

5th Dvara Research Conference 2021

Household Finance: Short-term financial needs and
long-term financial resilience

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Introduction

- ▶ RBI Committee on Household Finance (2017):
 - ▶ Benchmarked Indian households against those in other major world markets.
 - ▶ Evaluated the financial allocations of Indian households against optimal model-implied behaviour.
 - ▶ Evaluated the (re-)design of new systems of incentives and regulations.
 - ▶ Assessed the role of new financial technologies and products.
 - ▶ Highlighted widespread household financial vulnerability.

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- ▶ New insights: Simplification vs. Customization
- ▶ The Covid-19 pandemic: What have we learned?

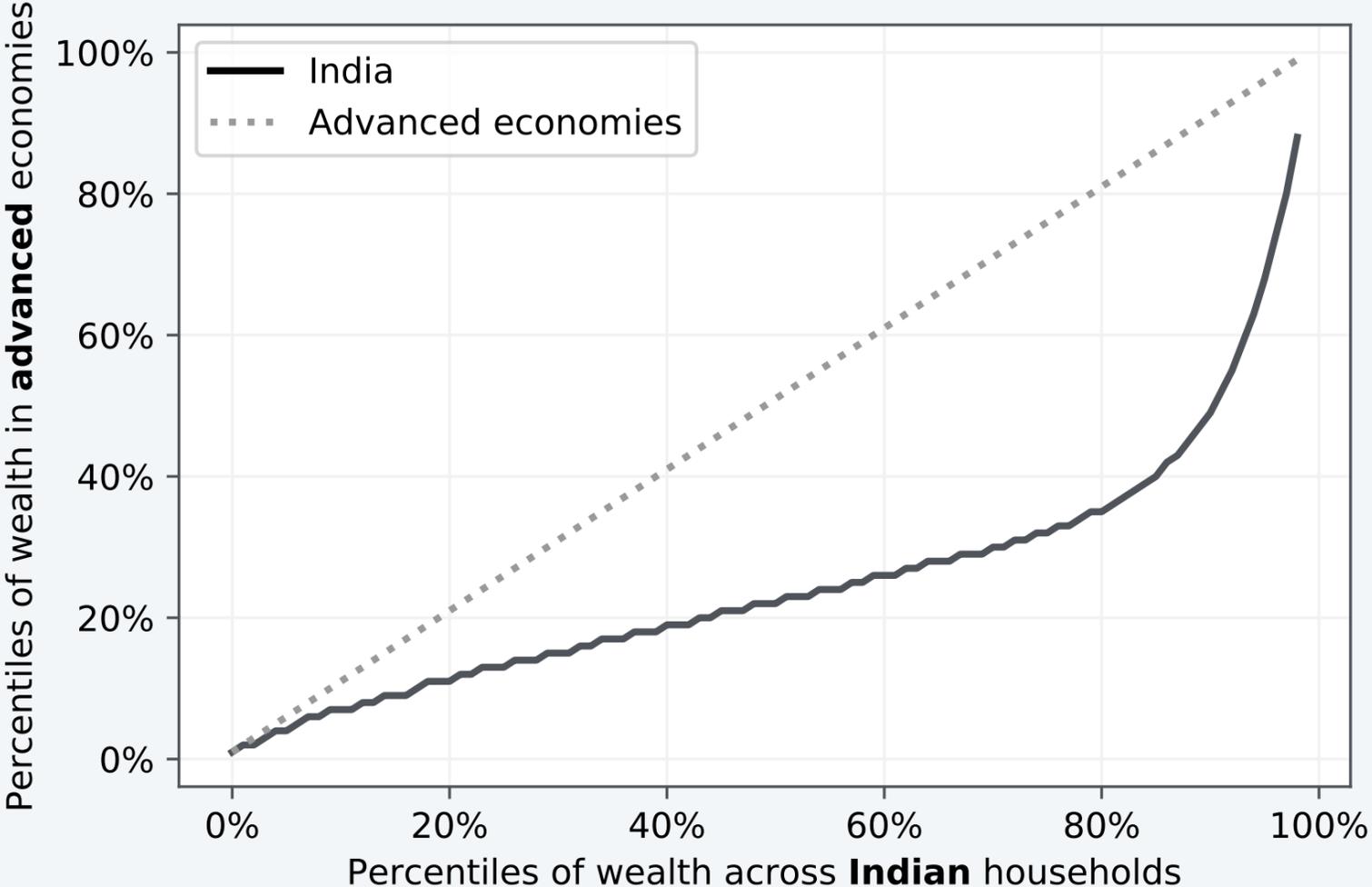
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- ▶ New insights: Simplification vs. Customization
- ▶ The Covid-19 pandemic: What have we learned?
- ▶ Where do we go from here?
 - ▶ Post-pandemic research priorities.
 - ▶ Policy implications given effects of the pandemic across the wealth distribution.
 - ▶ Financing short-term financial needs could severely impede progress on building longer-term resilience, which needs urgent focus.

Context: Indian households in the global wealth distribution

Badarinza, Balasubramaniam, and Ramadorai (2019), *Annual Review of Financial Economics*

- ▶ The poor and the rich look similar.
- ▶ Missing middle class.



Source: International household surveys (AIDIS, CHFS, TTS, SCF, WAS, HILDA, HFCS)

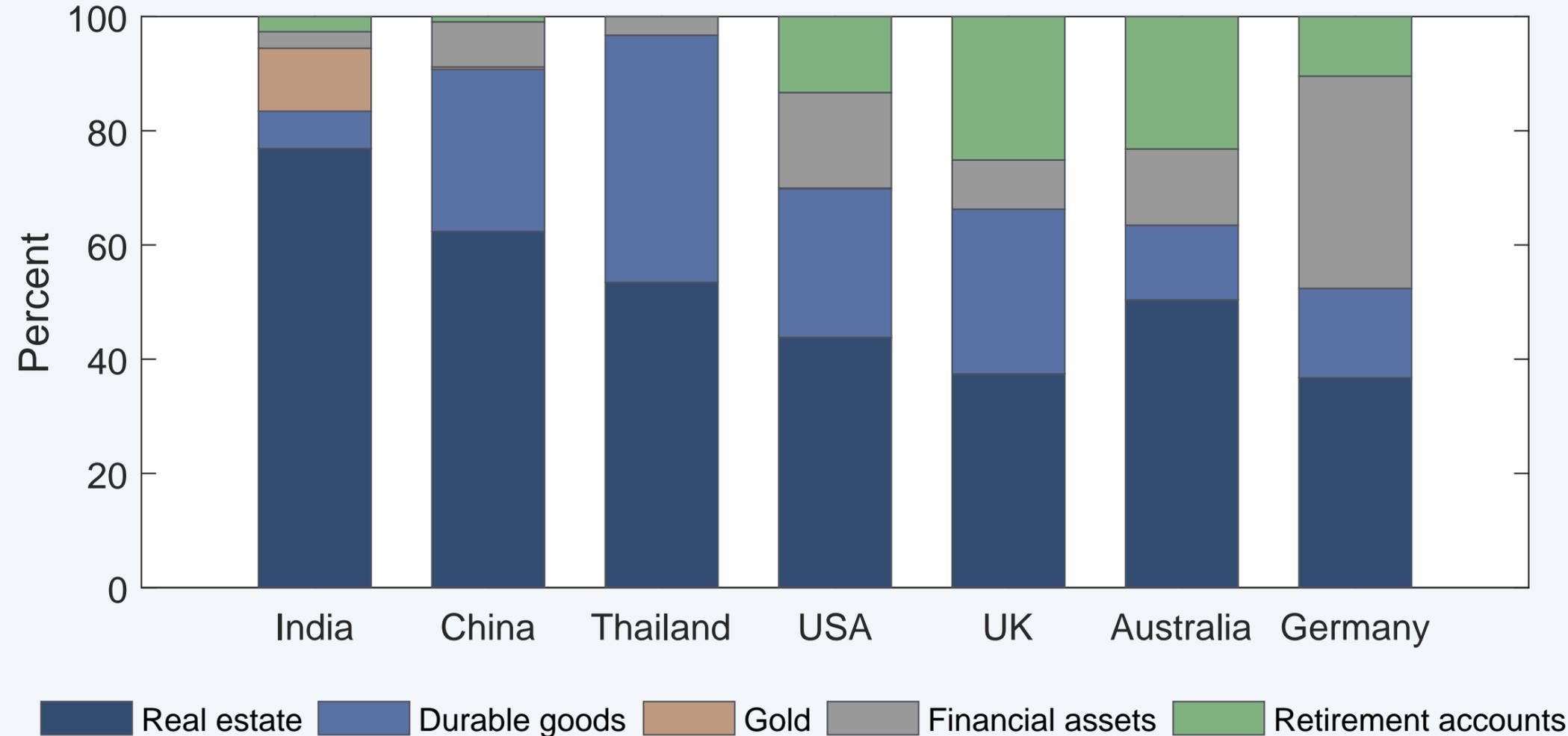
Roadmap

1. Refresher on the RBI Committee Report
2. New insights: Simplification vs. Customization
3. The Covid-19 pandemic: What have we learned?
4. Where do we go from here?

