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

Tarun Ramadorai (Imperial College and CEPR)

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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 - ▶ Highlighted widespread household financial vulnerability.
- ▶ New insights: Simplification vs. Customization
- ▶ The Covid-19 pandemic: What have we learned?

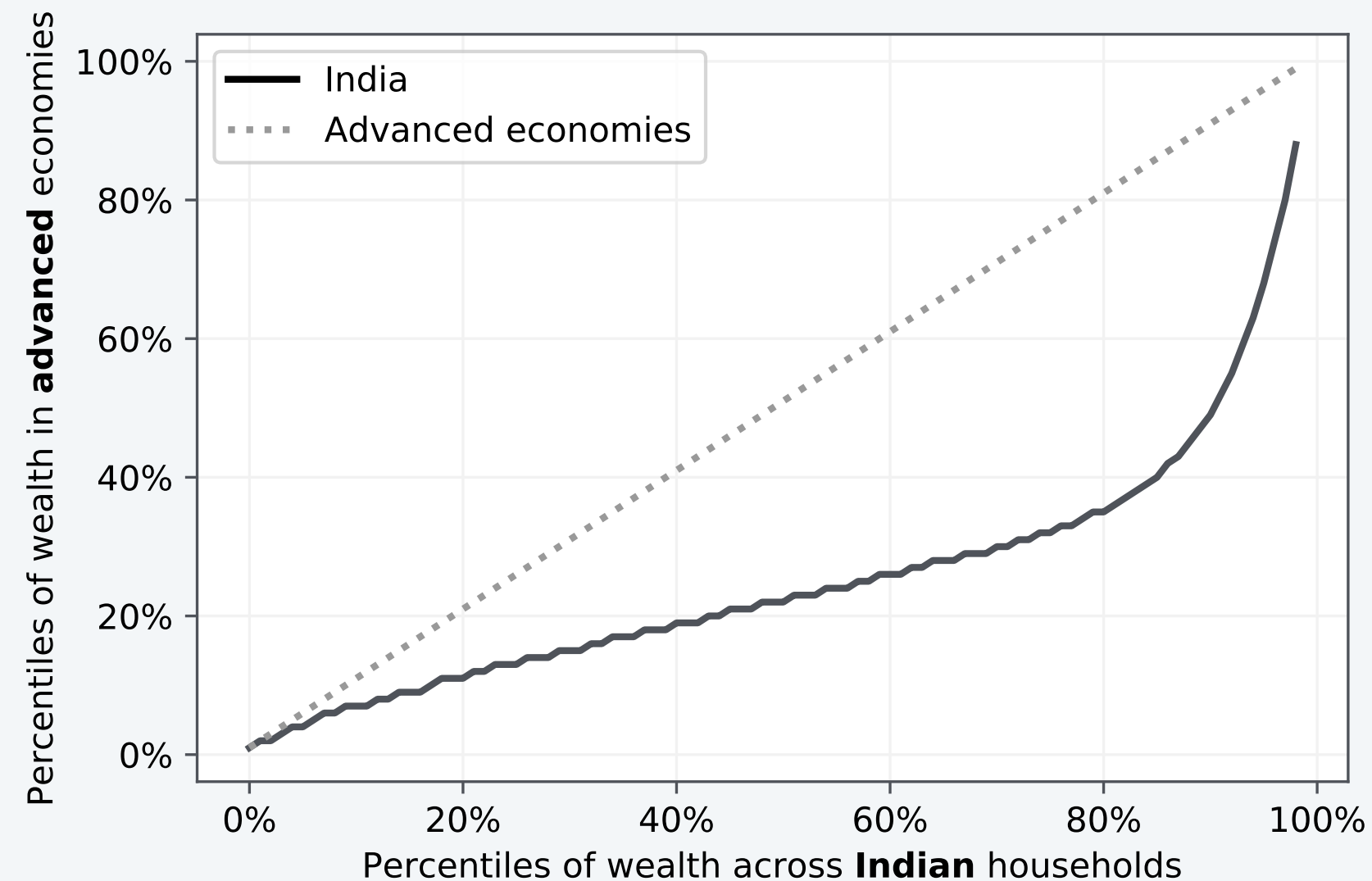
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- ▶ New insights: Simplification vs. Customization
- ▶ The Covid-19 pandemic: What have we learned?
- ▶ Where do we go from here?
 - ▶ Post-pandemic research priorities.
 - ▶ Policy implications given effects of the pandemic across the wealth distribution.
 - ▶ 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)

