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

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• ...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 ≠ return of invested assets

! 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 ⇒ reserves fluctuate
Insurance mechanism 2: Return smoothing

- Reserves are carried over across investor cohorts ⇒ wealth redistribution between investor cohorts

- Theoretically: risk sharing between investor cohorts

- Empirically over the period 2000–2020:

  - interest rates ↓
  - large bond returns
  - … hoarded as reserves, to be distributed to future cohorts of investors
  - ⇒ 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-envelop depletion of reserves: duration 8 years × interest rates rise 2.5 pp ⇒ 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
  
  ⇒⇒ Demand ↓
Wrap up

• Different implications of rising interest rates

  1. Wider wedge market rates v. guaranteed return
     \[\Rightarrow\text{Supply} \uparrow\]

  2. Low reserves
     \[\Rightarrow\text{Demand} \downarrow\]

• Other factors not covered in this impulse statement

  3. Inflation: return guarantees are a poor hedge against inflation risk
     \[\Rightarrow\text{Demand} \downarrow?\]

  4. Risk-based regulation: return guarantees consume regulatory capital
     \[\Rightarrow\text{Supply} \downarrow\]

References