The household balance sheet: Assets

RBI Household Finance Committee Report, 2017

- ▶ Dominance of real assets (incl. gold).
- ▶ Near-absence of retirement funds.

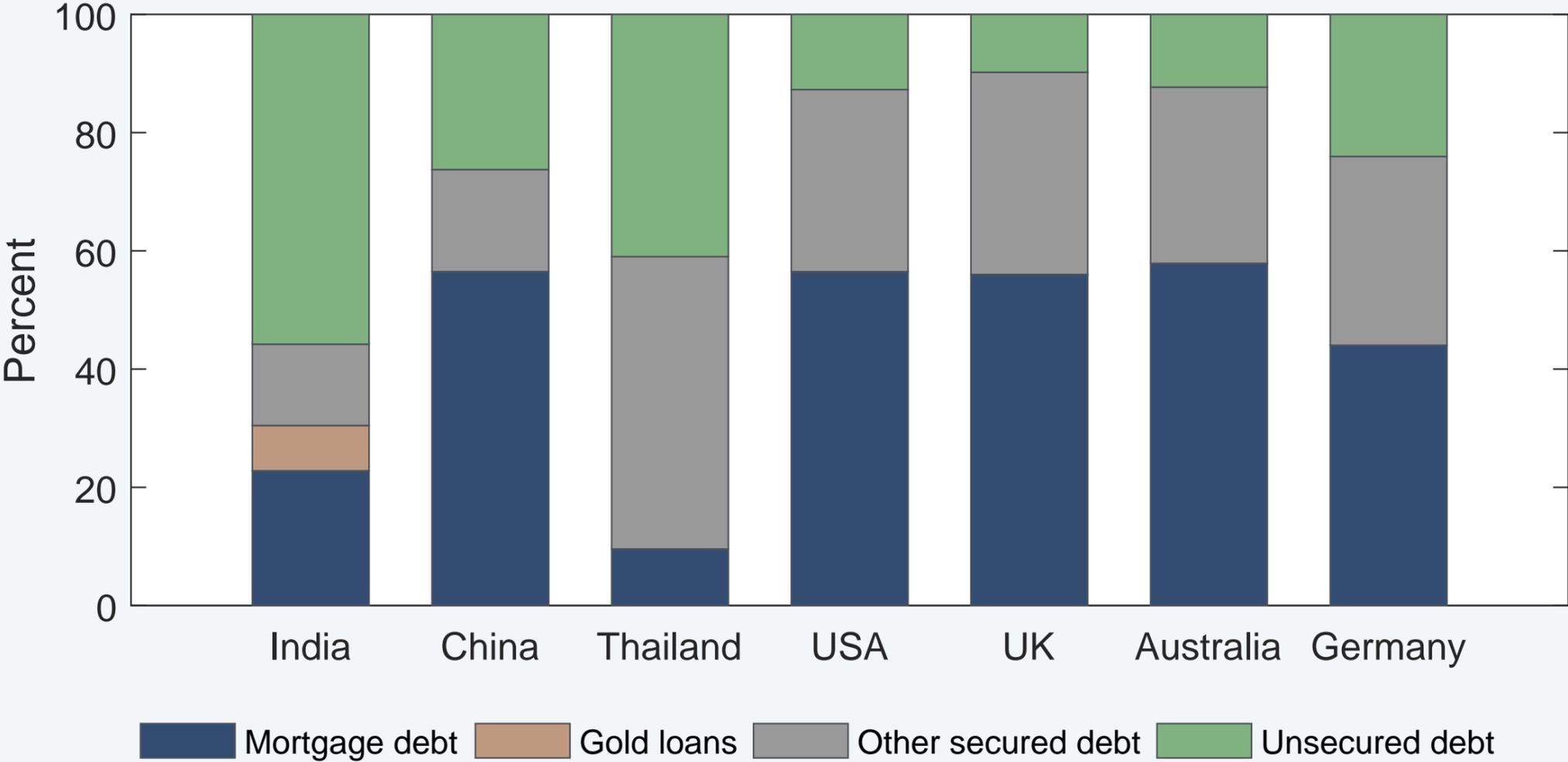


Source: International household surveys (AIDIS, CHFS, TTS, SCF, WAS, HILDA, HFCS)

The household balance sheet: Liabilities

RBI Household Finance Committee Report, 2017

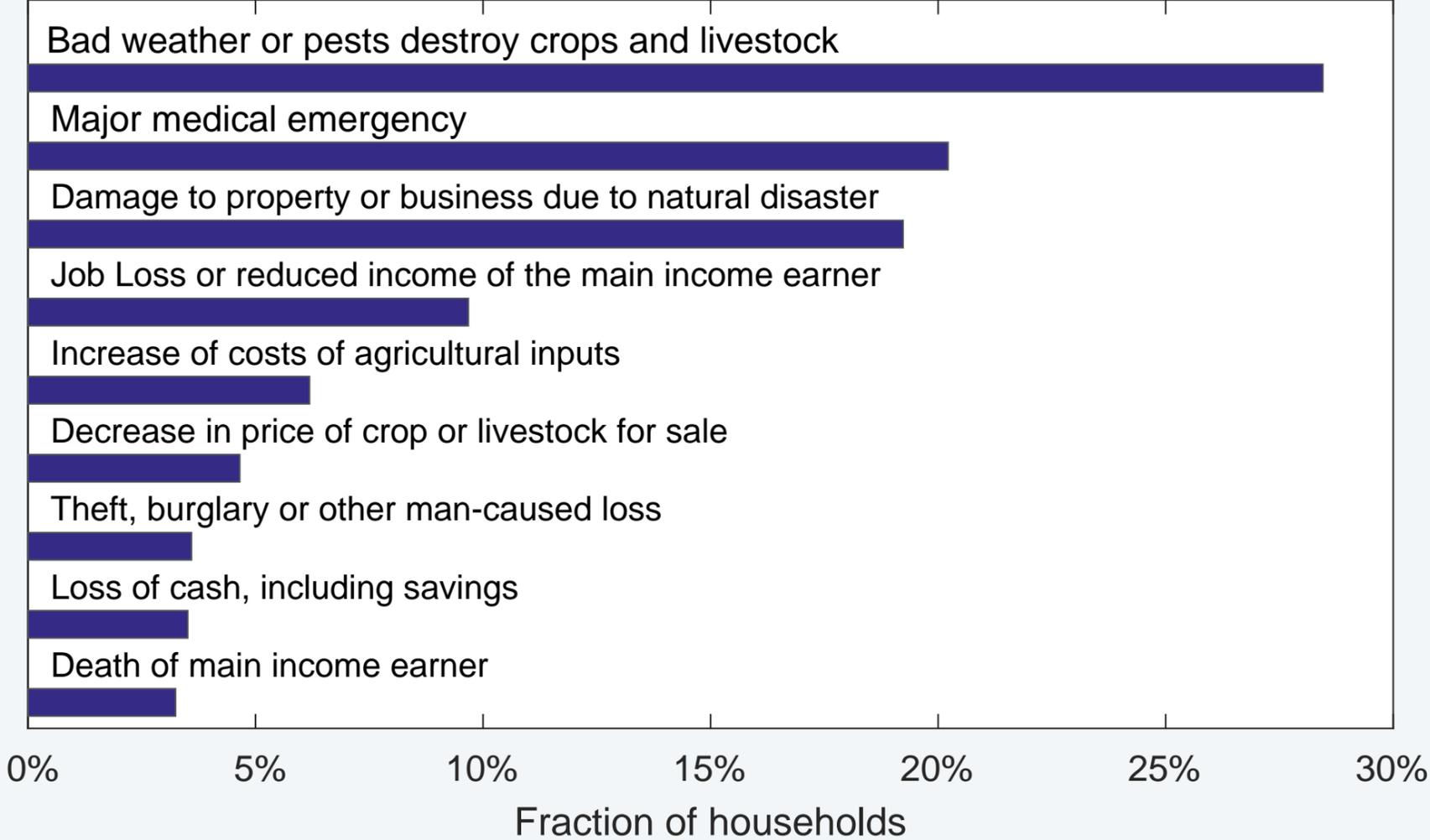
- ▶ Dominance of unsecured debt, primarily sourced informally.
- ▶ High *net* holdings of illiquid assets on the household balance sheet.



