



EUROPEAN CENTRAL BANK

EUROSYSTEM

Analysing insurance data for financial stability purposes

[Please select]



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Overview

1. What insurance data do we examine and why?
2. Example themes of analysis
3. Ongoing constraints to financial stability analysis

1. What insurance data do we examine and why?

- As part of ongoing **risk assessment monitoring**, investigate resilience of insurers from a financial stability perspective
- Use several **key data sources** that capture insurance corporations:
 - EIOPA (e.g. asset exposures, premiums, claims and expenses)
 - ECB statistics:
 - Insurance Corporations Balance sheet (ICB) – *asset and liabilities*
 - Insurance Corporations Operations (ICO) – *premiums, claims and expenses*
 - Large Insurance Group (LIG): - *the above + solvency, credit quality, liquidity, lapses..*
 - Securities Holding Statistics (SHSS) and Centralised Securities Database (CSDB) – *i.e. instrument-level data, incl. ratings etc.*
 - Other commercial or public data sources – *e.g. Bloomberg, CATDAT...*

1. What insurance data do we examine and why?

- We use data to monitor themes and risks of financial stability relevance:
 - Balance sheet dynamics
 - Solvency
 - Profitability/Performance>Returns
 - Asset quality/liquidity/portfolio rotation
 - Illiquid asset holdings, including real estate
 - Climate/NATCAT/transition risks

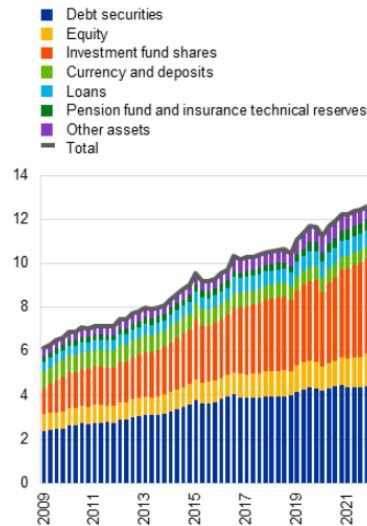
2. Themes: Balance sheet developments

- Tracking the evolution of the IC sector balance sheet
 - (often with PFs)
- E.g. demonstrated in recent [FISEA](#)
- Impact of interest rate hike on bond valuations especially.

Insurance companies' and pension funds' balance sheet developments

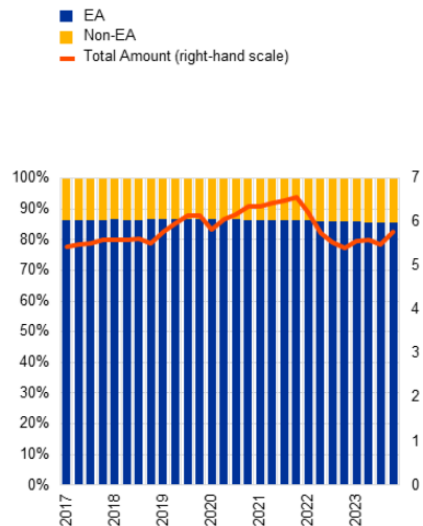
a) ICPFs' total assets by asset type

(€ trillions; end-of-year observations, 2009-23)



b) ICPFs' debt securities and equity holdings, by region

(left-hand scale: percentages, right-hand scale: € trillions; quarterly data Q1 2017-Q4 2023)



Publication: [Financial Integration and Structure in the Euro Area \(FISEA\) report, June 2024.](#)

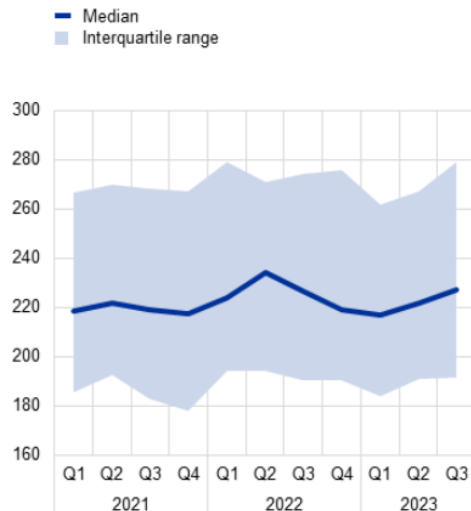
Data source: ECB (ICB, PFBR)

