

Discussion of
**Households' Response to the Wealth
Effects of Inflation**

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Disclaimer: The views expressed in this presentation are those of the author and do not necessarily coincide with the views of the Deutsche Bundesbank, or the Eurosystem.

Overview

Randomized Controlled Trial (RCT): 3,800 customers of „a major German bank“

- July 2022: inflation rate Germany 8.7% (at 70-year high)
- Many HHs **know** about nominal **asset erosion**
- Most HHs **unaware** of nominal **debt erosion**

Information treatment about debt erosion

- **Higher planned and actual spending (MPC \approx 3%)**
- **Higher (hypothetical) leverage ratio for real estate purchase**

Implications

- **Does inflation make HHs feel poorer than they actually are? (lower consumption)**
- **What are the financial stability implications of this paper?**

Household Balance Sheet (stylized)

Assets	Liabilities
Nominal Assets	Nominal Debt
Real Assets	-
Permanent Income	Permanent Consumption
	Residual

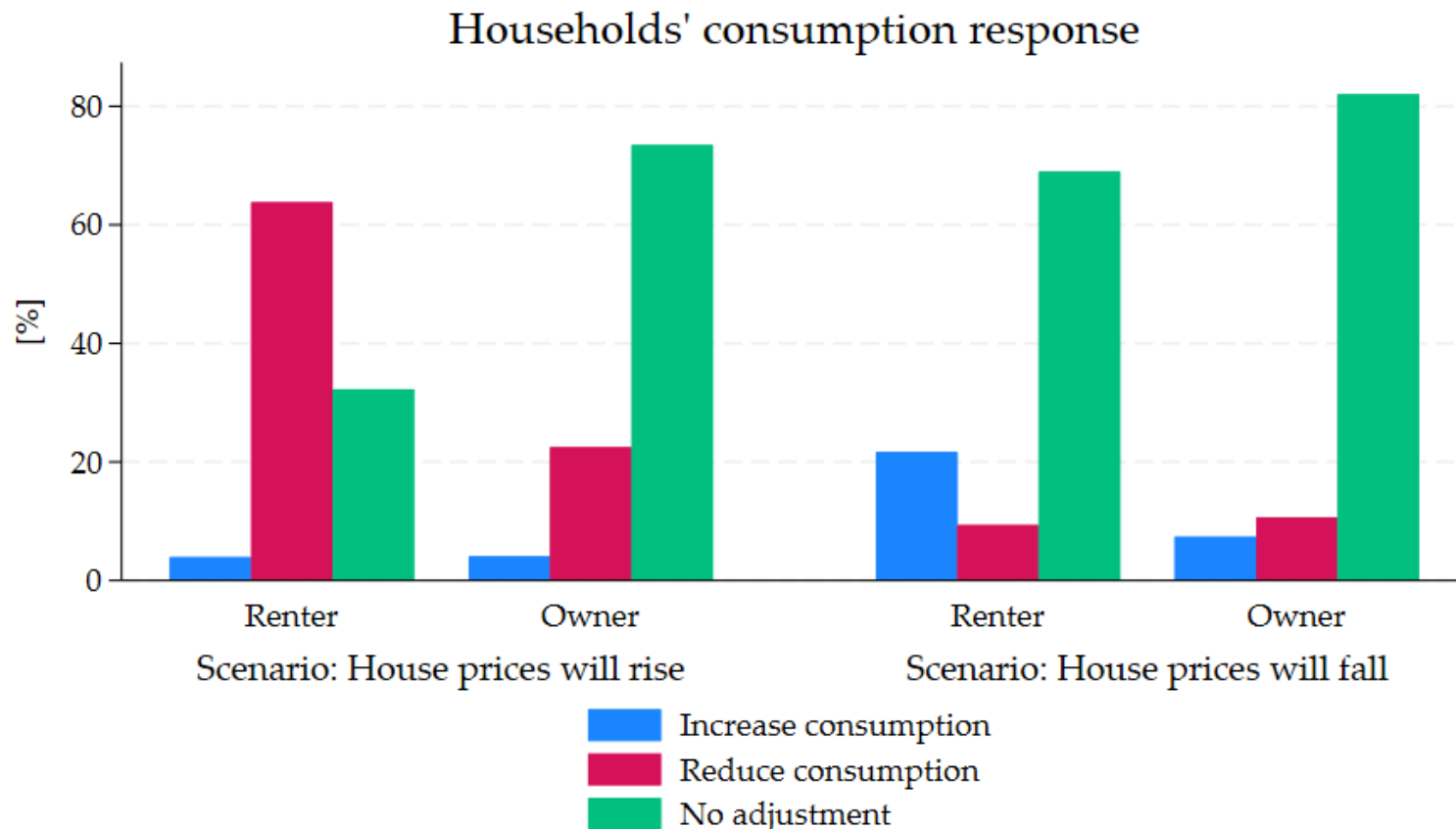
Inflation surprise:

- 1) How do HH respond to changes in **house prices**?
- 2) How quickly do HHs secure **higher rates for short-term nominal assets**?
- 3) How important is **debt erosion** for firms?