Source: International household surveys (AIDIS, CHFS, TTS, SCF, WAS, HILDA, HFCS)

Sources of risk faced by Indian households, pre-pandemic

“Which of these events made the biggest impact on your household income in the last two years?”

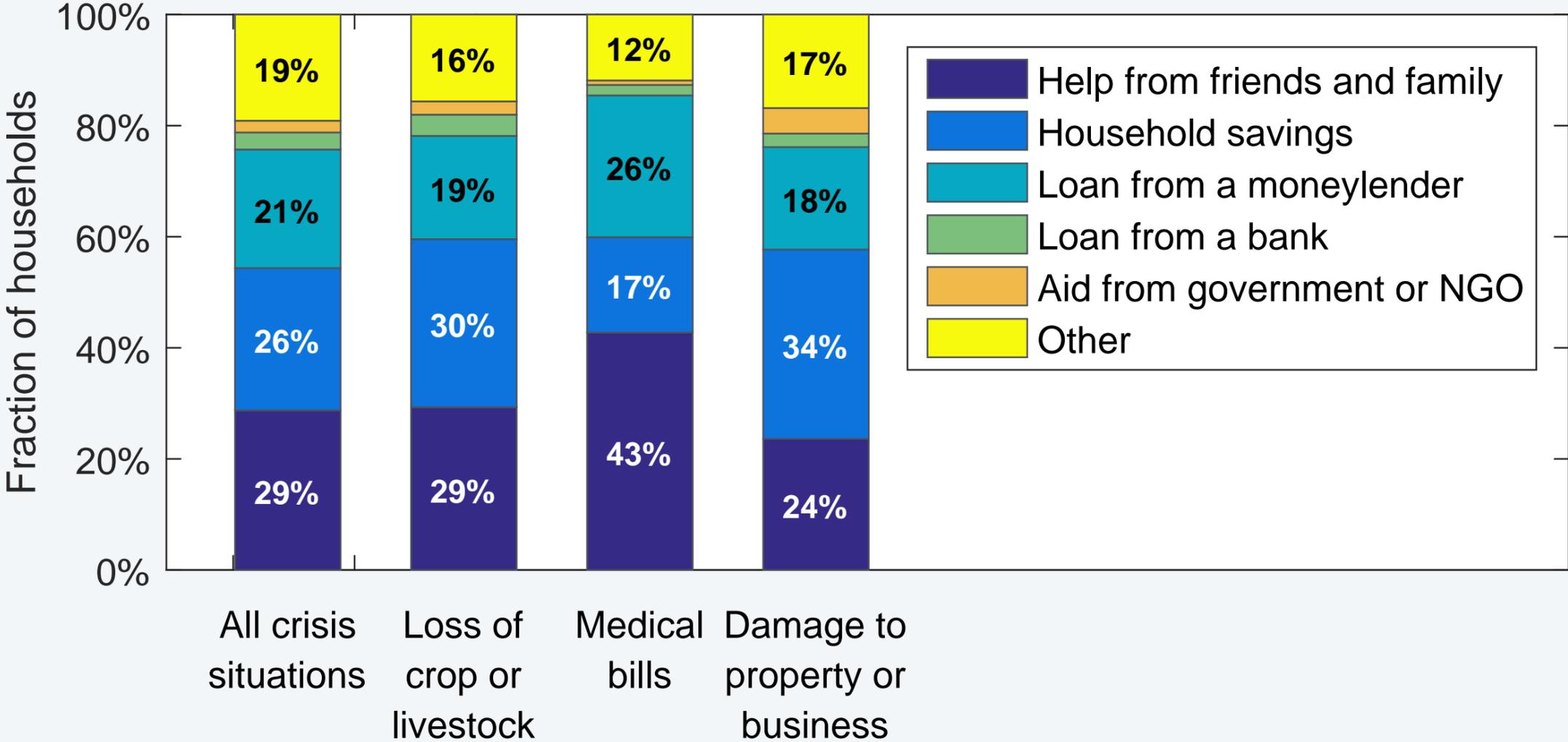


Source: Financial Inclusion Insights Survey

Sources of emergency funds

Mechanisms of coping with risks perpetuate financial fragility

“What was the main thing done to make ends meet when negative events happened to you or your household?”