2. Themes: Solvency

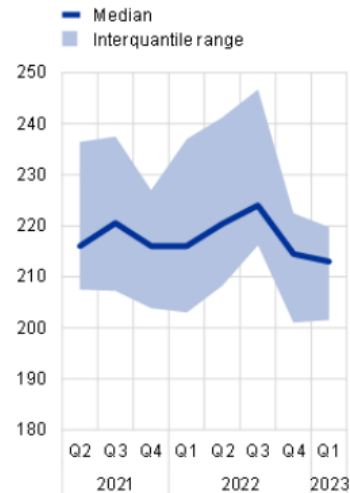
- IC sector solvency is crucial – must have sufficient own funds available to cover potential losses
- Solvency ratio (eligible own funds / SCR) – various FSRs.
- Demonstrates robust solvency of EA IC sector, on aggregate

Solvency Capital Requirement (SCR) ratio

(Q1 2021-Q3 2023, percentages)



(Q2 2021-Q1 2023, percentages)



Publication: Left: [FSR May 2024](#);

Data source: Left: ECB (LIG);

Right: [FSR November 2023](#).

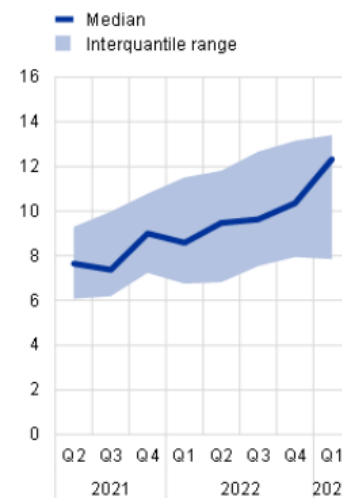
Right: Bloomberg Financial L.P.

2. Themes: Profitability, Performance, Returns

- Profitability difficult for insurers during LIRE -> low returns on investments.
- Recent macroeconomic developments also impacted insurers
 - Inflation contributing to claims inflation and rising expenses
 - Together with lower growth weighing on new policies + lapses
- Monitor RoE, underwriting performance, investment income

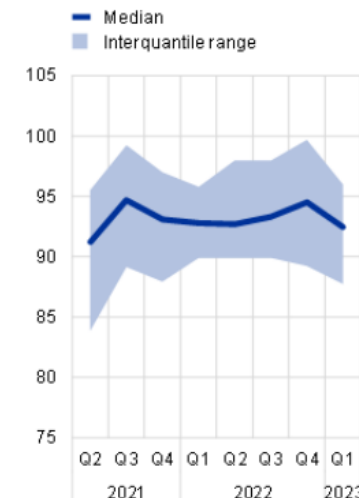
Return on Equity

(Q2 2021-Q1 2023, percentages)



Combined ratio (non-life)

(Q2 2021-Q1 2023, percentages)



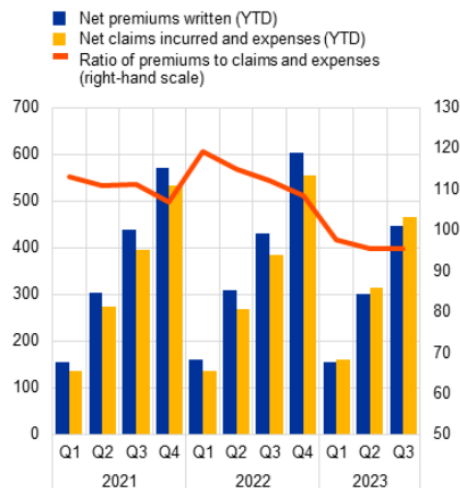
Publication: [FSR November 2023](#) ;
Data source: Bloomberg Financial L.P.

2. Themes: Profitability, Performance, Returns

- Life insurers underwriting performance declined in 2023
- But higher interest rates supported rising investment income
- Slow rollover of fixed coupon debt.

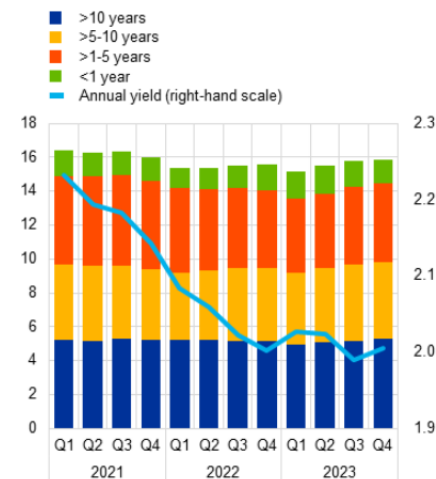
Life insurers' ratio of premiums to claims and expenses

(Q1 2021-Q3 2023; € billions, percentages)



Investment income on bond portfolios, by maturity bucket

(Q1 2021-Q4 2023; € billions, percentages)



Publication: [FSR May 2024](#);

