Investment Funds and the Monetary-Macroprudential Policy Interplay

Martin Hodula[1]   Anisa Tiza Mimun[2]

[1]Czech National Bank
[2]European Central Bank

ChaMP WS1 Workshop at Deutsche Bundesbank
15 April 2025

Motivation

▶ Is there an undesired side-effect of banking regulation on the non-bank sector?

▶ How effective is the non-bank financial intermediaries' transmission channel of monetary policy in the presence of macroprudential policy?

▶ Following the ongoing debate, why did investment funds increase so much in the last years? Because of monetary policy, macroprudential policy, or the interplay between both?

Contribution

▶ We contribute to the literature in several ways:
1. We estimate the effects of monetary policy *and* macroprudential policy on investment funds.
2. We contribute to the debate *why* investment funds have experienced this growth in the last decade.
3. We identify country-specific heterogeneity, which allows for policy-related recommendations.

Key results

- In financially conservative markets (Germany, France, the Netherlands), tight monetary policy combined with stricter macroprudential measures significantly contracts investment fund assets.
- Conversely, financial hubs (Luxembourg, Ireland, Italy) experience counterintuitive expansions under the same policy mix, *likely* driven by regulatory arbitrage.
- Further disaggregation shows that equity funds are more vulnerable to joint tightening in conservative systems, while bond funds partly offset contractionary measures.

Related literature

- ▶ Martinez-Miera and Repullo (2017) and Malovaná et al. (2023) investigate how the prolonged low-interest-rate environment has driven the search for yield and influence investment fund growth.

- ▶ Altavilla et al. (2020) argue that tighter macroprudential policies can mitigate the risk-taking channel of monetary policy, while Gebauer and Mazelis (2023) and Hodula and Ngo (2024) examine how such policies can induce regulatory arbitrage.

- ▶ Rendon et al. (2024), Gopal and Schnabl (2022), and Irani et al. (2021) study different aspects of regulatory shifts from banks to non-banks. Buchak et al. (2024) highlight regulation's role in increasing non-bank engagement in residential mortgages.

Data

- ▶ We use monthly, country-specific aggregated data for euro area investment funds, including total assets and disaggregated assets for equity and bond funds from January 2009 to December 2021.

- ▶ Countries included in our analysis are Germany, France, the Netherlands, Luxembourg, Ireland, and Italy.

- ▶ A dummy variable is used to capture macroprudential policy tightening from the Integrated Macroprudential Policy (iMaPP) database by the IMF.

- ▶ The data distinguishes between capital-based measures (e.g., risk weights, systemic risk buffers) and liquidity-based measures (e.g., liquidity coverage ratios).
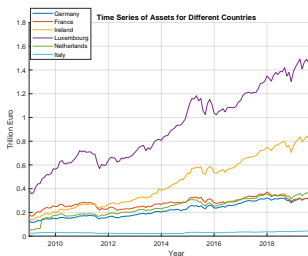
Data

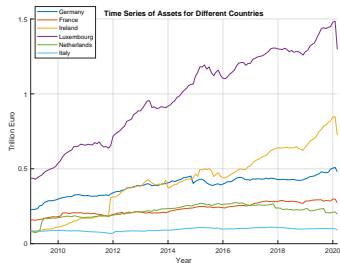Figure 1: Investment Funds in selected EA countries
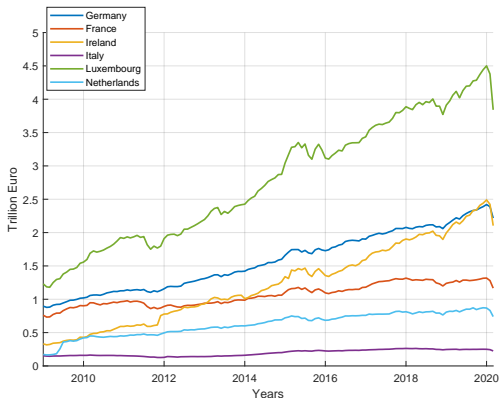
Source: ECB Dataportal, own calculation.

