



Indian Household Finance

Committee on Household Finance

Tarun Ramadorai

Terms of Reference: Household Finance Committee

1. To **benchmark**... household financial markets in India vis-a-vis... other major world markets...
2. To characterize... Indian households' demand in formal financial markets... **over the coming decade**.
3. To consider whether... the financial allocations... **deviate from desirable financial allocation and behavior**.
4. To evaluate the **design of new systems and the redesign of existing systems** of... regulations...
5. To assess the role of **new financial technologies and products**... in the... provision of... financial products...

Roadmap

International comparative analysis

- Broad trends

- Participation in financial markets

- Allocation of wealth

- Understanding international differences

Optimal decisions along the life cycle

Indian household financial decisions

- Geographic heterogeneity

- Household behaviour

- Medium-term projections

- Gains from re-allocation of household wealth

Enabling improved household finance outcomes

- Explaining household behaviour

- Qualitative principles for household finance policy

Recommendations

Indian Household Financial Decisions

- ▶ Four broad features visible in the All-India Debt and Investment Survey, 2012:

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1. High allocation to non-financial assets (gold and real estate).
2. High levels of non-institutional-source borrowing.
3. Near complete lack of pensions.
4. Low levels of insurance penetration (life and non-life).

Indian Household Financial Decisions

- ▶ Four broad features visible in the All-India Debt and Investment Survey, 2012:

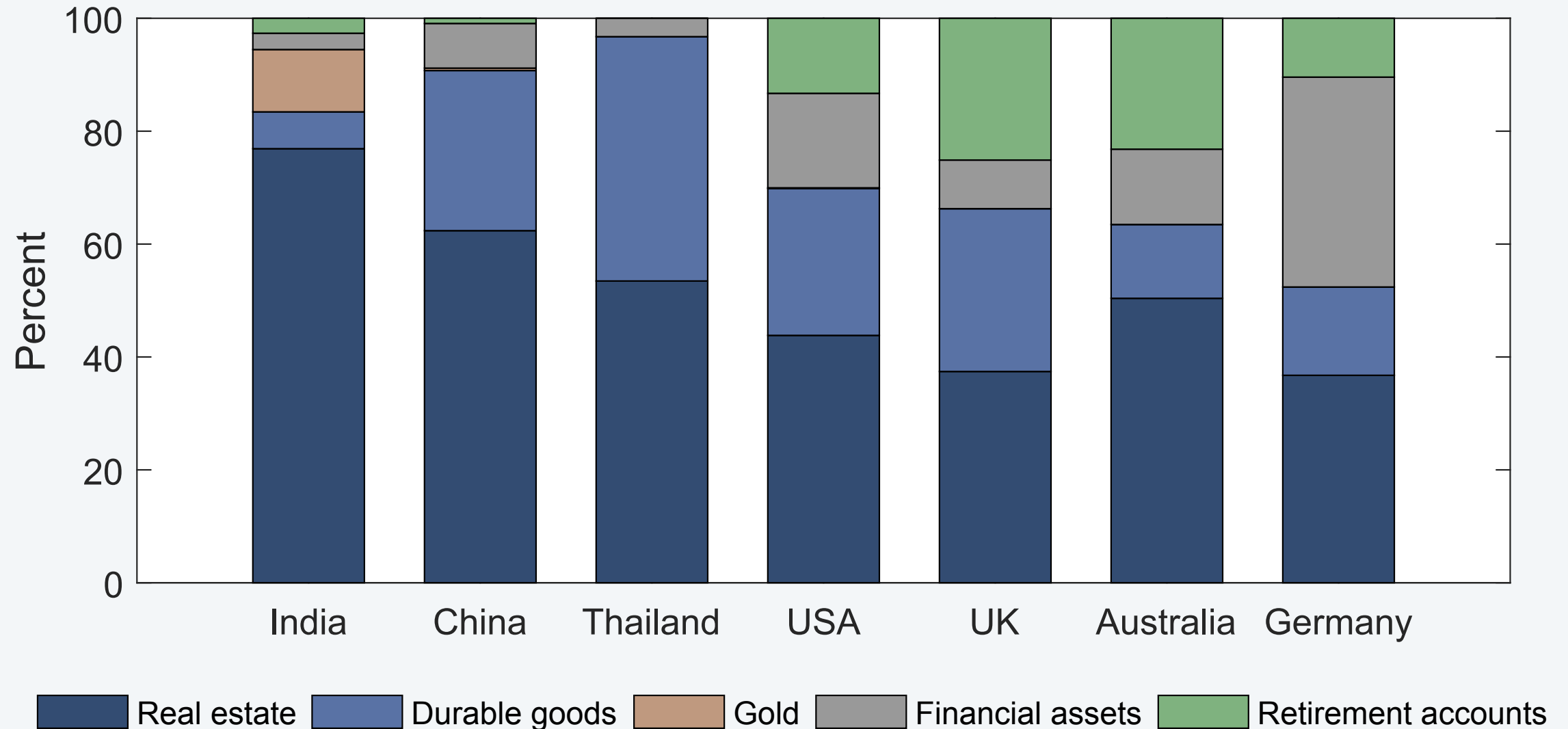
1. High allocation to non-financial assets (gold and real estate).
2. High levels of non-institutional-source borrowing.
3. Near complete lack of pensions.
4. Low levels of insurance penetration (life and non-life).