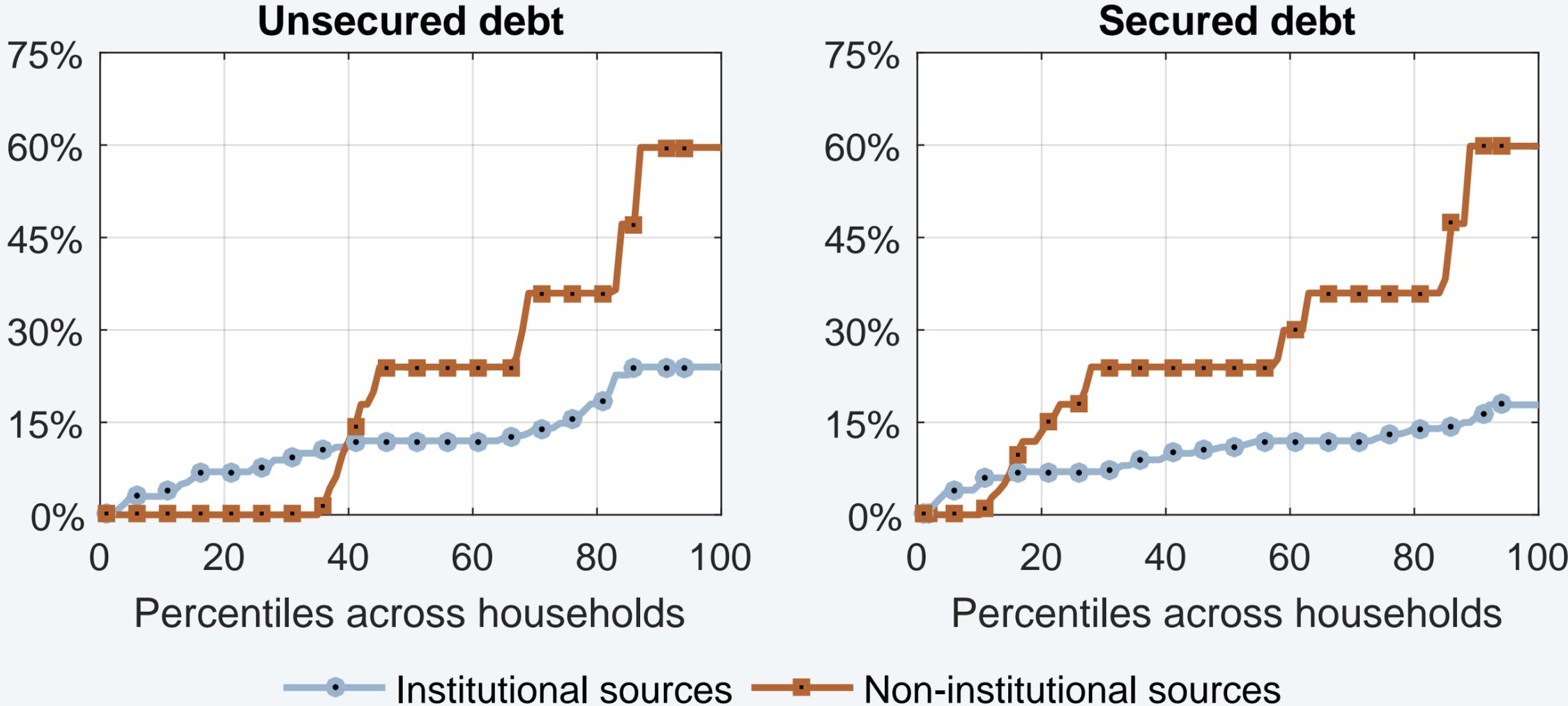


Source: Financial Inclusion Insights Survey

Exposure to high-cost borrowing

Mechanisms of coping with risks perpetuate financial fragility

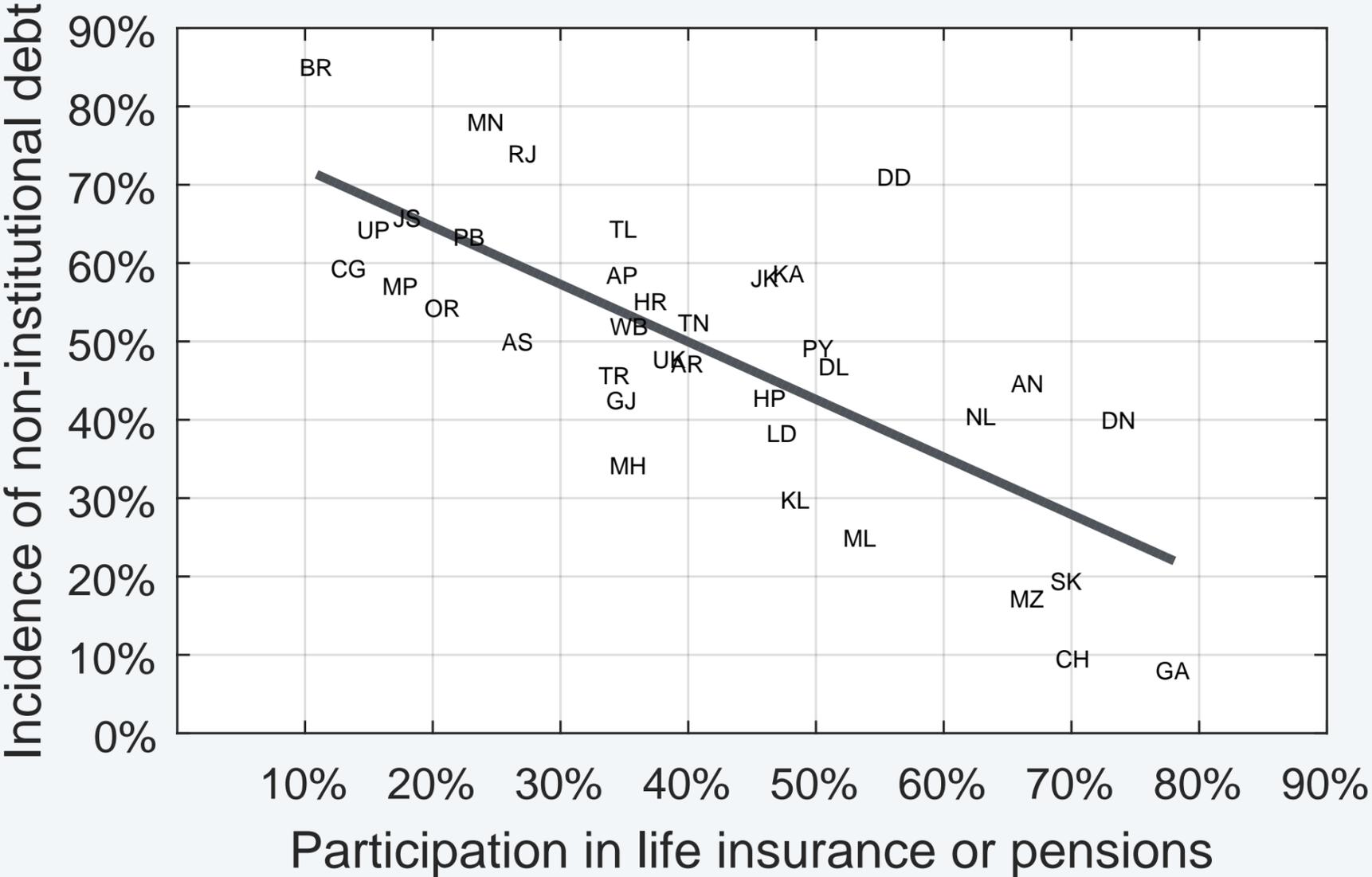
Interest rates on outstanding loans



Source: All India Debt and Investment Survey

Substitution between insurance and debt: Evidence across Indian states

Non-institutional mechanisms and *ex-post* insurance perpetuates financial fragility

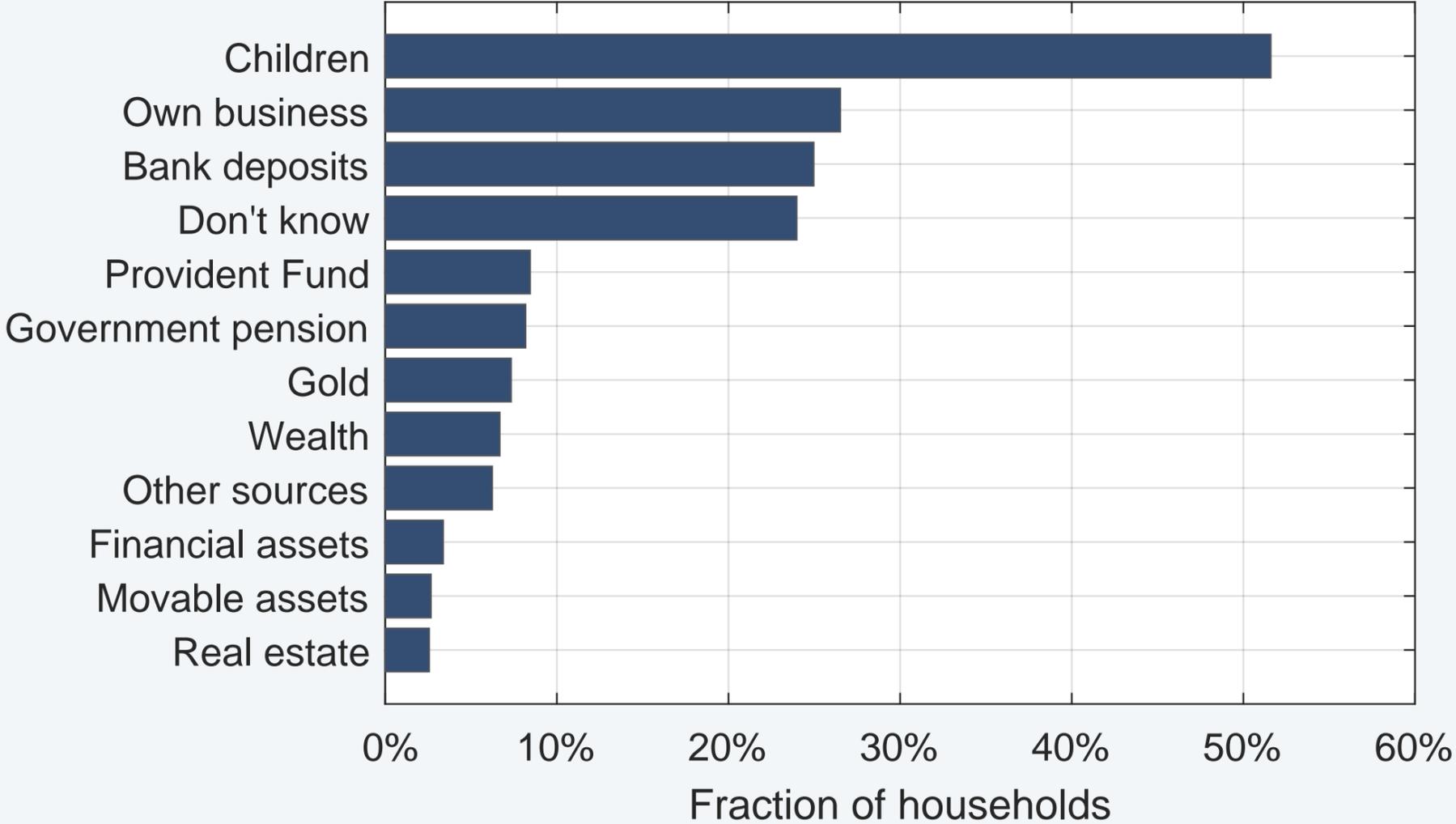


Source: All India Debt and Investment Survey

Retirement: When coping with the present, ignoring the future?