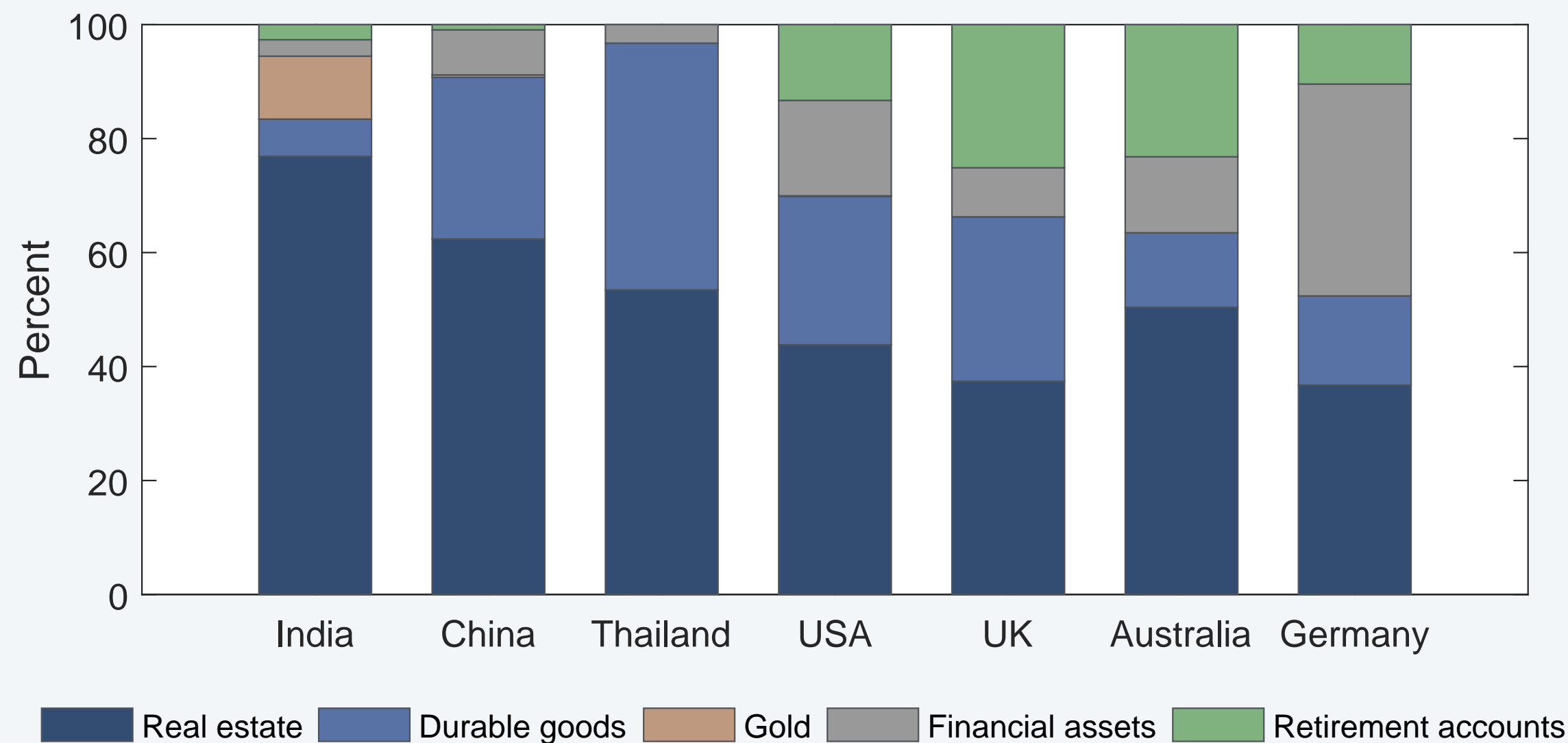
Roadmap

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.

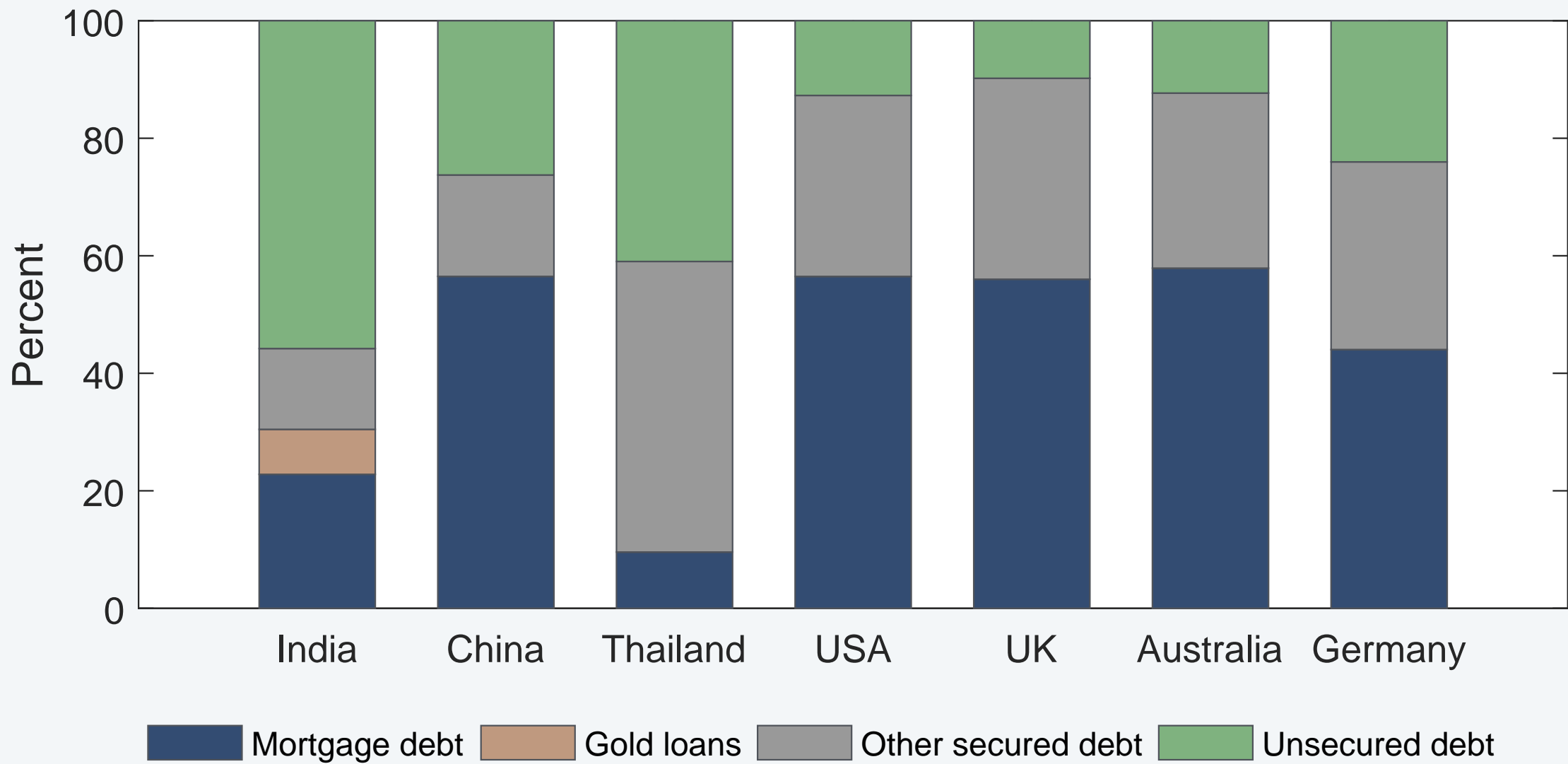


Source: International household surveys (AIDIS, CHFS, TTS, SCF, WAS, HILDA, HFCS)