- ▶ These facts are:

- ▶ unusual in the international context, and
- ▶ difficult to rationalize using a canonical life-cycle model.

Allocation of household assets

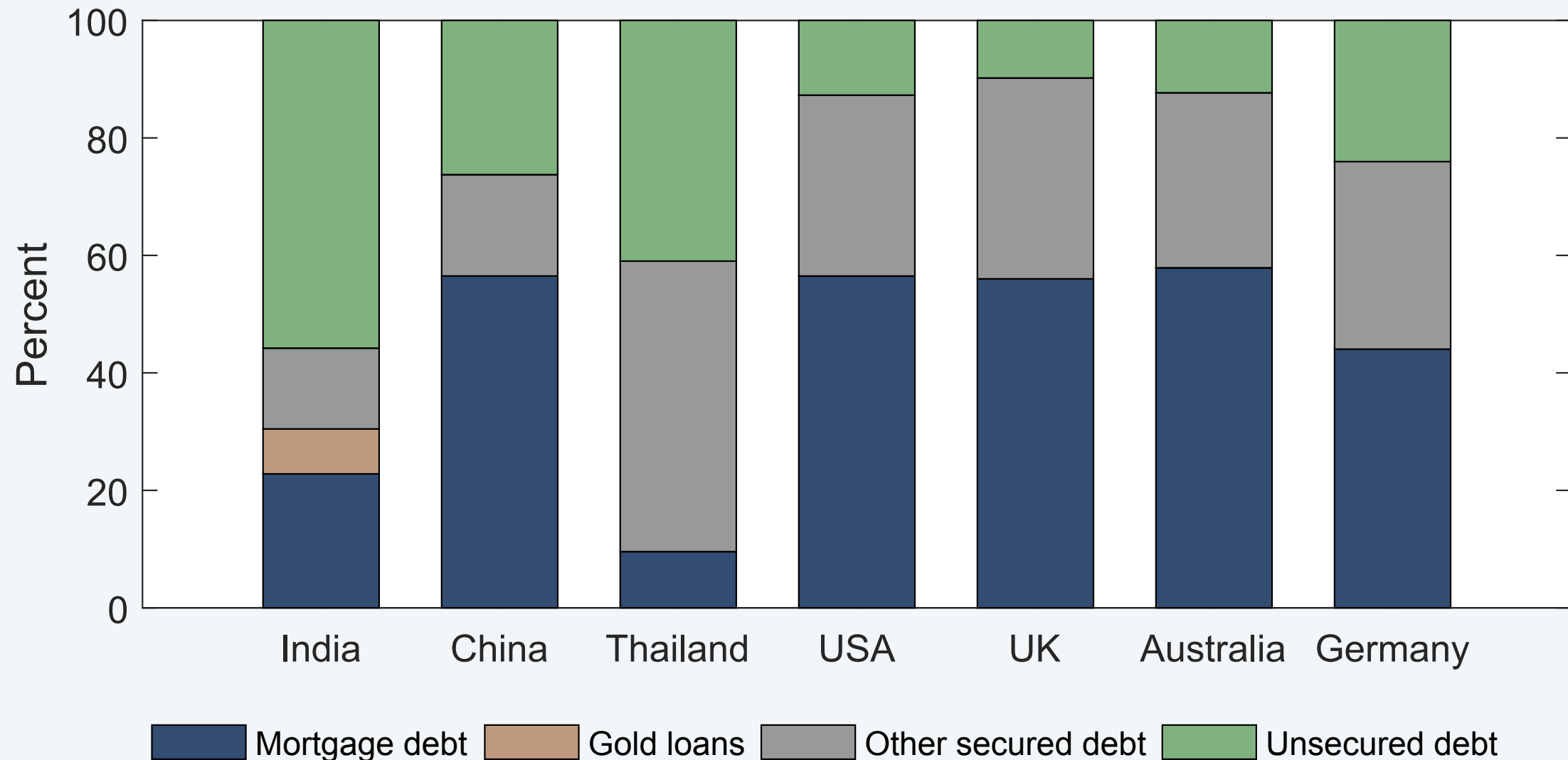
Equal-weighted average



- The average Indian household holds 77% of total assets in real estate, 11% in gold, 5% in financial assets, and hardly any retirement assets/pensions.