Anticipating future resilience gaps as family structure changes

“What are likely to be the primary means for you to ensure financial security in your old age?”



Source: ICE 360 Degrees National Household Survey

The Household Finance Committee Report: Selected Recommendations

Simplification and customization: walking a fine line

▶ Facilitating the use and growth of household finance markets:

▶ Simplification:

▶ Providing financial advice that is in the best interests of households.

▶ Simplifying and explaining financial contracts in a manner that is both intuitive and salient.

▶ Process simplification for entry and use (e-KYC, eliminating wet signatures, and other mechanisms).

▶ Use of technology to scale up and depersonalise potentially uncomfortable face-to-face interactions.

▶ Customization to deal with “real” complexity:

▶ Customised financial products that account for the *complexity of financial circumstances along the life cycle*.

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Complex trade-offs in product and market design

▶ **Simplification:**

- ▶ Despite unprecedented growth in access, still limited actual use of financial instruments and contracts in emerging economies.
- ▶ Simplification can help to overcome barriers to access formal financial products (e.g., documentation and other frictions, trust, attachment to traditional modes of operation).
- ▶ But: simplification comes at the cost of potentially failing to meet actual needs.

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▶ **Customization:**

- ▶ Coming to grips with the real complexities of household economics.
- ▶ But: Significant concerns about financial innovation in markets populated by behavioural agents.
 - ▶ High cognitive/behavioural and administrative burden on households in both asset and liability markets. (Andersen, Campbell, Nielsen, Ramadorai, 2020, Balasubramaniam, Campbell, Ramadorai, Ranish, 2021)
 - ▶ Regressive cross-subsidies in financial markets. (Fisher, Gavazza, Liu, Ramadorai, Tripathy, 2021)
 - ▶ Can exacerbate inequality of financial wealth. (Campbell, Ramadorai, Ranish, 2018)

Example 1: Refinancing inaction in Danish households

Andersen, Campbell, Meisner-Nielsen, and Ramadorai (2020, American Economic Review)

- ▶ Mortgage refinancing is a complex optimal stopping problem.
- ▶ Danish system freely permits refinancing without constraints, streamlines options available to households. And yet:
- ▶ Evidence of **Time-dependent inaction**:
 - ▶ Older households with lower education, income, housing wealth, and financial wealth.
- ▶ Evidence of **State-dependent inaction**:
 - ▶ Middle-aged households with relatively higher financial wealth.
- ▶ Financial capabilities deteriorate late in life, and poorer households make worse financial decisions even in an environment that is well-designed and freely permits households to exercise choice.

Example 2: Portfolio construction by Indian households

Balasubramaniam, Campbell, Ramadorai, and Ranish (2021)

- ▶ Study how Indian investors create stock portfolios in a “natural” environment without assistance from mutual fund managers.
- ▶ Older and larger accounts tend to hold stocks with characteristics that traditionally generate risk-compensation, but younger and smaller accounts tend to be lured in by mega-IPOs and “lottery-like” stock characteristics.

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Campbell, Ramadorai, and Ranish (2018, American Economic Review: Insights)

- ▶ Larger Indian stock accounts earn similar arithmetic average returns to smaller accounts, but substantially higher geometric average returns, a result of more efficient diversification.
- ▶ Over a long time period, these differences compound substantially, contributing heavily to the inequality of wealth held in risky assets by Indian investors.

Example 3: Refinancing cross-subsidies in the UK mortgage market

Fisher, Gavazza, Liu, Ramadorai, and Tripathy (2021)

- ▶ Study mortgage refinancing using administrative data in the U.K. on the total outstanding stock of mortgages.
- ▶ Initially fixed “discounted” rates automatically rolled to higher “revert” rate.
 - ▶ Prompt refinancers and sluggish refinancers suggests presence of cross-subsidies.
 - ▶ Quantification of cross-subsidies shows that rates in a hypothetical single-rate world lie above teaser rates, and below revert rates.
- ▶ Cross-subsidies unevenly distributed across the U.K., in a regressive manner.

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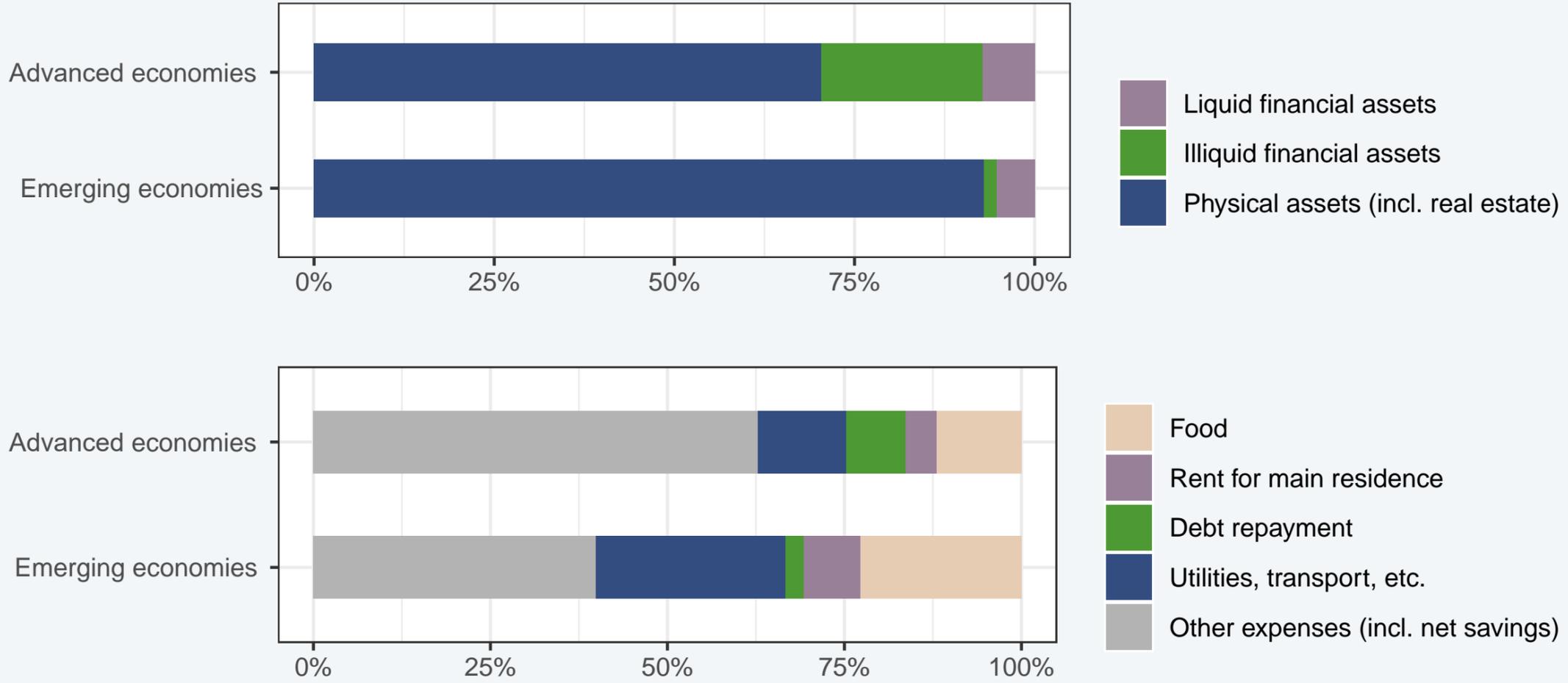
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A global shock to household income

- ▶ The Covid-19 pandemic has exposed significant fragility in the economic well-being of households across the world.
- ▶ Tough economic questions:
 - ▶ Significant uncertainty about the ability of health services to cope with outbreak.
 - ▶ Scale and nature of containment measures.
 - ▶ How can households cope with lockdown-induced disruption to earned income?
 - ▶ Need for direct transfers inhibited by available fiscal space.
- ▶ Some new work on this (Badarinza, Balasubramaniam, Bartzoka, Ramadorai, 2021).

