard monetary policy shock is identified via sign and zero restrictions on Eurosystem balance sheet assets (+), the CISS indicator (-), the EONIA-MRO spread (-), the MRO rate (0) and contemporaneous zero restrictions on euro area and the CESEE country's GDP and price level, respectively. For Montenegro no estimate on GDP is available. For Romania the peak GDP response is surrounded by a large uncertainty band and thus not depicted here.

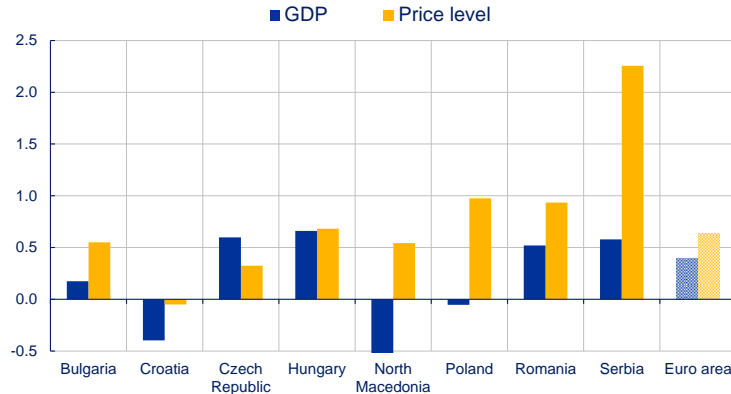
Spillovers of ECB monetary policy to CESEE depend on the underlying shock assumptions...

- **Spillover literature** usually **assumes** that **monetary policy is independent of economic developments**, i.e. monetary policy is defined as exogenous shock
- In practice, **monetary policy responds to economic conditions** (mostly demand but also supply shocks)
- **CESEE countries affected by ECB monetary policy measures**, but also by the **economic conditions prompting those monetary policy decisions** → ex-ante impact of ECB monetary policy measures on CESEE countries ambiguous

... which can have very different outcomes

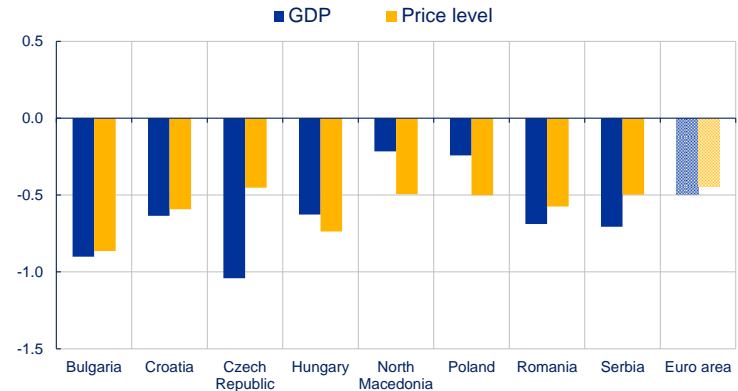
Cumulative impact under continuous expansionary monetary policy shocks after two years

(cumulative deviation of baseline in %)



Cumulative impact under continuous demand shock-induced expansionary monetary policy after two years

(cumulative deviation of baseline in %)

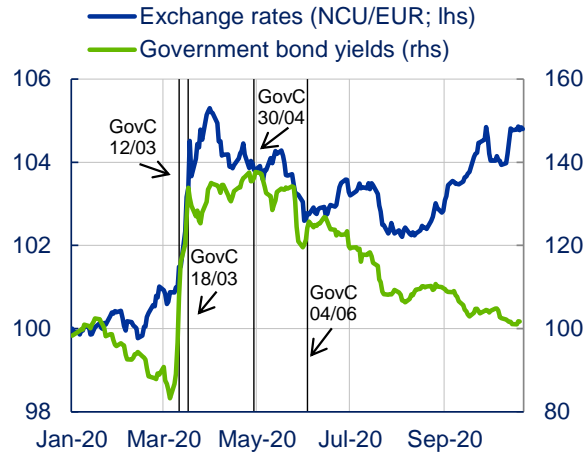


Source: ECB calculations based on Geis et al. (2020). Note: The charts show the cumulative impact of shock-specific conditional forecasts over 2019-2020, where the MRO rate is kept at 0 basis points over the forecast horizon. In the left chart the conditional forecasts are driven entirely by euro area monetary policy shocks, while in the right chart the conditional forecasts are driven entirely by monetary tightening responses to euro area demand shocks.

COVID-19 measures and CESEE financial markets

CESEE exchange rates and bond yields

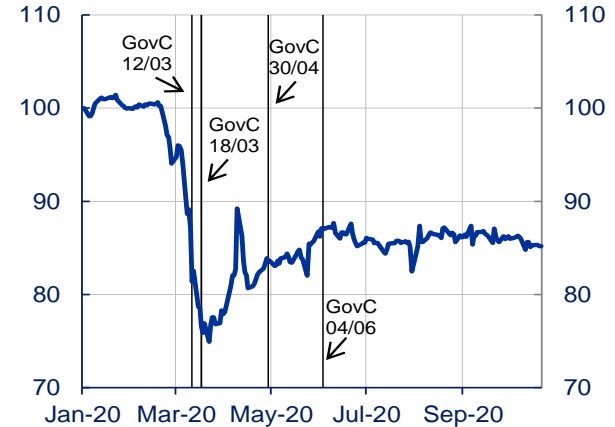
(index, 02/01/2020=100)



Source: ECB calculations, Bloomberg and Haver. Note: Exchange rates refer to the unweighted average of the national currencies of Albania, the Czech Republic, Hungary, Poland, Romania and Serbia against the euro. Government bond yields refer to the unweighted average of 10-year government bond yields of Croatia, the Czech Republic, Hungary, Montenegro, Poland, Romania and Serbia.

CESEE stock indices

(index, 02/01/2020=100)



Source: ECB calculations and Haver. Note: Stock indices refer to the unweighted average of Bosnia and Herzegovina, Bulgaria, Croatia, the Czech Republic, Hungary, Montenegro, North Macedonia, Poland, Romania and Serbia.

Conclusions

- **Some evidence that CESEE countries are affected by ECB conventional and non-standard monetary policy measures**
- **If monetary policy is assumed to respond to economic conditions, spillovers of euro area economic conditions might more than offset the impact of ECB monetary policy measures** and thus have the opposite effect
- **Development of CESEE financial conditions during COVID-19 shock were in line with global trends**, but ECB announcements coincided with a trend reversal