1) How would HHs respond to house price changes?

- MP tightening in Euro area:

German real estate prices declined nominally by 14%! (real decline even larger)



- Bundesbank HH survey (Feb 2024)
- HHs randomly assigned to scenarios
- 80% of **owners** would **not adjust consumption**, independent of scenario
- 65% of **renters** would **not adjust consumption** if decline of house price
- 60% of **renters** would **lower consumption** if increasing house prices

2) How quickly are HH securing higher rates?

Doepke and Schneider 2006: Wealth effect of inflation shock depends on how quickly households secure higher rates for their short-term nominal assets (e.g. deposits)

- But: Re-allocating bank deposits & short-term debt can imply financial stability risks

Bundesbank Financial Stability Review 2023:

- German financial system has so far coped well with interest rate increase
- One factor: In 2023 German banks were recording high net interest income as they had not yet passed on the higher interest rates in full to their depositors
- **Bundesbank HH survey (May 2024):** on aggregate, HHs plan to re-allocate only 3.5% of bank deposits (mostly into equity), roughly 9% switched main bank in last 12 months
 - Speed of adjustment differs by consumer type: older consumers less mobile, stick with small regional banks

3) Beyond households: Firm debt

- Potentially interesting for future research (firm surveys, e.g. BOP-F)
- Definitely important for financial stability

Figure 4: Inflation and Firm Bankruptcies.

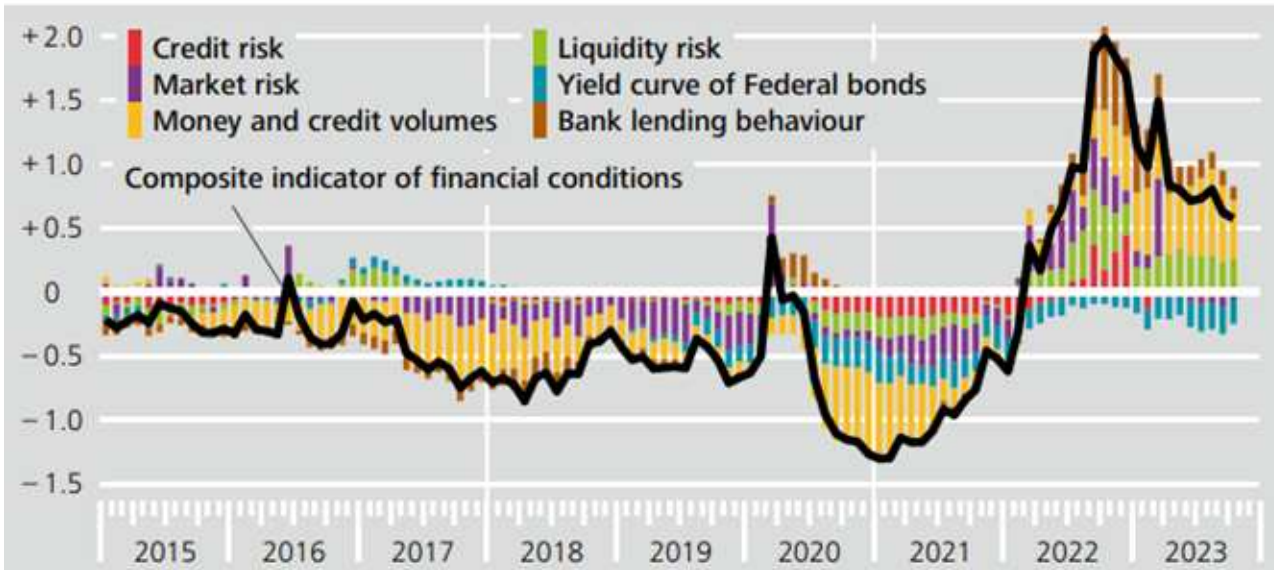


- Brunnermeier et al (2023):
German hyperinflation of 1920s
- Between Jan 1922 and Jan 1924:
price level increased by factor 10^{12}
- **Debt erosion close to 100%**
- **Bankruptcies went to record low**

