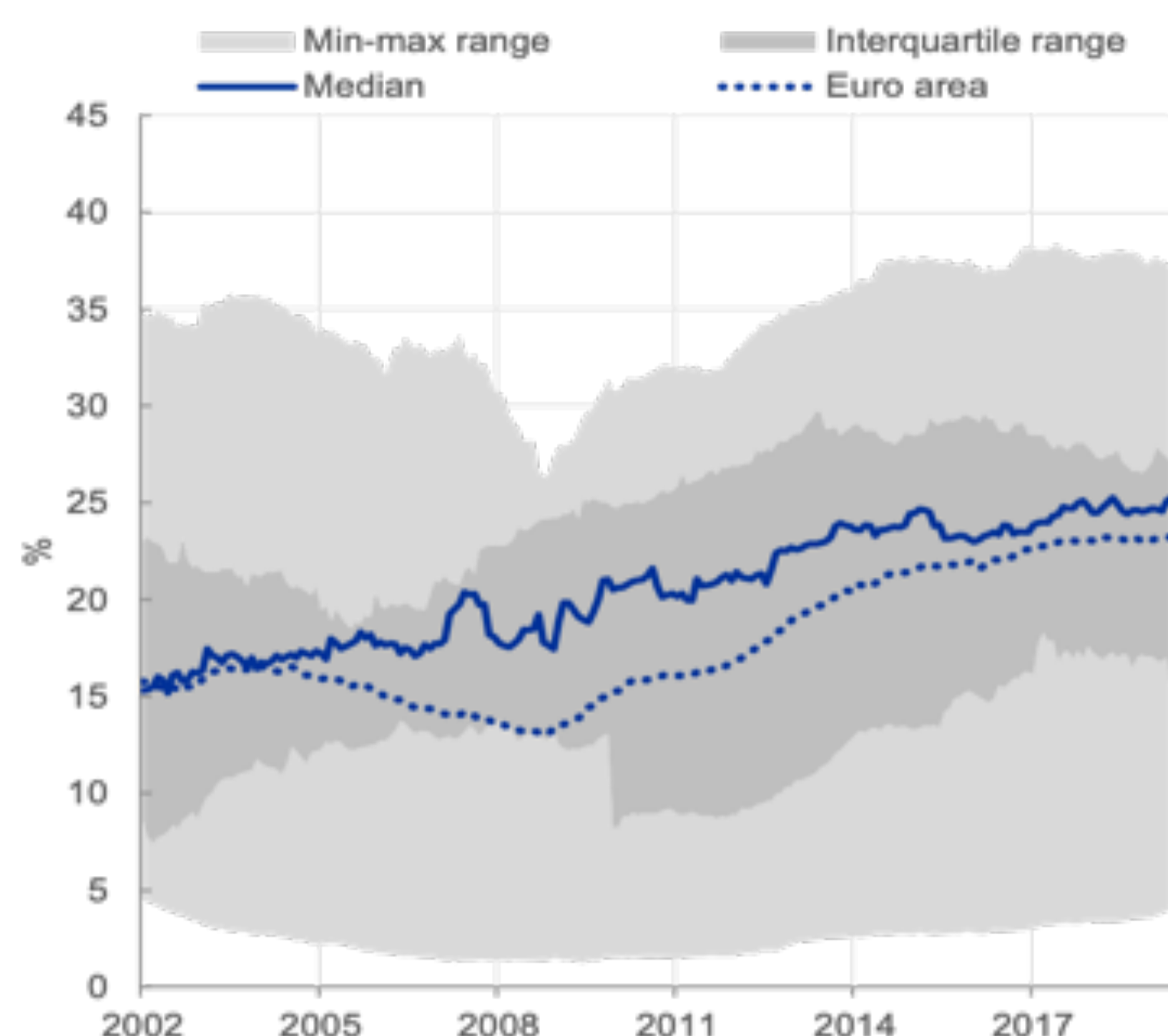


(The views expressed are those of the authors and do not represent the views of the European Central Bank or the Eurosystem)

Bond-based finance increasingly relevant at euro area and country level

Cross-country distribution of bond share (euro area)



Note: The bond share is calculated as the ratio of bonds over total debt financing (sum of corporate loan and bond volumes).

- Marked **shift in corporate debt structures**: increase in corporate bonds relative to bank loans
- Wide range of bond share (B/D) across euro area countries
- Time-series pattern of bond share primarily driven by **steady increase in bond volumes**

Question we address: Does shift in debt financing structures matter for monetary policy transmission?

Modelling dynamic impact of MP shock and its interaction with debt structure

Estimate **IRFs** via local projections (Jordá, 2005)*

$$y_{i,t+h} = \alpha_{i,h} + (\beta_{0,h} + \beta_h(B/D)_{i,t-1})shock_t^{IR} + controls + \varepsilon_{i,t+h} \text{ where}$$

$$y_{i,t+h} = [GDP_{i,t}, Defl_{i,t}, Loan_{i,t}, Bond_{i,t}, (B/D)_{i,t}, Intermed. wedge_{i,t}, r_t]$$

Combined effect of monetary policy shock:

$$\frac{\partial y_{i,t+h}}{\partial shock_t^{IR}} = \beta_{0,h} + \beta_h(B/D)_{i,t-1}$$

- Estimate IRFs at different points of B/D distribution

Identification: High-frequency surprises in short-term rate around Governing Council meetings (EA-MPD by Altavilla et al., 2019)**