The household balance sheet: Liabilities

RBI Household Finance Committee Report, 2017

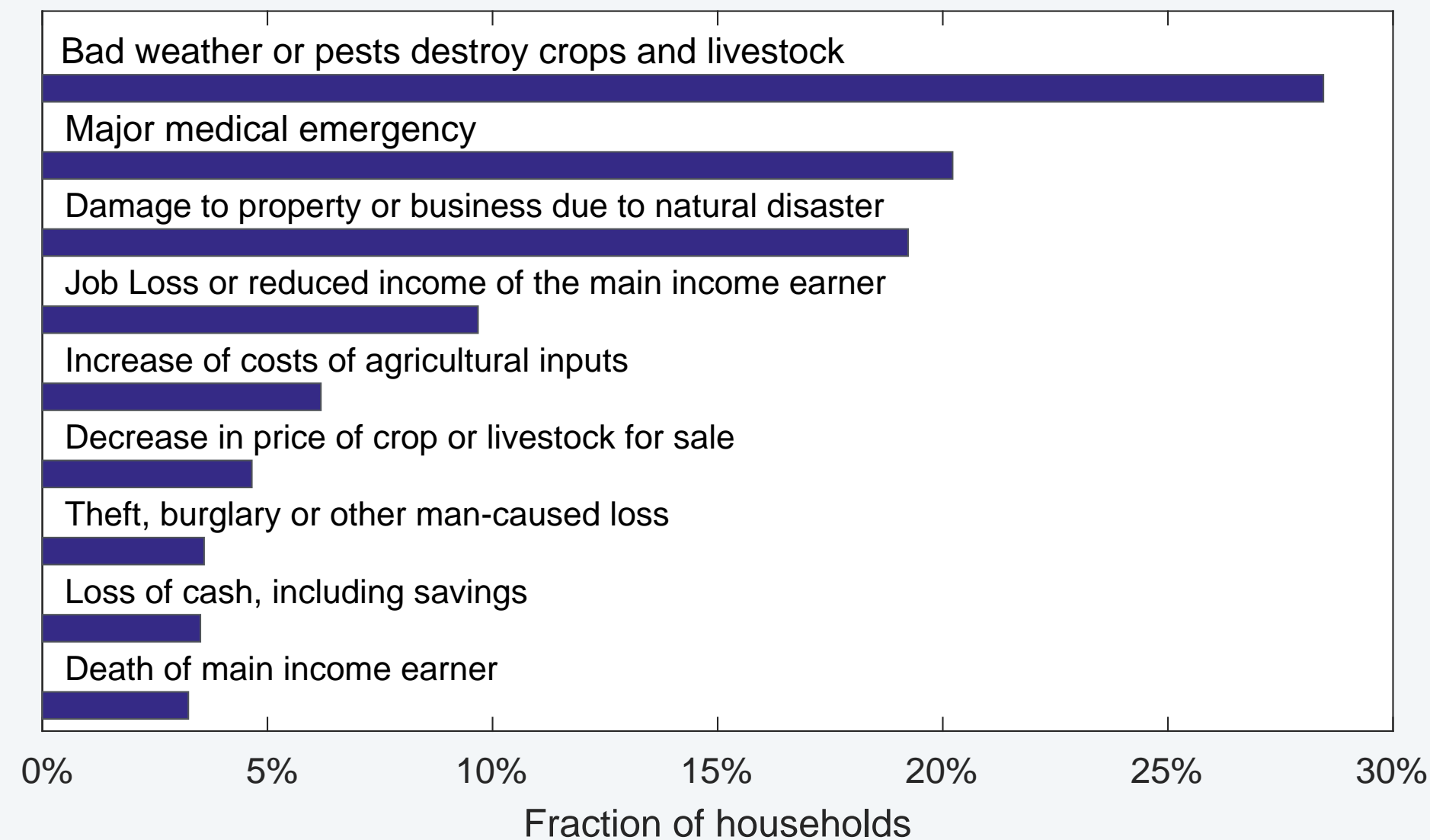
- ▶ Dominance of unsecured debt, primarily sourced informally.
- ▶ High *net* holdings of illiquid assets on the household balance sheet.



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

Sources of risk faced by Indian households, pre-pandemic

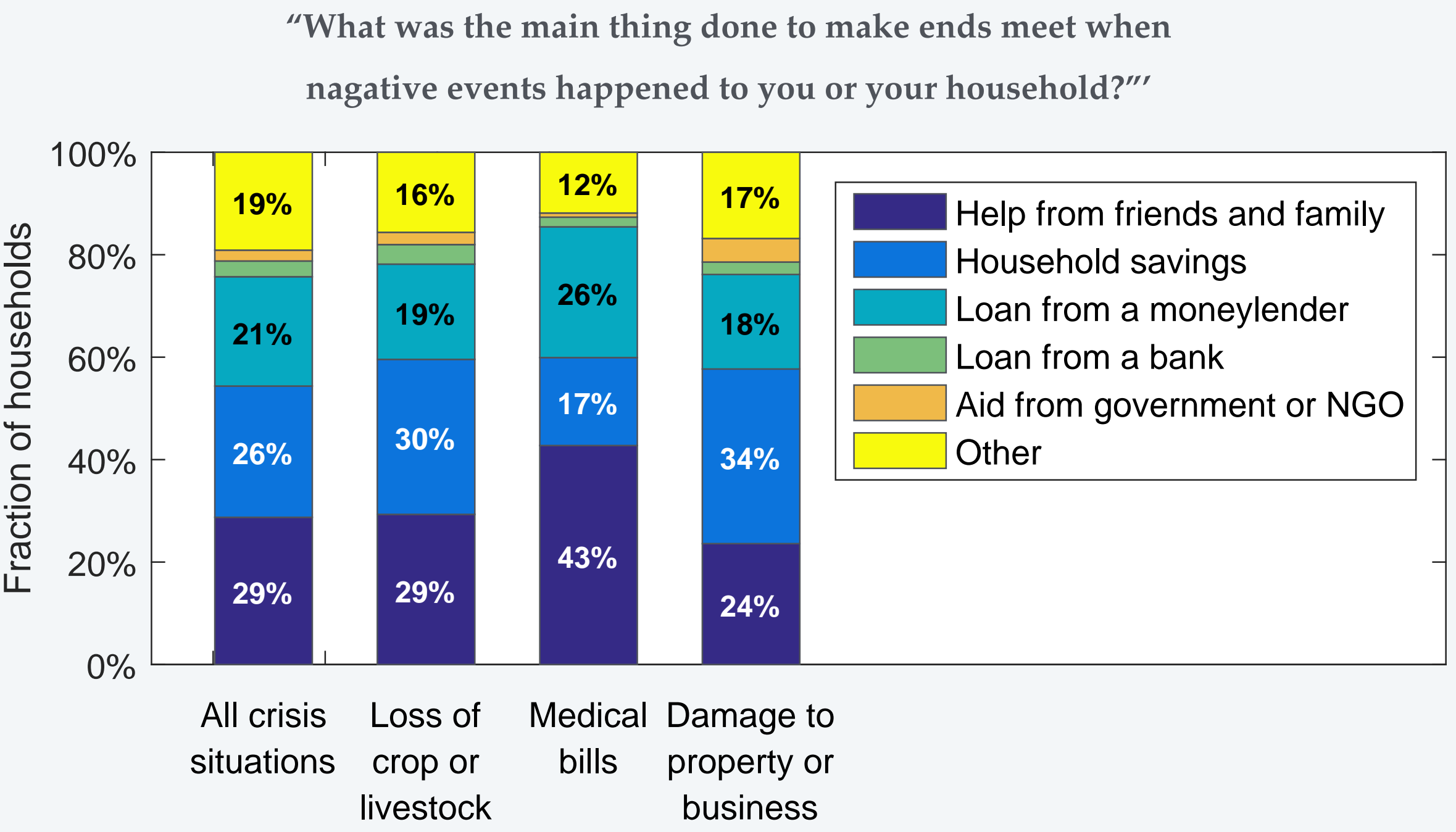
“Which of these events made the biggest impact on your household income in the last two years?”