Understanding household vulnerability I

- ▶ Income shock (Covid-19)
- ▶ Question: Are liquid assets sufficient to cover consumption?



Source: International household surveys (updated to latest available wave)

Understanding household vulnerability II

... Answer: No.

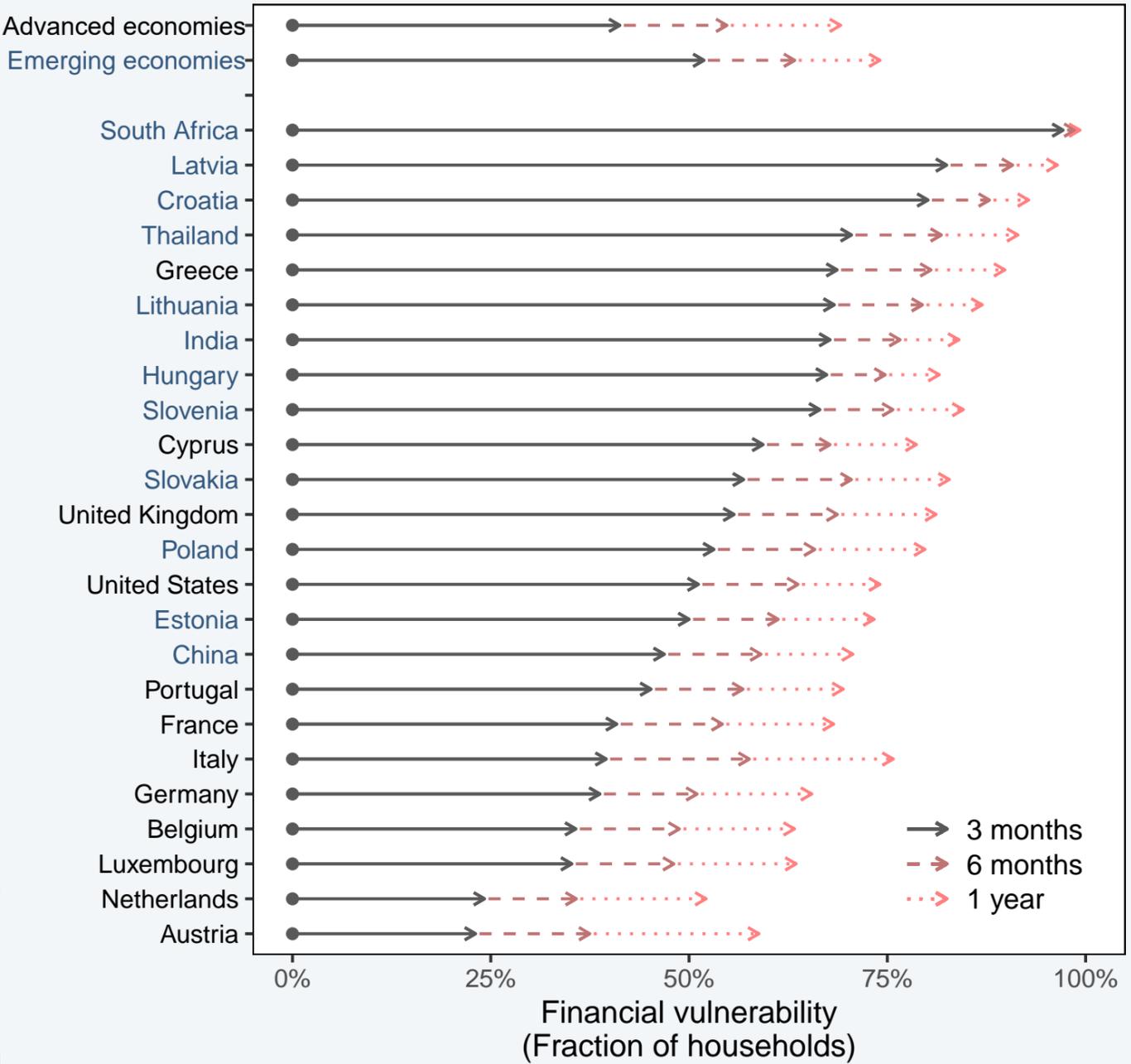
► Measurement:

$$\frac{\text{Liquid assets}}{\text{Consumption}} < 3, 6, 12 \text{ months}$$

Financial vulnerability (Fraction of households)

► Results:

	<3 months	<6 months	<12 months
Advanced economies	41%	55%	69%
Emerging economies	52%	63%	74%
India	68%	77%	84%