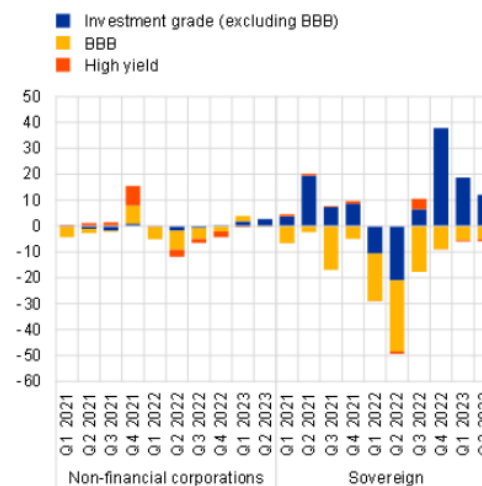
Data source: ECB (LIG)

2. Themes: Asset quality, liquidity & rotation

- Rotation to higher quality and liquid assets
- Though liquid assets as a share of total assets continue to fall
- Important in context of need for liquidity preparedness to margin calls.

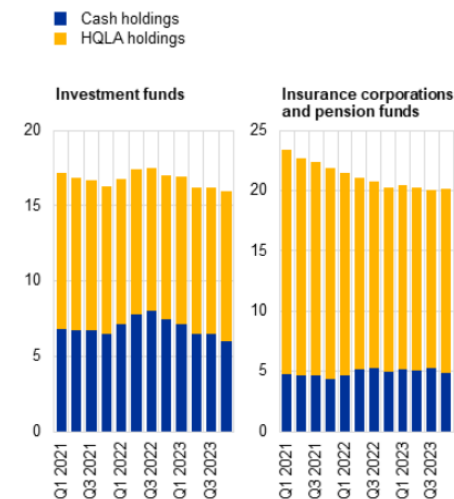
a) ICPFs' debt securities transactions, by rating and issuer sector

(Q1 2021-Q2 2023, € billions)



b) Euro area NBFIs sector cash and liquid asset holdings

(Q1 2021-Q4 2023, percentages of total assets)



Publication: Left: [FSR November 2023](#); Right: [FSR May 2024](#)

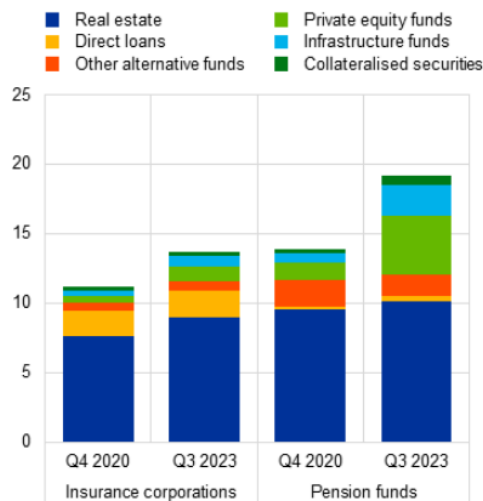
Data source: Left: ECB SHS, CSDB. Right: ECB SHS, CSDB, IVF, PFBR, ICB

2. Themes: Illiquid asset exposure & real estate risks

- LIRE contributed to a search for yield and shift to illiquid assets
- Rising holdings of alternative assets (PE, PC, real estate)
- Valuation uncertainty could hide and result in sudden losses for investors

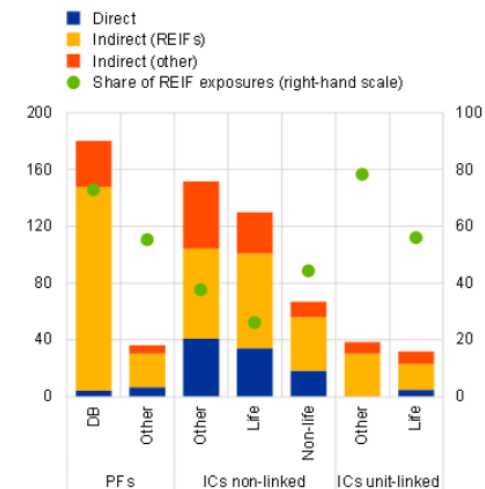
a) Share of alternative assets in total assets held by euro area insurance corporations and pension funds

(Q4 2020, Q3 2023, percentages)



b) ICPF real estate investments, by type

(Q4 2022; left-hand scale: € billions, right-hand scale: percentages)



Publication: Left: [FSR May 2024 – SF on private markets](#) Right: [FSR May 2023](#)

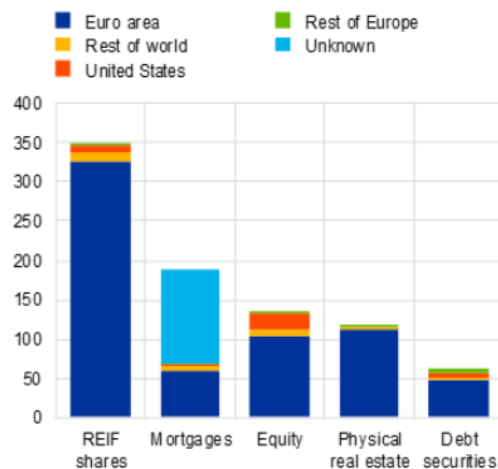
Data source: Left & Right: EIOPA asset exposures.