Source: Financial Inclusion Insights Survey

Sources of emergency funds

Mechanisms of coping with risks perpetuate financial fragility

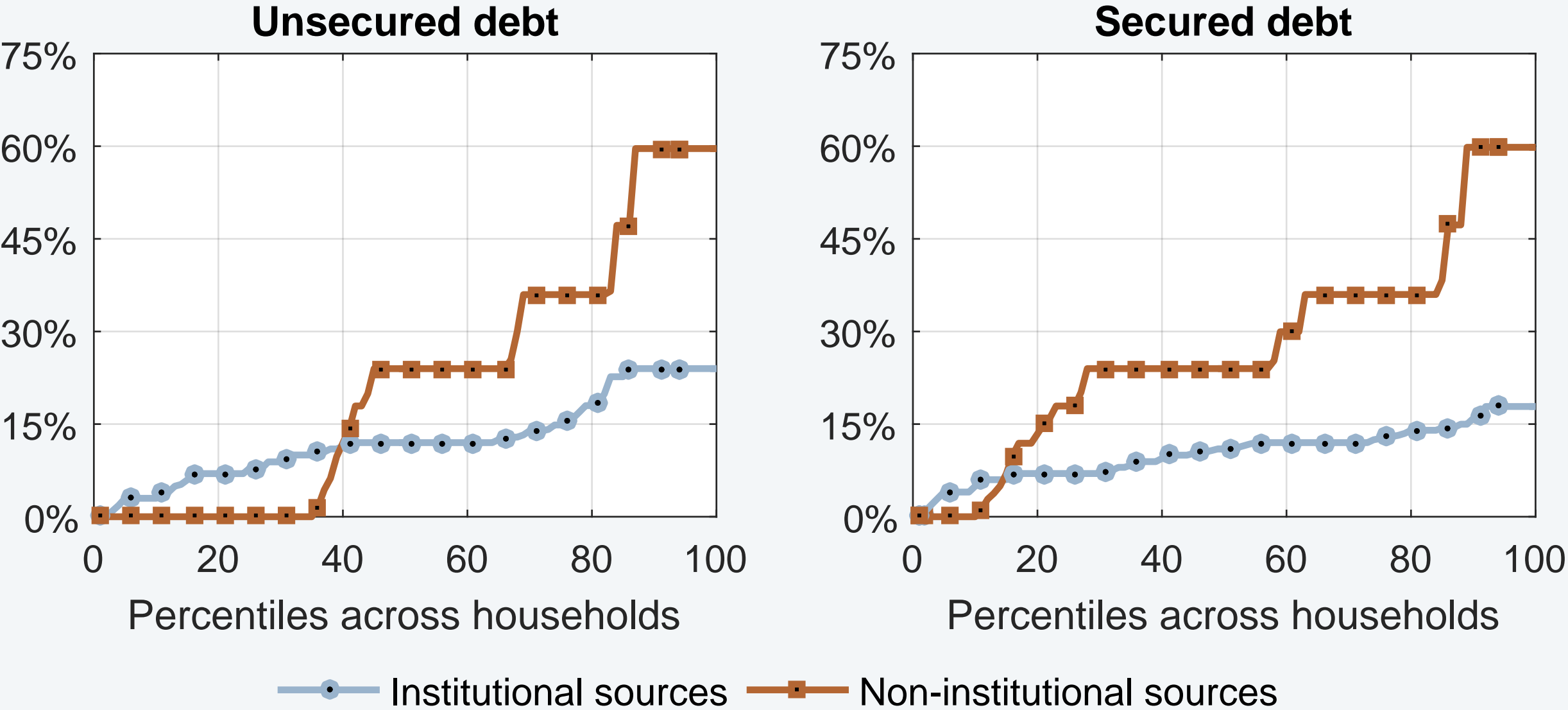


Source: Financial Inclusion Insights Survey

Exposure to high-cost borrowing

Mechanisms of coping with risks perpetuate financial fragility

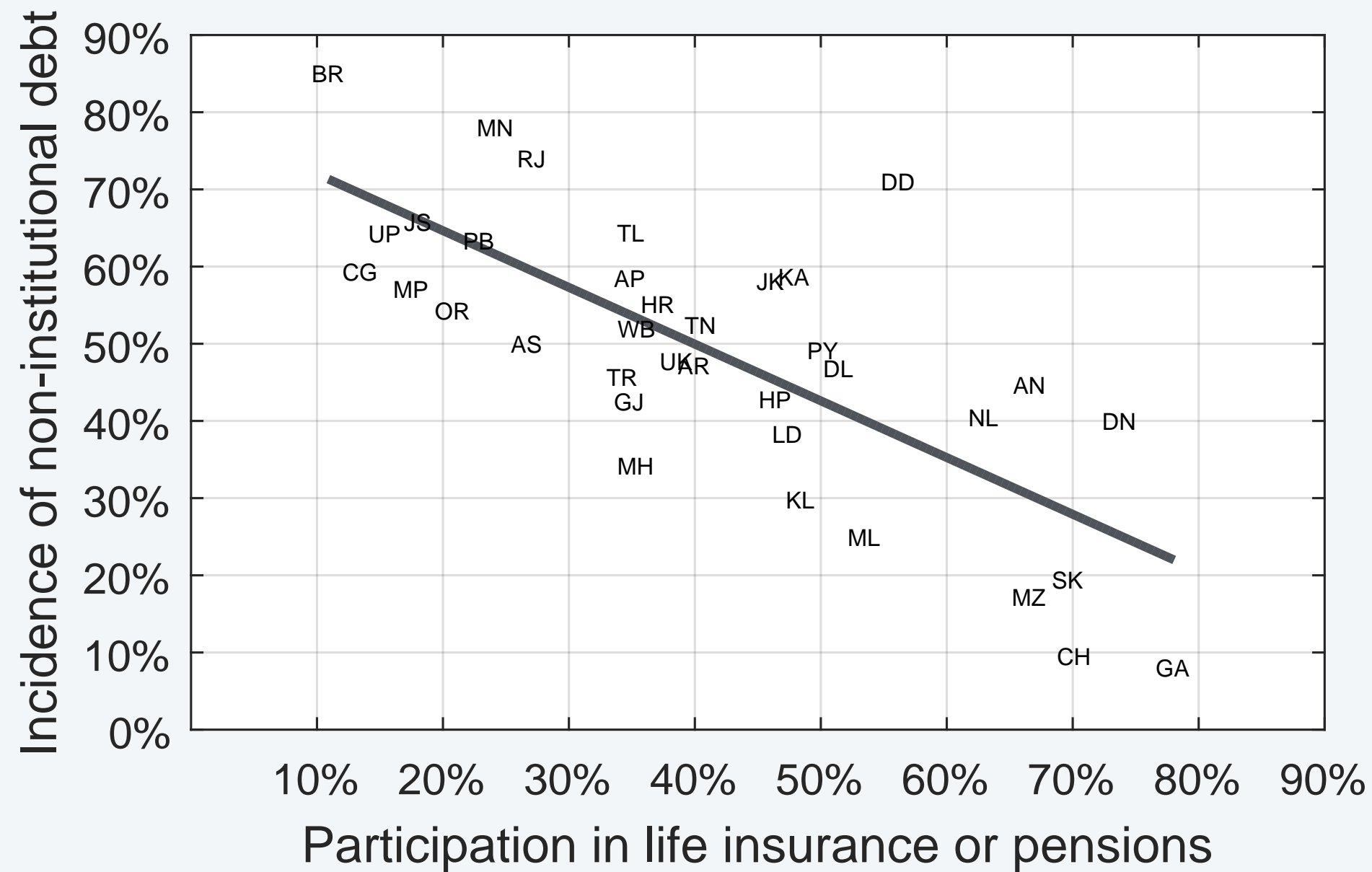
Interest rates on outstanding loans



Source: All India Debt and Investment Survey

Substitution between insurance and debt: Evidence across Indian states