Data

Figure 2: Investment Funds in selected EA countries: Fund Type Breakdown

(A) Equity Funds

(B) Bond Funds

Source: ECB Dataportal, own calculation.

Econometric approach

▶ We follow Ramey and Zubairy (2018) and employ state-dependent local projections of the following form:

$$y_{t+h} = I_{t-1}[\alpha_{A,h} + \theta_{A,h}(L)z_{t-1} + \beta_{A,h}shock_t] + \atop (1 - I_{t-1})[\alpha_{B,h} + \theta_{B,h}(L)z_{t-1} + \beta_{B,h}shock_t] + \varepsilon_t \quad (1)$$

where y_t is our variable of interest, I_t is a dummy variable that indicates the macroprudential policy state, $shock_{(}t)$ indicates the monetary policy shock, and z_t includes the control variables.

Identification of monetary policy shocks

▶ We follow the approach introduced by Altavilla et al. (2019).

▶ We build a surprise time series including the change of the yield of a specific asset around the ECB's press conference.

▶ Technically, our times series is built in the following way:

$$shock_t = \begin{cases} surp_{t,d} & \text{if GovC meeting in quarter } t \\ 0 & \text{if no GovC meeting in quarter } t \end{cases}$$

where t and d indicate the quarter and the day of the press conference following meetings of the Governing Council.

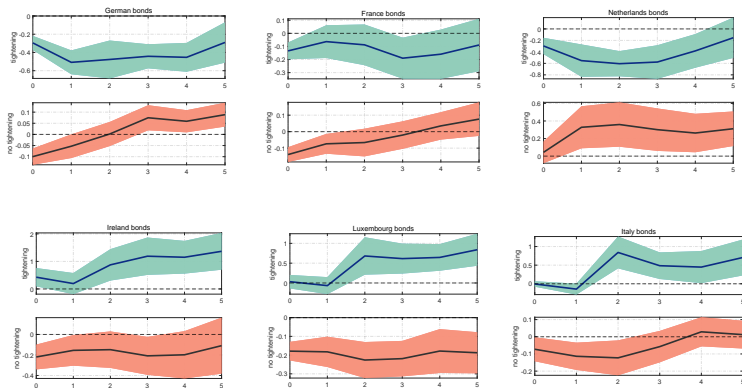# Impulse responses of Investment Funds
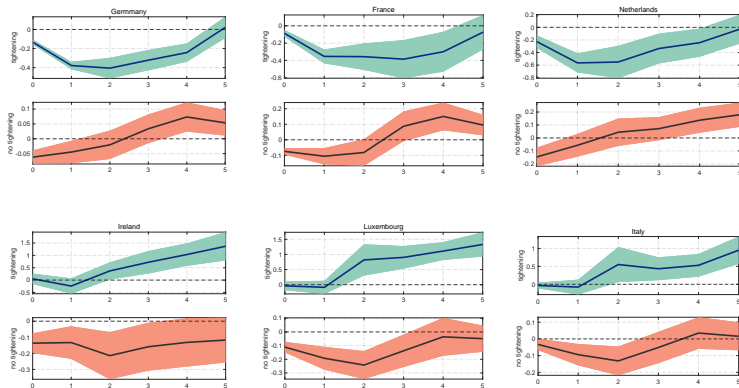
Notes: The figure shows the estimated β_h coefficients in a tight macroprudential policy state (upper panel) and in a state without any macroprudential policy measures included (lower panel). The figure also shows 68% confidence bands.