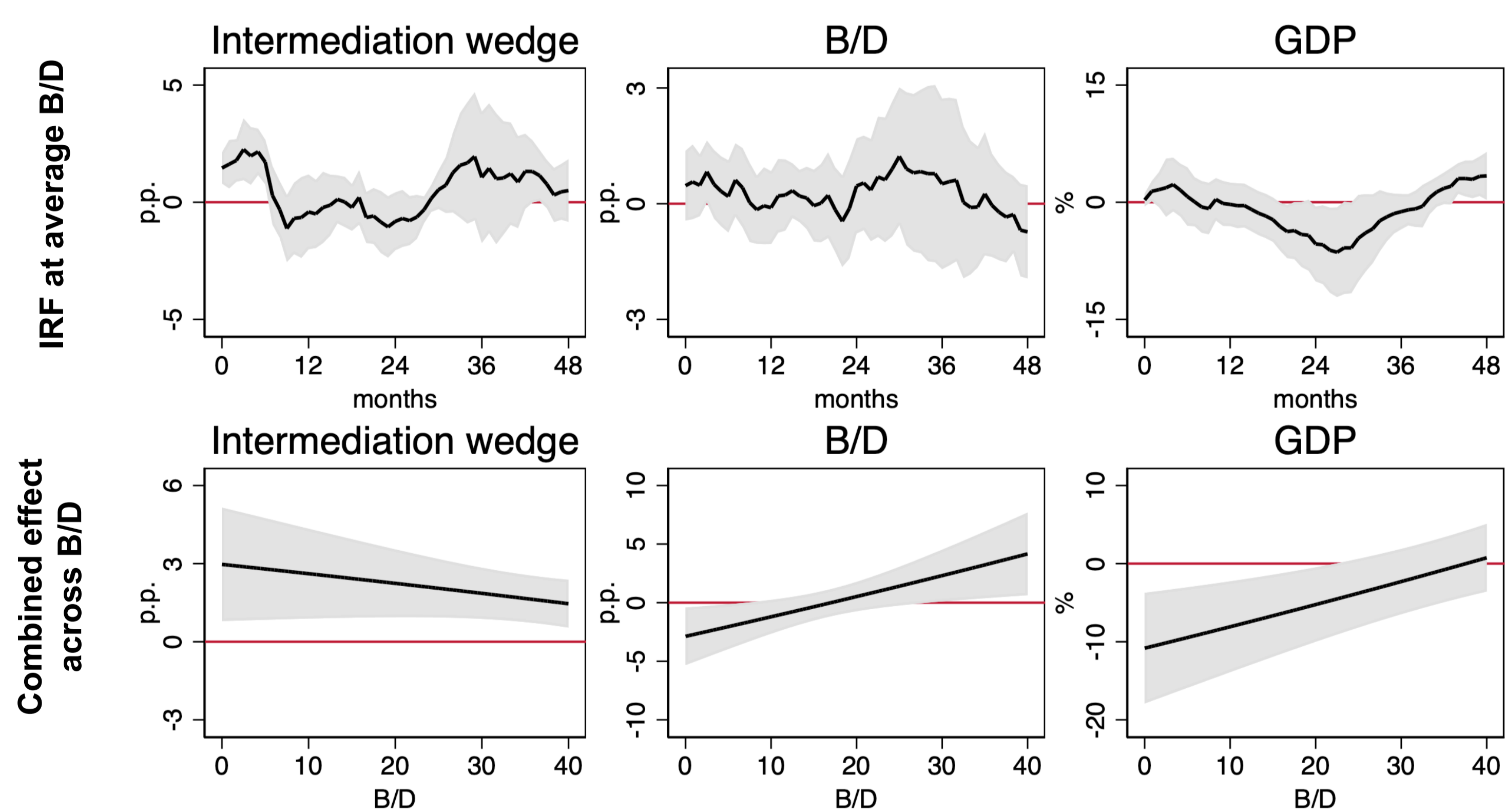
Sample: Jan-2002 to May-2019, panel of 10 euro area countries

* Jordá (2005) Estimation and inference of impulse responses by local projections. The American Economic Review 95 (1), 161–182.

** Altavilla et al. (2019) Measuring euro area monetary policy. Journal of Monetary Economics 108, 162–179.

Strength of bank lending and demand-substitution channel varies across bond share distribution

IRF at average B/D and across distribution



Note: The projection horizon for the lower panels is $h=3$ for the wedge and $h=24$ for B/D and GDP . The grey area is the 90% confidence interval. The intermediation wedge is the difference of the cost of loan and bond finance.

At average B/D

- Cost of loans rise relative to cost of bonds in response to MP tightening ($wedge \uparrow$); bank lending channel: supply of loans declines
- Loans and bonds fall in equal proportion ($B/D =$); demand for loans increases

Across B/D spectrum

- High B/D : bonds expand as loan supply contracts ($B/D \uparrow$)
- Low B/D : upward pressure on cost of credit reinforced by a demand shift towards loans ($B/D \downarrow$)
- Transmission to real activity attenuated in economies with higher bond share

Additional findings using long-rate shock and robustness

- **Long-rate shock** leads to different transmission pattern
 - At high B/D : contraction in B relative to L ($B/D \downarrow$); at low B/D no shift in debt composition
 - Stronger transmission of MP as bond share increases
- **Robustness** of main findings w.r.t. (i) sub-samples, (ii) further cross-country heterogeneity, and (iii) alternative MP indicators and shocks