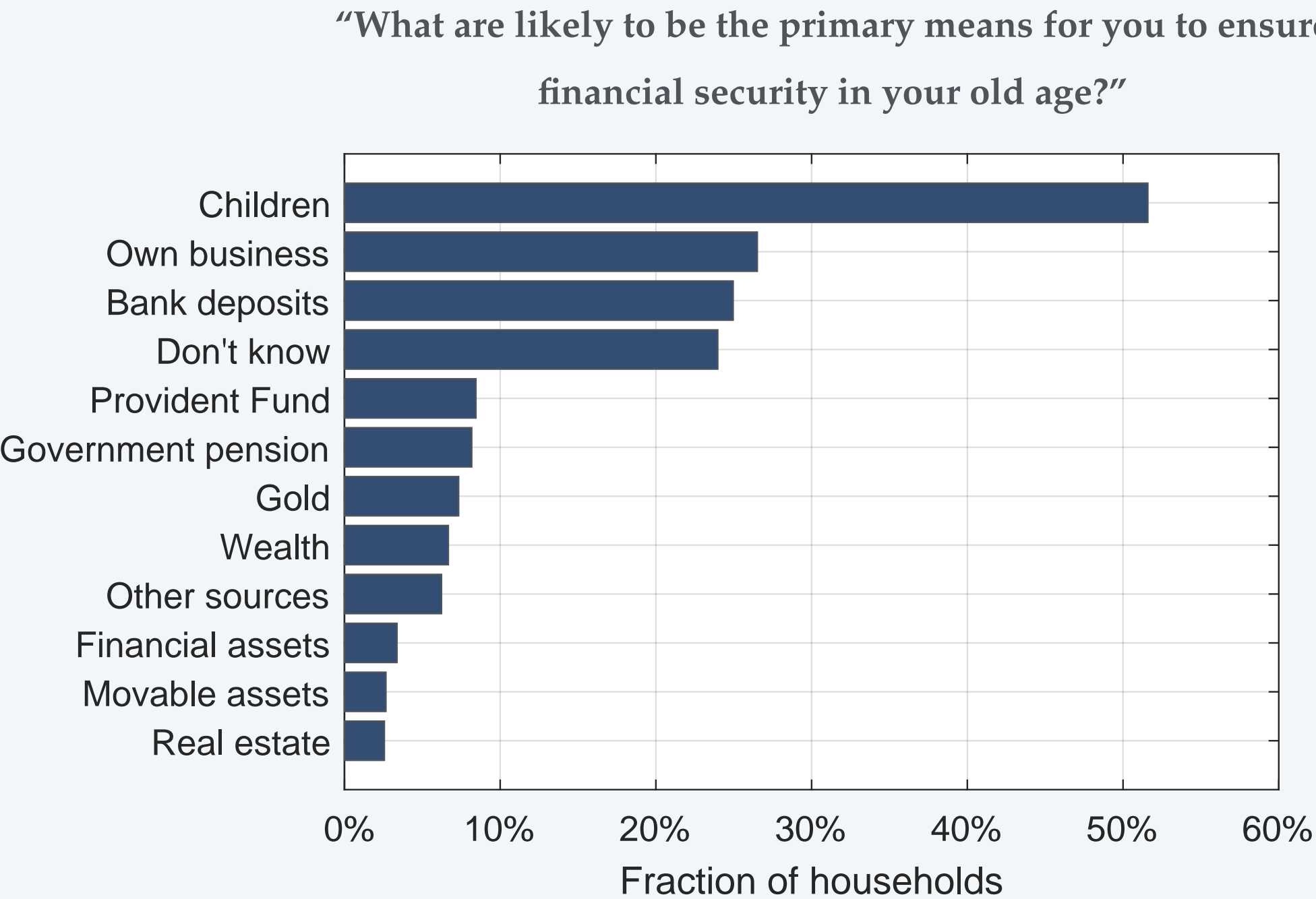
Non-institutional mechanisms and *ex-post* insurance perpetuates financial fragility



Source: All India Debt and Investment Survey

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

Anticipating future resilience gaps as family structure changes



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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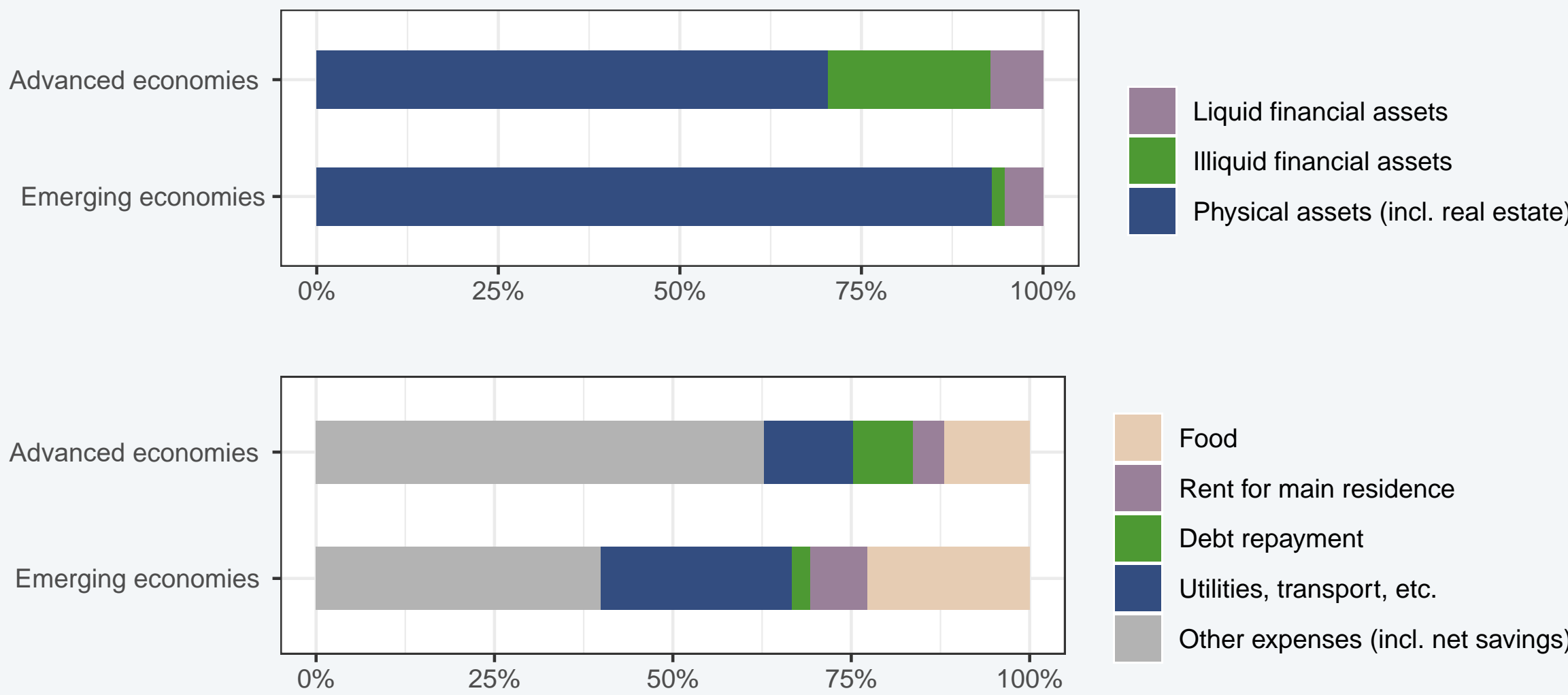
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A global shock to household income