Impulse responses of country-level Equity Funds
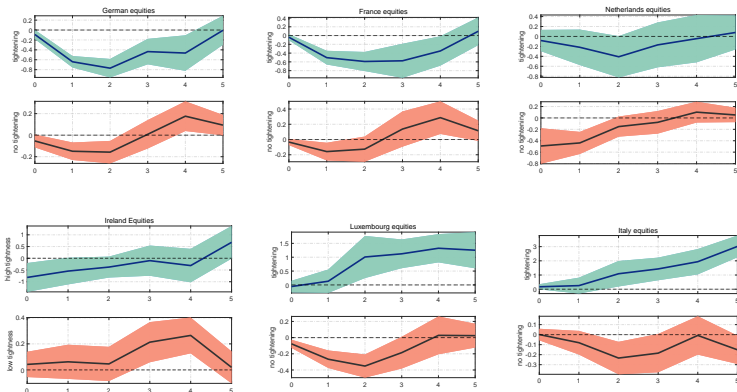
Notes: The figure shows the estimated β_h coefficients in a tight macroprudential policy state (upper panel) and in a state without any macroprudential policy measures included (lower panel). The figure also shows 68% confidence bands.
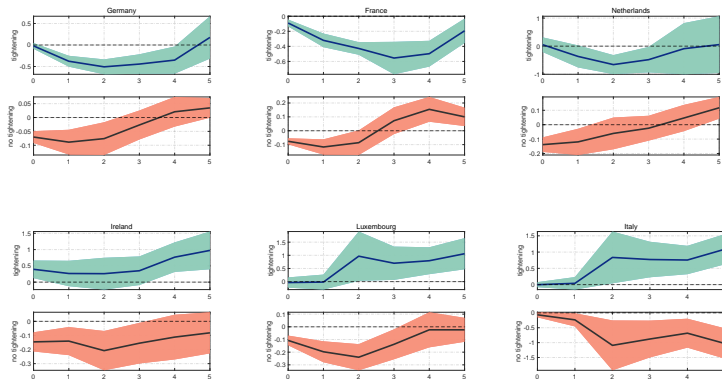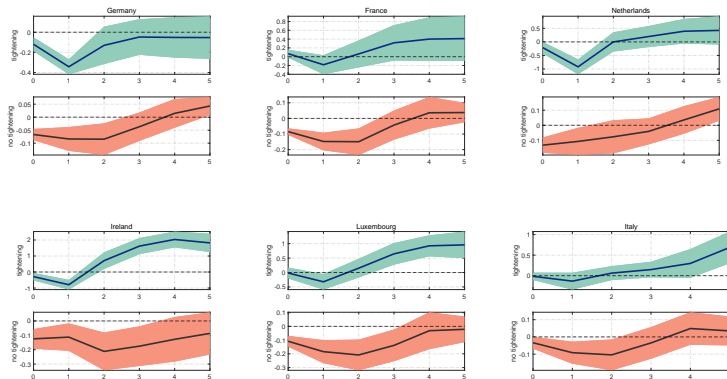
Impulse responses of country-level Bond Funds

Notes: The figure shows the estimated β_h coefficients in a tight macroprudential policy state (upper panel) and in a state without any macroprudential policy measures included (lower panel). The figure also shows 68% confidence bands.

Impulse responses to capital-based policies

Notes: The figure shows the estimated β_h coefficients in a tight macroprudential policy state (upper panel) and in a state without any macroprudential policy measures included (lower panel). The figure also shows 68% confidence bands.

Impulse responses to liquidity-based policies

Notes: The figure shows the estimated β_h coefficients in a tight macroprudential policy state (upper panel) and in a state without any macroprudential policy measures included (lower panel). The figure also shows 68% confidence bands.

Conclusions

▶ We study investment funds, and use a state-dependent local projection methodology to explore their responses to monetary policy shocks under various macroprudential regimes.

▶ We identify cross-country differences in the euro area, which allows us to differentiate between financially conservative countries and financial hubs.

▶ Our results overall suggest that while the monetary-macroprudential policy interplay might reduce the investment funds sectors in financially conservative countries, at the same time it also seems to push for regulatory arbitrage in financial hubs.

Q & A

Thank you for your attention.