Firms in recent inflation episode

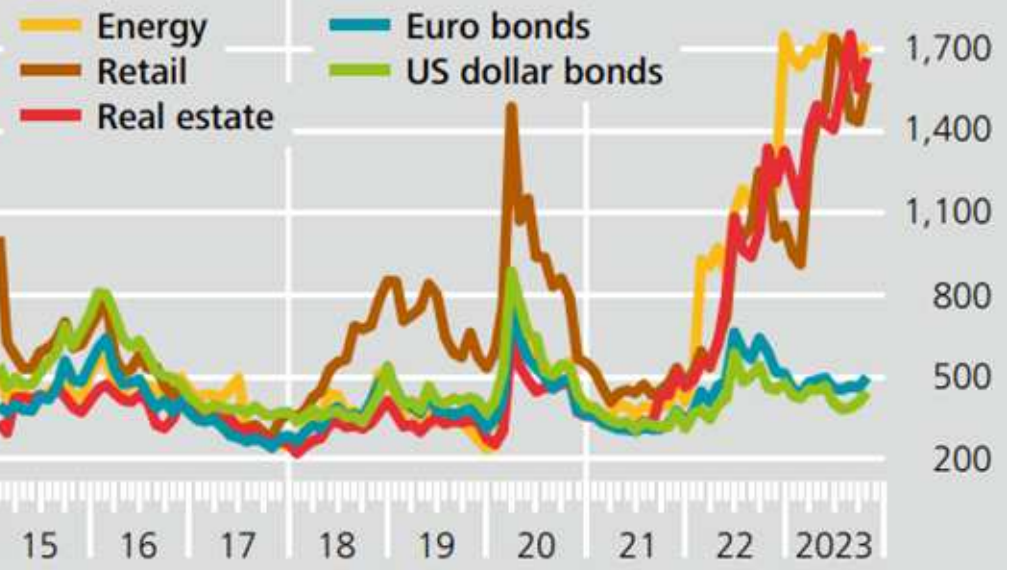
Composite indicator of financial conditions*

Monthly data, standardised from 2003



Risk premia of euro corporate bonds in the high-yield segment¹

Basis points



- Bundesbank Financial Stability Review 2023:
 - **Tighter financial conditions increase default risk of highly leveraged firms**
 - Firms with large roll-over needs particularly at risk
 - Similar problem for HHs who took out 10-y mortgage in 2014 (interest rate: 2 % → 4 %)
- Debt *increases* risks from financial stability perspective (despite possible debt erosion)

Some Suggestions for the Paper

- Make explicit the **assumptions** under which a given HH would actually benefit from surprise inflation (via debt erosion)
 - **Heterogeneity** matters: exploit theoretical predictions on heterogeneity more when interpreting the treatment effects (e.g. Doepke and Schneider 2006)
- Exploit your **bank dataset** even more
 - Any evidence on how respondents re-allocate to higher rates (e.g. from sight deposits, to long-term savings accounts, to equity, or outside of the bank)
 - Do you have information on how respondents' income responds to inflation shock? Does this correlate with their debt erosion perception?
- Schnorpfel, Weber, and Hackethal. *Inflation and trading*. NBER DP 2024

Conclusion

- Thought-stimulating paper, well-crafted
- Opens up many questions for further research
- Nominal debt can have interesting redistribution effects (from old to young), but most households lose (few winners in Germany and Italy)
- Financial stability perspective: **debt increases risks**
 - **Debt erosion** might be **dominated by tighter financial conditions**

References

- Brunnermeier, Markus K., et al. *The debt-inflation channel of the German hyperinflation*. No. w31298. National Bureau of Economic Research, 2023.
- Doepke, Matthias, and Martin Schneider. "Inflation and the redistribution of nominal wealth." *Journal of Political Economy* 114.6 (2006): 1069-1097.
- Kim, Chi Hyun, and Ranaldi, Lorenz, and Schularick, Moritz. "Inflation Surprises and Asset Returns: a Macroeconomic Perspective". Unpublished Manuscript (July 2024).
- Schnorpfeil, Philip, Michael Weber, and Andreas Hackethal. *Inflation and trading*. No. w32470. National Bureau of Economic Research, 2024.