- ▶ 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.

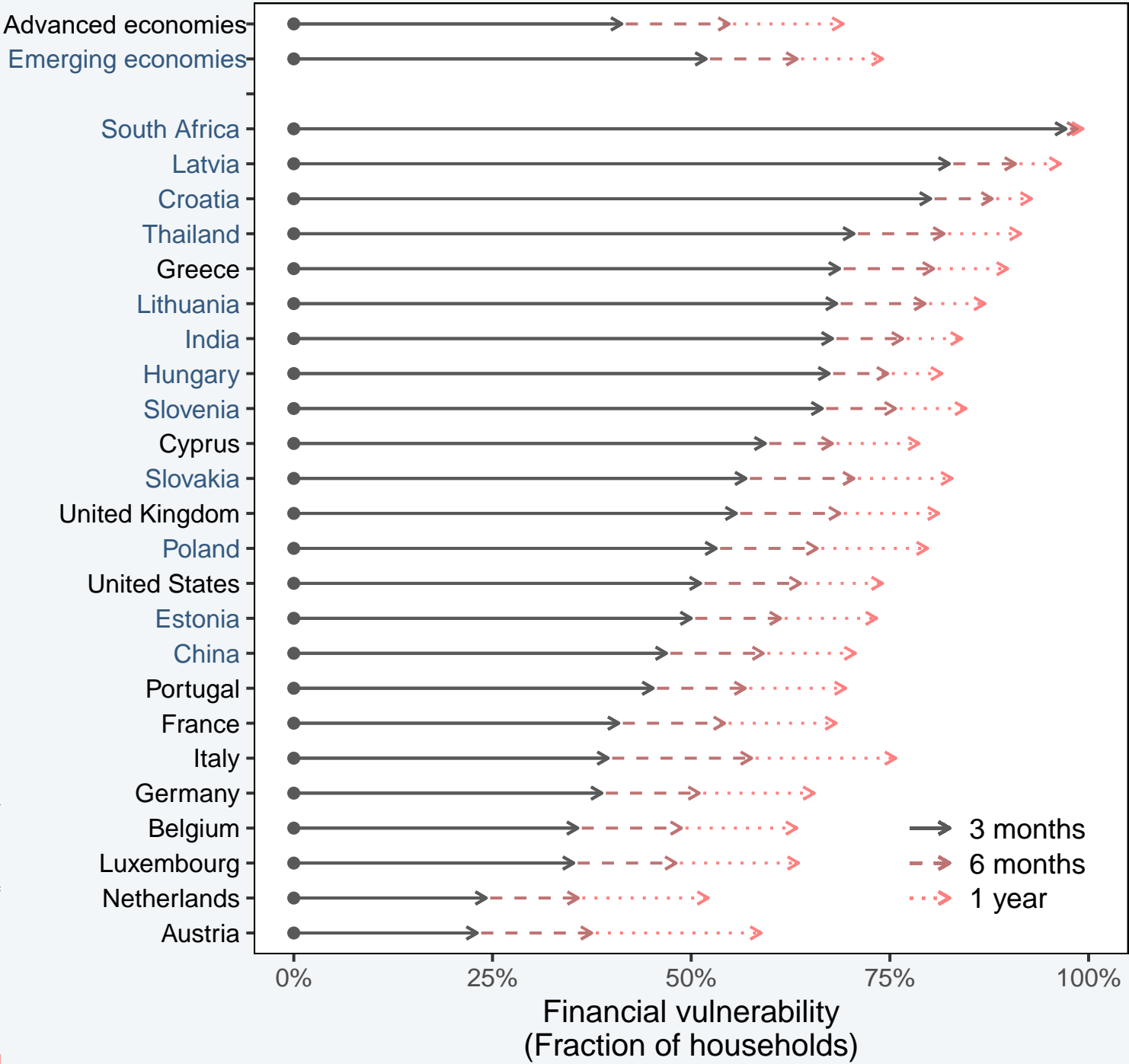
► Measurement:

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

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%

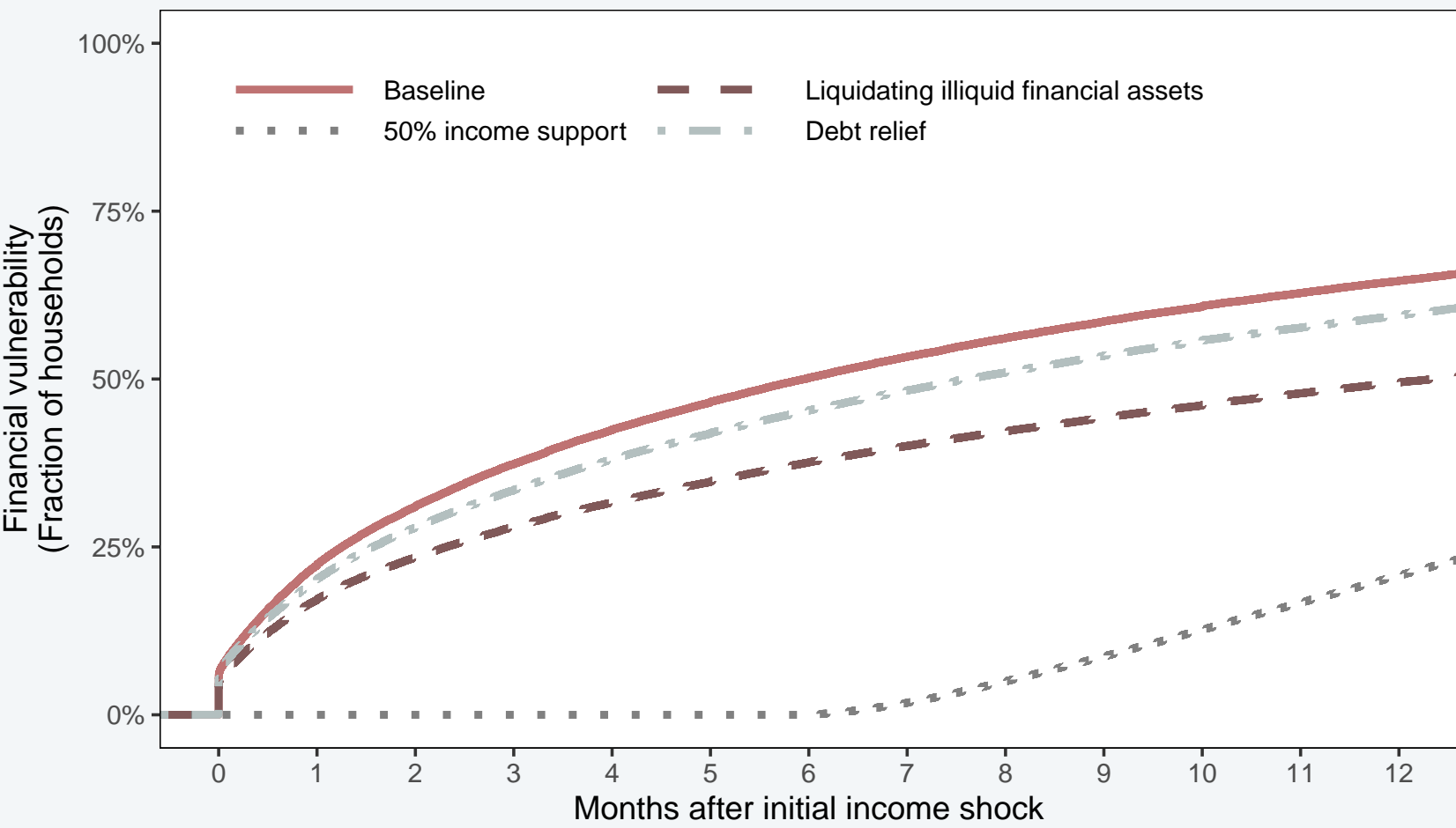


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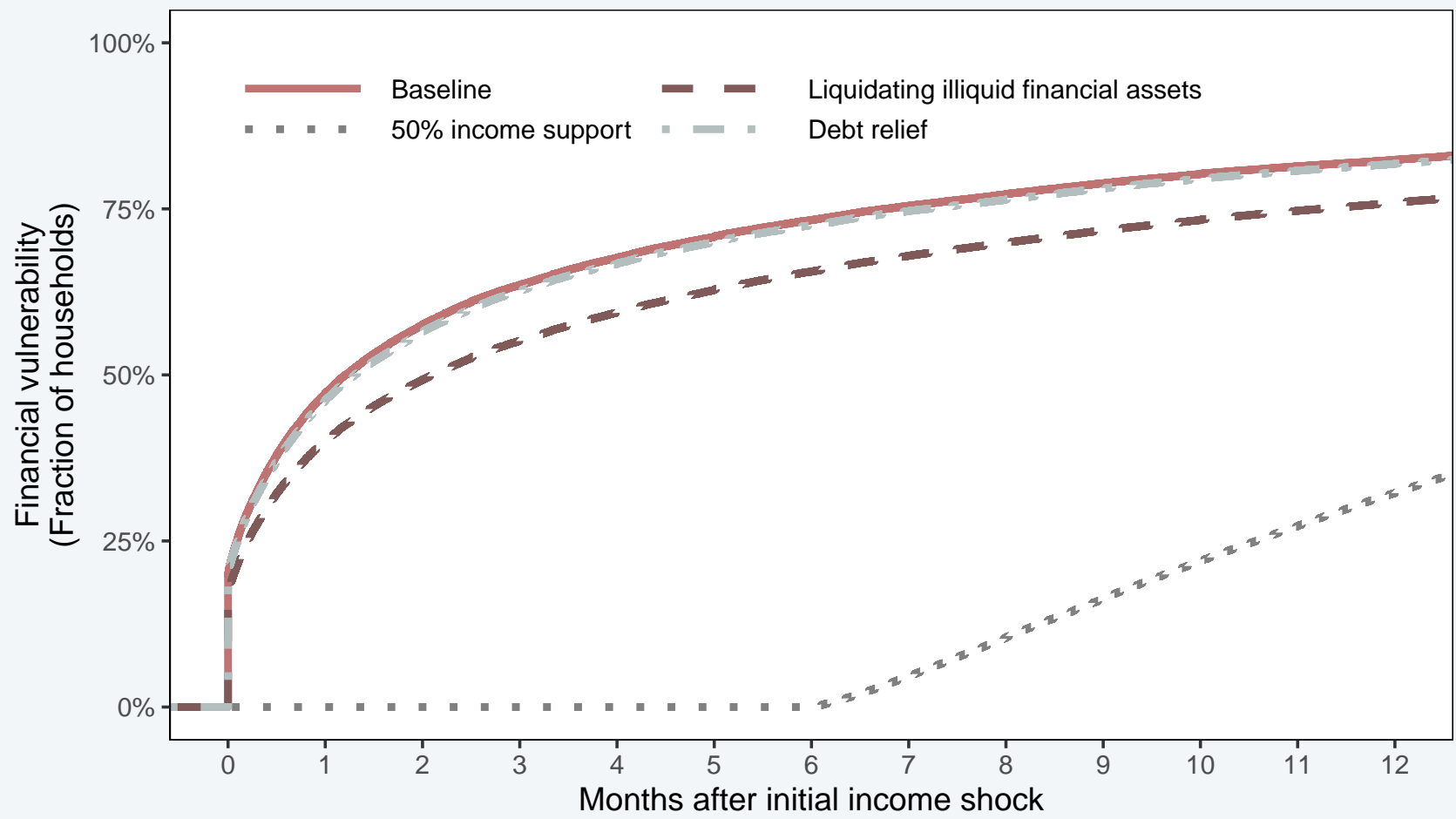
Understanding policy impact