2. Themes: Illiquid asset exposure & real estate risks

- Recent focus on real estate exposures, given correction in CRE markets especially
- Different dimensions and splits
- Also demonstrates interconnectedness, especially with REIFs and RECs.

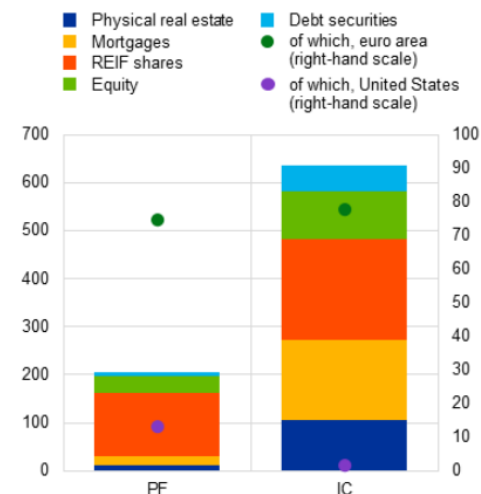
b) ICPFs' real estate assets, by type and region of exposure

(Q2 2023, € billions)



b) Euro area ICPF real estate exposures, by type

(Q3 2023; € billions, percentages of total real estate exposures)



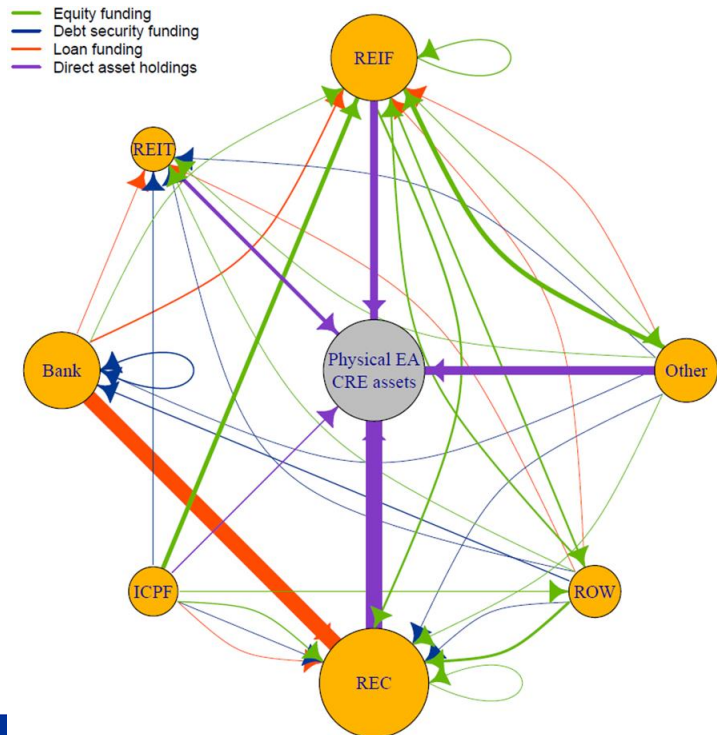
Publication: Left: [FSR November 2023](#) Right: [FSR May 2024](#)

Data source: Left & Right: EIOPA asset exposures.

2. Themes: Illiquid asset exposure & real estate risks

Network of cross-sectoral CRE exposures and interconnectedness by instrument

(nodes: size of sectoral CRE exposures (EUR billions); edges: size of links by instrument type (EUR billions))



- Interconnectedness in CRE exposures also demonstrates how ICPFs could be impacted directly and indirectly by CRE shocks
 - Forthcoming analysis

Publication: Forthcoming Macroprudential Bulletin Article – November 2024

Data sources: for insurers – ECB SHSS and EIOPA

3. Ongoing constraints to financial stability analysis

1. Infrequent data (typically quarterly) and lags

2. Limited granularity:
 - Commonly focus on euro area/EU
 - Only some quartile breakdowns, or splits by country or insurer/business type
 - Typically shows sectoral resilience **on aggregate, but...**
 - **Tails of more vulnerable/risky entities?**

 - Therefore, entity-level data is crucial to comprehensively assessing risks
 - Future delivery of insurer-level Solvency II data (in 2027) will be a crucial milestone!

Questions