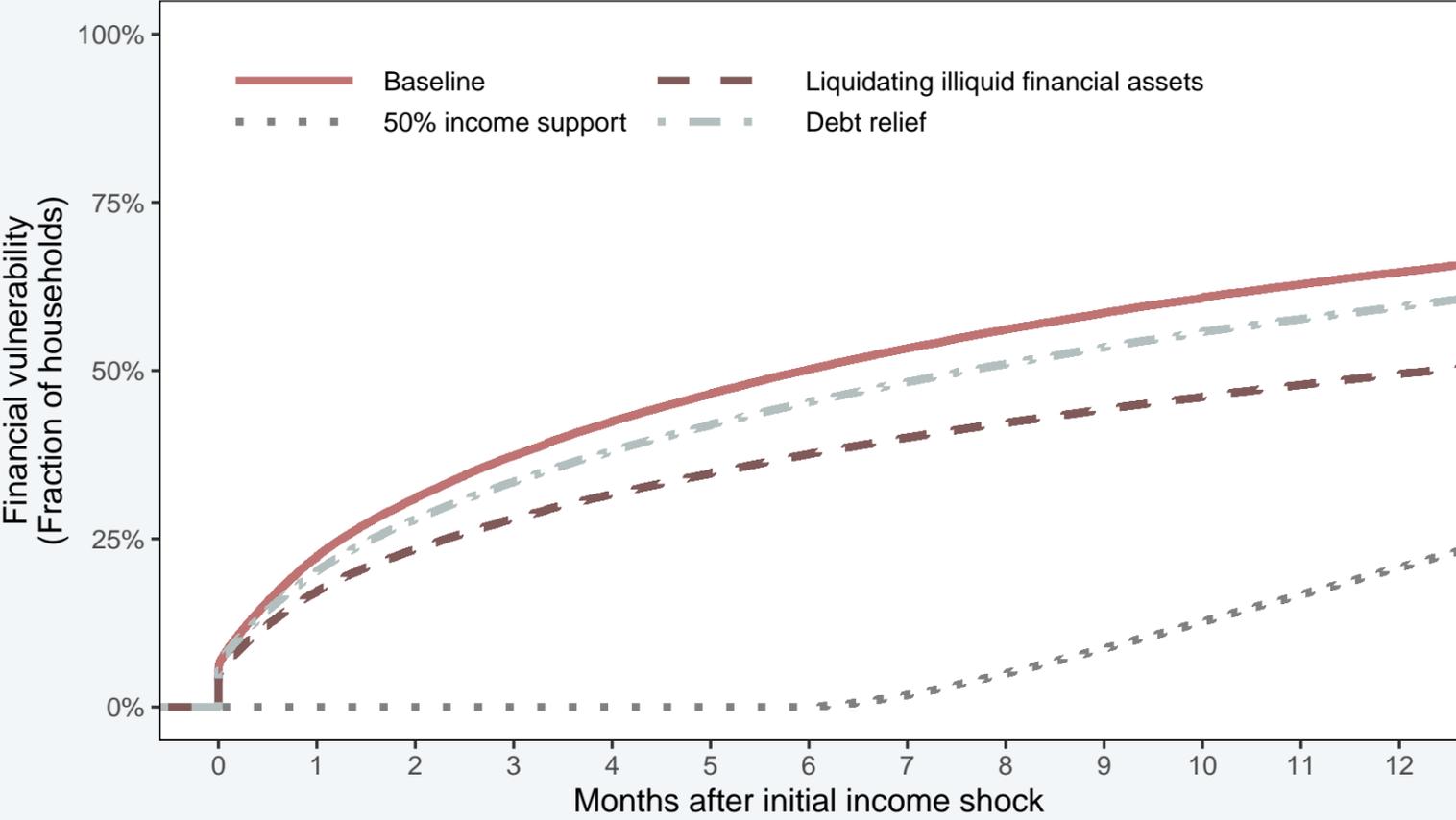


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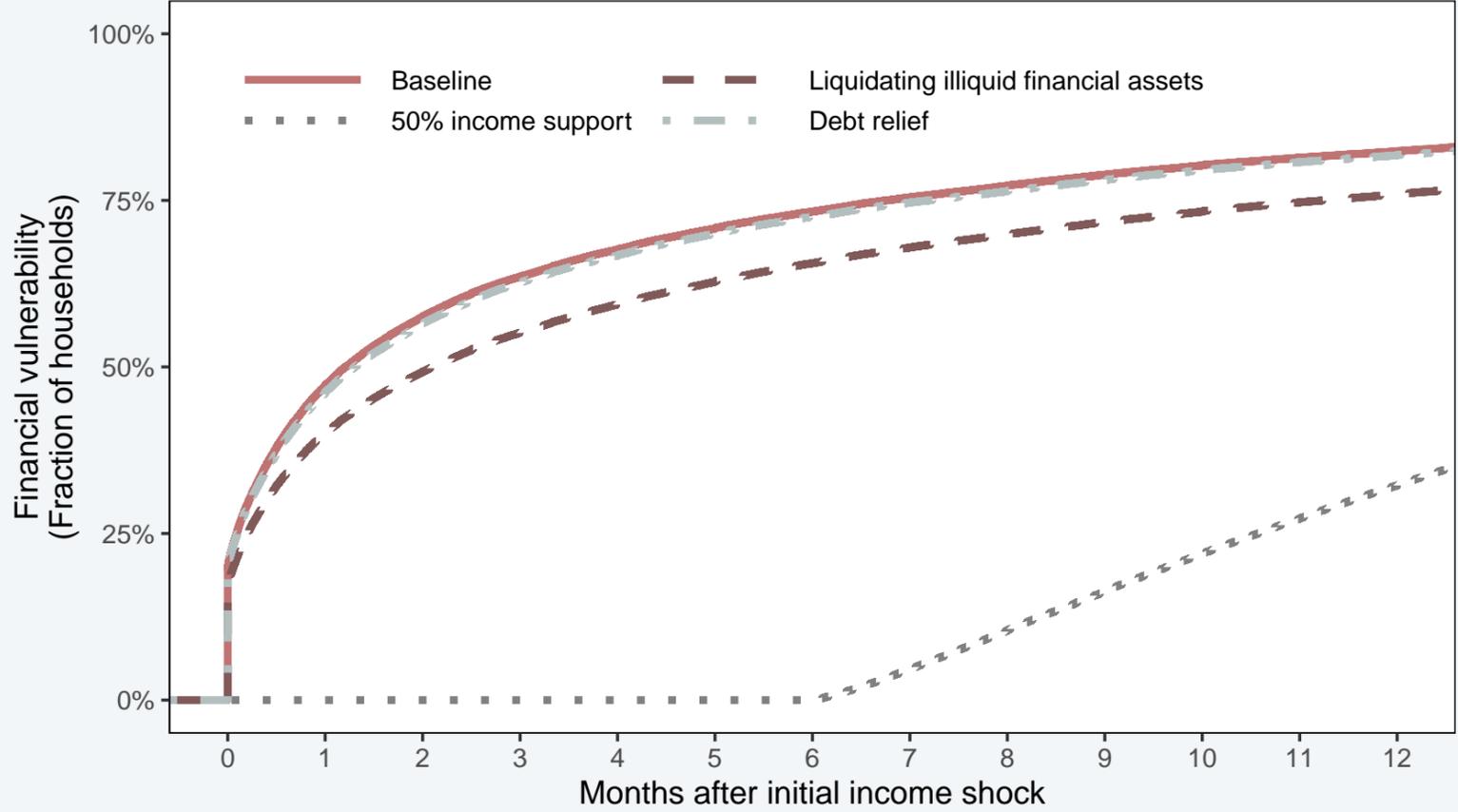
Understanding policy impact