Income support vs. Debt relief

Advanced economies



Emerging economies

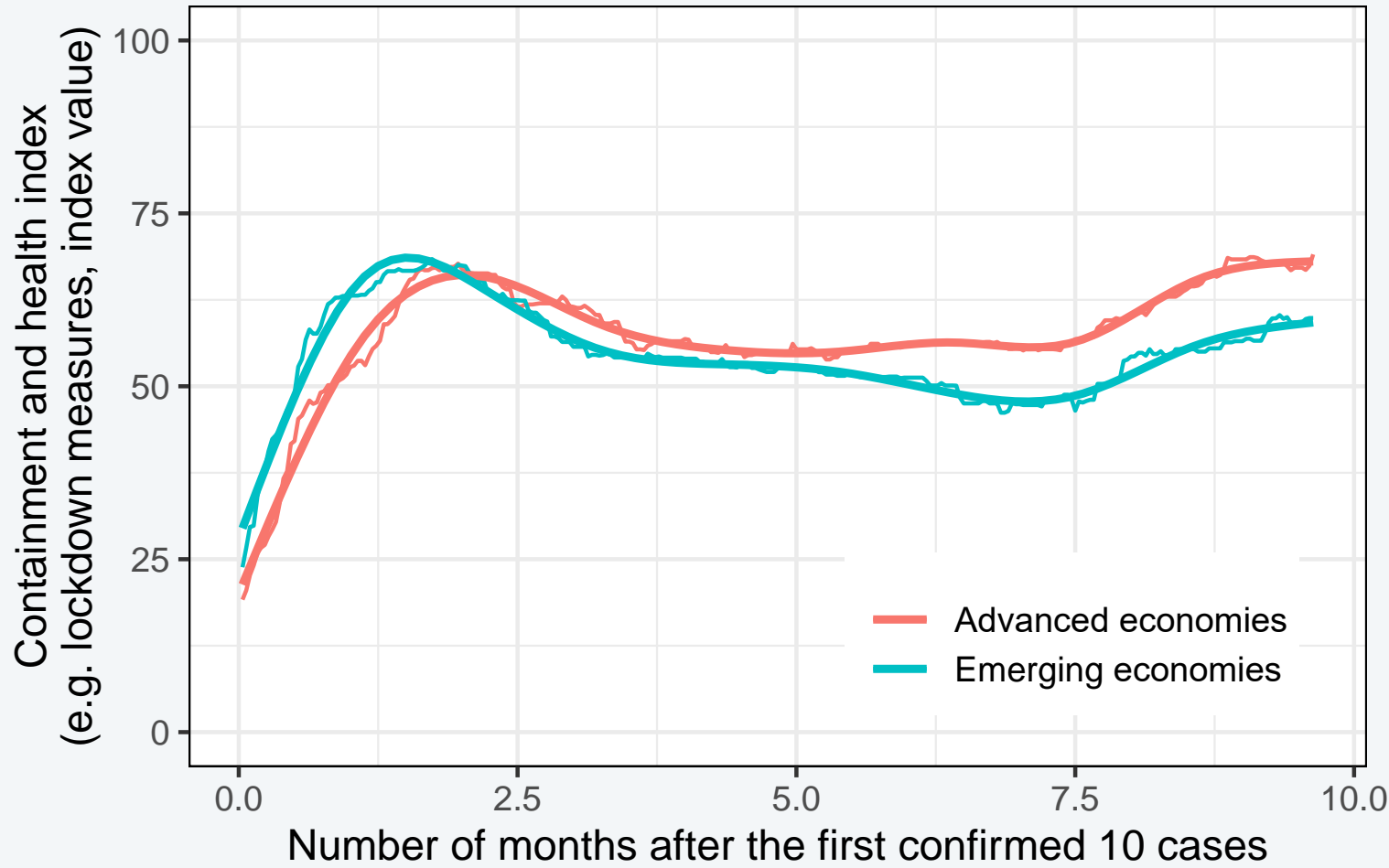


Understanding policy trade-offs

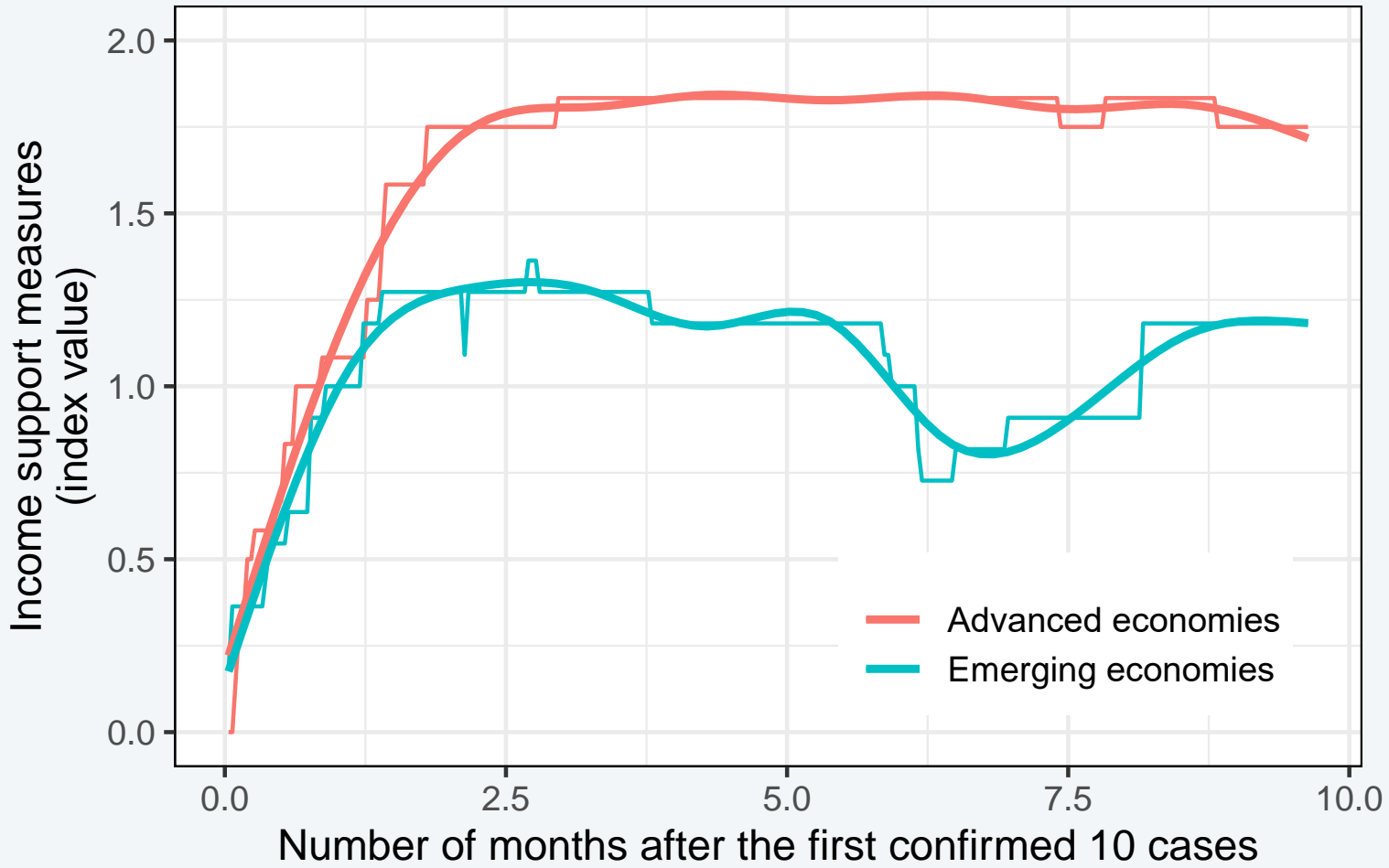
Containment policy vs. Economic support

- ▶ 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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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.

