

Changing macroeconomic environment:
Will guaranteed products come back?

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- Changing macroeconomic environment
 - ▶ Focus on higher interest rates
- ... Will guaranteed products come back?
 - ▶ How do rising rates impact the value added of guaranteed products?
 - ▶ Value added of guaranteed products: insurance against market risk

- Changing macroeconomic environment
 - ▶ Focus on higher interest rates
- ... Will guaranteed products come back?
 - ▶ How do rising rates impact the value added of guaranteed products?
 - ▶ Value added of guaranteed products: insurance against market risk
- Guaranteed products embed two insurance mechanisms against market risk
 1. Return guarantees
 2. Return smoothing

Insurance mechanism 1: Return guarantees

- Insurance against market risk provided by the insurer
- Variation in the level of return guarantees

... across countries

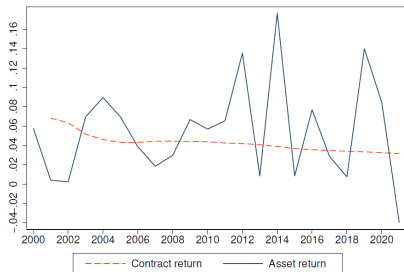
... across time (more later)



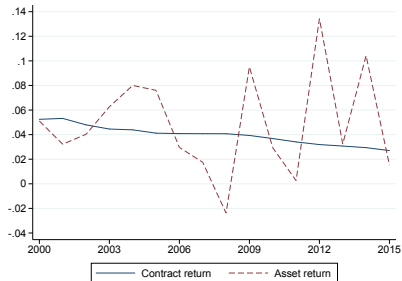
Insurance mechanism 2: Return smoothing

- Return smoothing: contract return \neq return of invested assets

Germany



France



! color code is different on each graph !

Insurance mechanism 2: Return smoothing

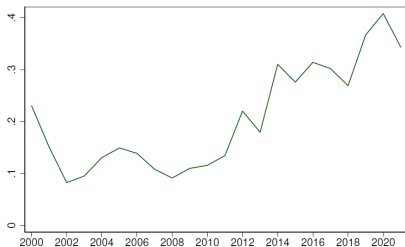
- Accounting identity:

$$\text{Asset return} = \text{Contract return} + \Delta\text{Reserves} + \text{Insurer income}$$

- Most of the difference between contract return and asset return is **absorbed by reserves** \Rightarrow reserves fluctuate

Reserves (% of account value)

Germany



France



Insurance mechanism 2: Return smoothing

- Reserves are carried over across investor cohorts \Rightarrow wealth redistribution between investor cohorts
- Theoretically: risk sharing between investor cohorts

- Empirically over the period 2000–2020:

interest rates \downarrow

large bond returns

... hoarded as reserves, to be distributed to future cohorts of investors

\Rightarrow redistribution from early cohorts to late cohorts

- Quantitatively:

France: 1.4% of account value is redistributed across investor cohorts every year (Hombert and Lyonnet, 2022)

Germany: between 0.8% and 1.5%/yr depending on product characteristics (Hombert, Mölmann and Weill, 2023)

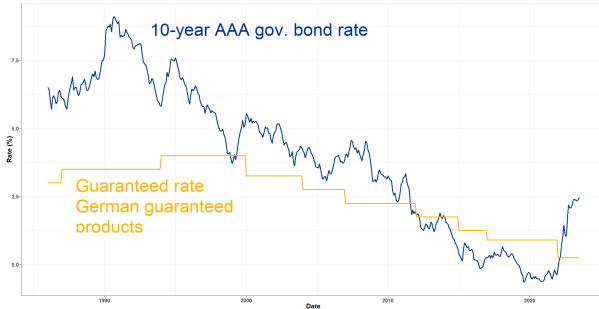
Rising interest rates

- How do high interest rates affect both risk sharing mechanisms

- ...and therefore the supply and demand for guaranteed products?

1. Impact of rising interest rates on return guarantees

- Guaranteed rates vary less than 1-for-1 with market rates



- Higher rates make guaranteed products more profitable for insurers

⇒ Supply ↑

2. Impact of rising interest rates on return smoothing

- On impact (2021–?): reverses the direction of redistribution → towards current cohorts (use reserves and replenish later)
 - ▶ Back-of-the-envelope depletion of reserves: duration 8 years \times interest rates rise 2.5 pp \Rightarrow reserves drop by 20% of assets
- After impact (starting 2023?): redistribution away from current cohorts (replenish reserves)
 - ▶ Empirically: low reserves lead to lower future contract returns (Hombert and Lyonnet, 2022; Hombert, Möhlmann and Weiss, 2023)
- Implication: guaranteed products are becoming less attractive for investors

\Rightarrow Demand \downarrow

Wrap up

- Different implications of rising interest rates
 1. Wider wedge market rates v. guaranteed return
⇒ Supply ↑
 2. Low reserves
⇒ Demand ↓
- Other factors not covered in this impulse statement
 3. Inflation: return guarantees are a poor hedge against inflation risk
⇒ Demand ↓ ?
 4. Risk-based regulation: return guarantees consume regulatory capital
⇒ Supply ↓

References

Hombert & Lyonnet, 2022, "Can Risk be Shared Across Investor Cohorts? Evidence from a Popular Savings Product," *Review of Financial Studies* [[pdf](#)]

Hombert, Möhlmann & Weiss, 2023, "Inter-Cohort Risk Sharing with Long-Term Guarantees: Evidence from German Participating Contracts," *Bundesbank Discussion Paper* [[pdf](#)]