Income support vs. Debt relief

Advanced economies



Emerging economies

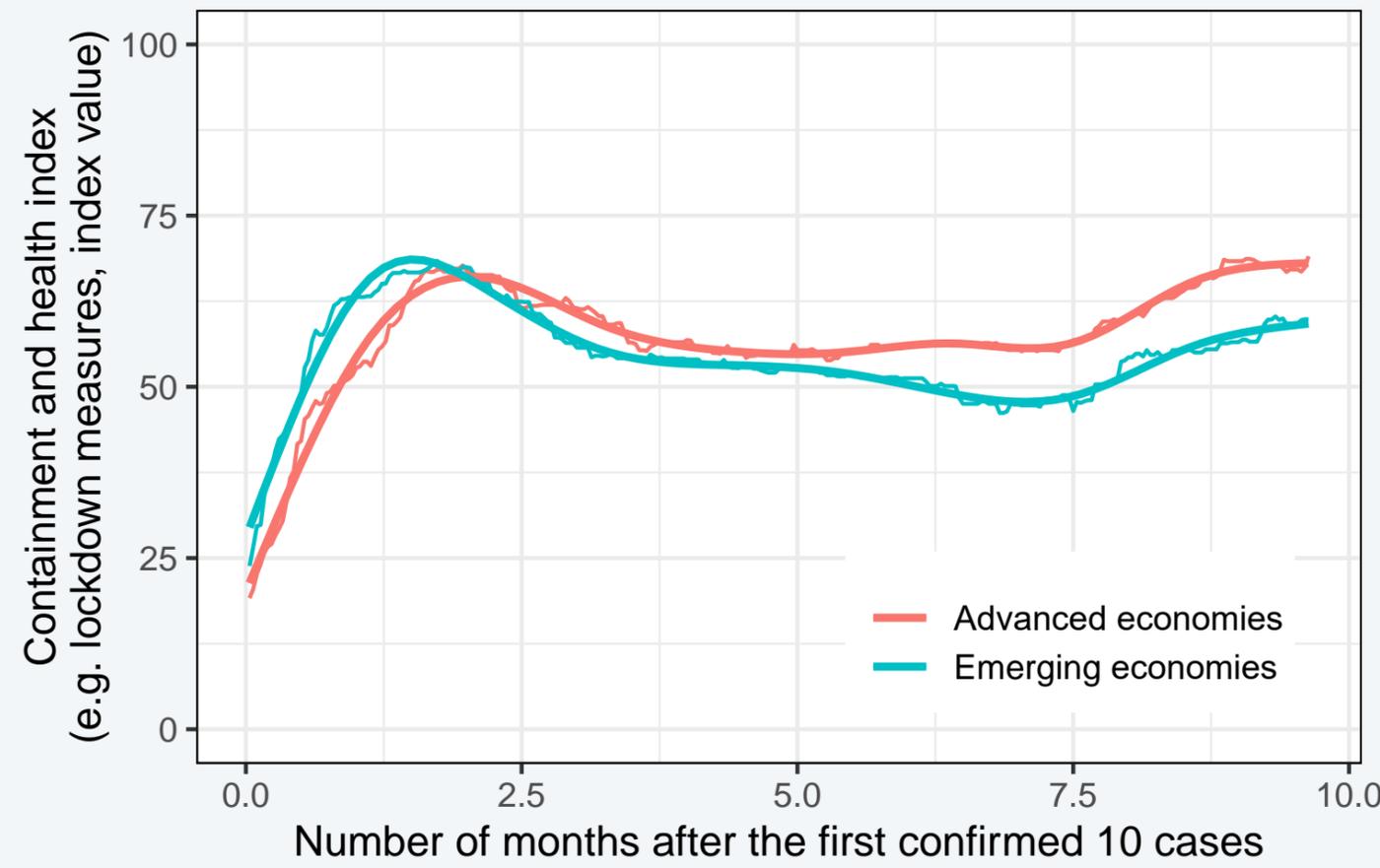


Understanding policy trade-offs

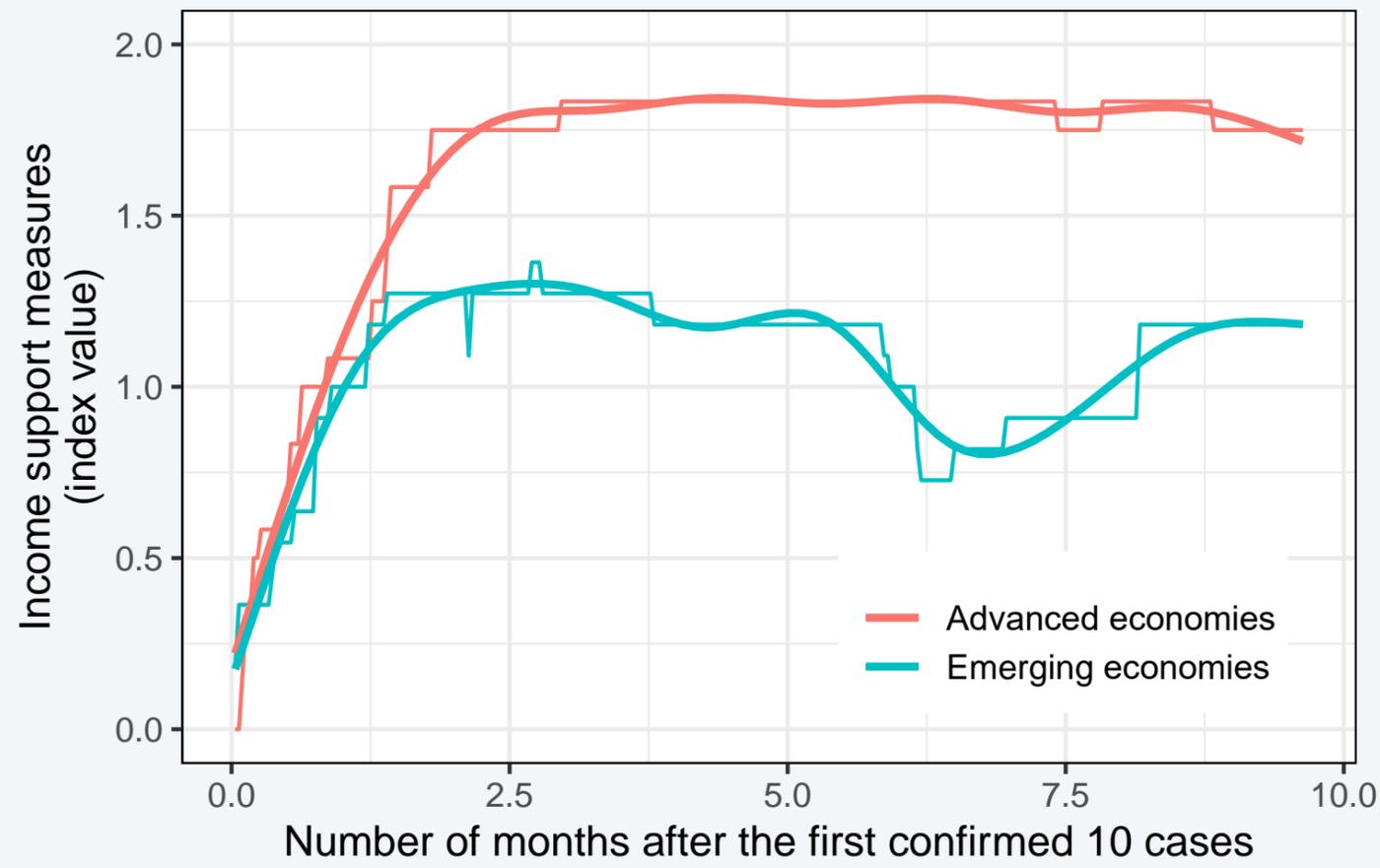
Containment policy vs. Economic support

- ▶ Global pandemic and local response.
- ▶ Action limited by fiscal space.

Containment policy



Economic support



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This Conference

Research Streams

1. Understanding balance sheets: Assets and Liabilities

- ▶ Heterogeneity across demographic groups (example: low-income, migrant households).
- ▶ Dominance of durable goods (example: gold as an asset class).

2. Understanding cash flows: Consumption and Savings

- ▶ Spatial variation (example: rural vs. urban).
- ▶ Response to exogenous events (example: cash transfers).
- ▶ Intra-household bargaining (effects on consumption and savings).

3. Assessing vulnerability

- ▶ Quantification of risk exposure (example: farmer distress index).
- ▶ Mitigation strategies (example: crop insurance).
- ▶ Identifying at-risk sub-groups (example: healthcare services for women).
- ▶ Gold as a hedge against inflation.

Priorities in the post-pandemic world

Research priorities

(Survey: Gomes, Haliassos, and Ramadorai, 2021, Journal of Economic Literature).

- ▶ Household finance and inequality.
 - ▶ What structural inadequacies has the pandemic exposed in our household finance system?
 - ▶ How are frictions differentially impacting households across the wealth distribution? Across race, ethnicity, caste, and gender?

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- ▶ Unlocking administrative data *combined with* surveys, and using structural approaches to addressing issues.
 - ▶ Data science tools are excellent for describing patterns in the data.
 - ▶ But to understand mechanisms and magnitudes, and to evaluate counterfactuals, need economic models that provide encompassing explanations of patterns in data.
 - ▶ Focus on deeper parameters: households' beliefs, preferences, constraints, and features of the environment.

Priorities in the post-pandemic world

Policy priorities

- ▶ The Covid-19 pandemic has been a litmus test for the ability of Indian households to cope with severe income shocks.
 - ▶ It is now increasingly clear that the adverse consequences of the pandemic will be long-lasting across all segments of the Indian population; worse as we move down the wealth distribution.

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- ▶ The Covid-19 pandemic has been a litmus test for the ability of Indian households to cope with severe income shocks.
 - ▶ It is now increasingly clear that the adverse consequences of the pandemic will be long-lasting across all segments of the Indian population; worse as we move down the wealth distribution.
- ▶ But: Financing these short-term financial needs could severely impede progress on building longer-term household financial resilience in India.
 - ▶ Focus on long-term issues as a matter of priority.
 - ▶ Research emphasis on building household financial resilience.
 - ▶ Alas, this is not the final crisis we will face! Larger ones (like climate) loom.

Looking ahead I: Short and medium term

1. Anticipating the effects of potential increases in inflation.

- ▶ Mortgage product design: adjustable rates expose households to unexpected rate increases.
- ▶ Financialization and collateralization of durable goods?

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- ▶ Financialization and collateralization of durable goods?

2. Using technology to automatically trigger emergency disbursements.

- ▶ Particularly relevant for the case of insurance payouts.
- ▶ But also potentially useful as a general incentive for financial inclusion.
- ▶ Default options, facilitating adoption of new technologies.

Looking ahead II: Longer term

3. Saving for and financing retirement.

- ▶ Micro-pensions scheme: Customization and scalability.
- ▶ Annuitisation: Hedging against longevity risk.

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4. Accessing a basic household finance “kit.”

- ▶ Assets:

No-frills savings and target-date accounts with digital access, and micro-pensions with flexible dates of pay.

- ▶ Insurance:

Life, health and catastrophe insurance with automatic triggers.

- ▶ Liabilities:

Micro, unsecured credit, and simple collateralized loans.