Allocation of household liabilities

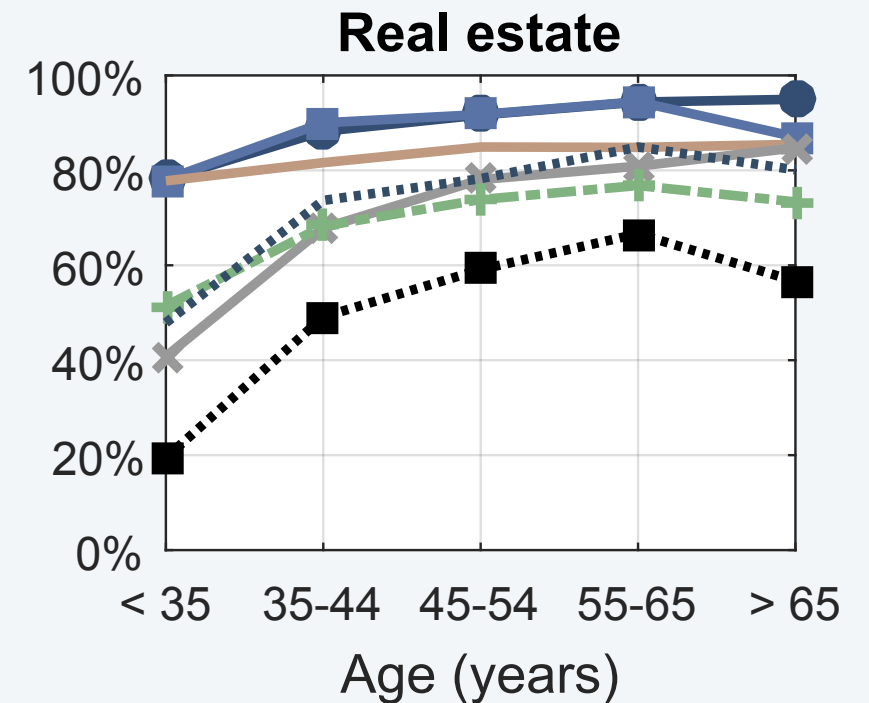
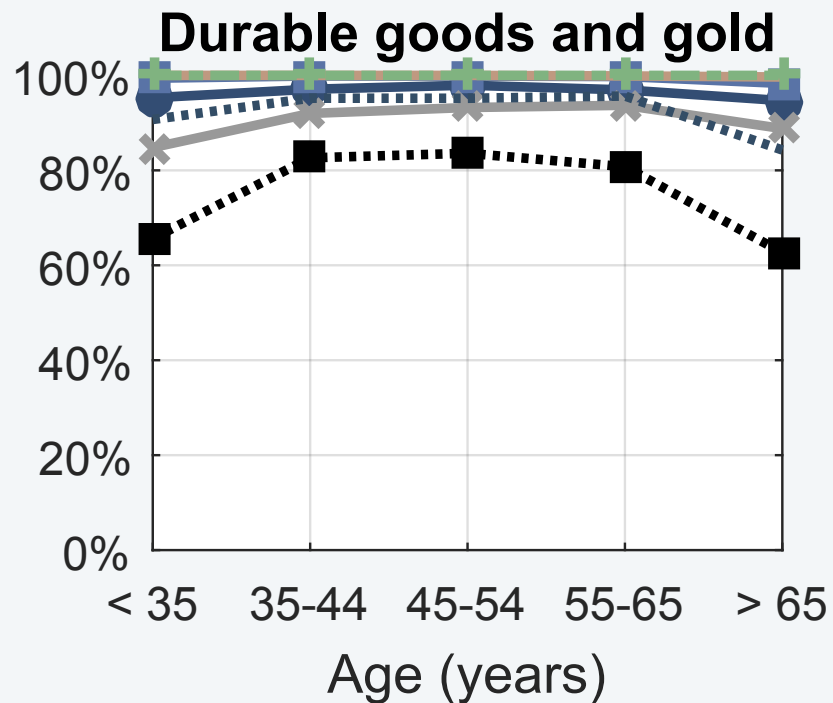
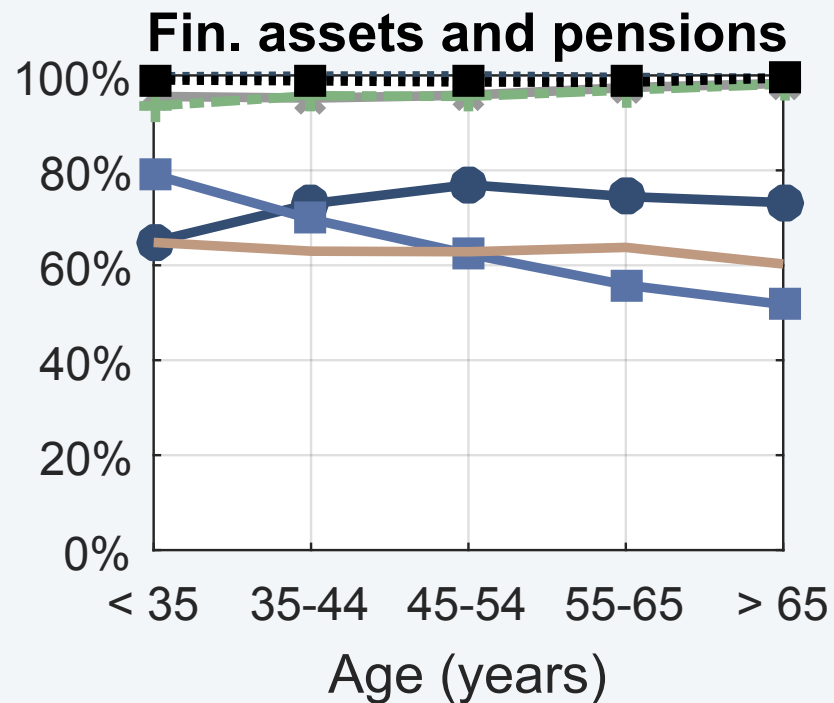
Equal-weighted average



- Mortgages are households' largest liability in China, the US, the UK, and Australia, but account for a small part of total liabilities (23%) of Indian households. Most debt is unsecured (55%).

Participation over the life-cycle

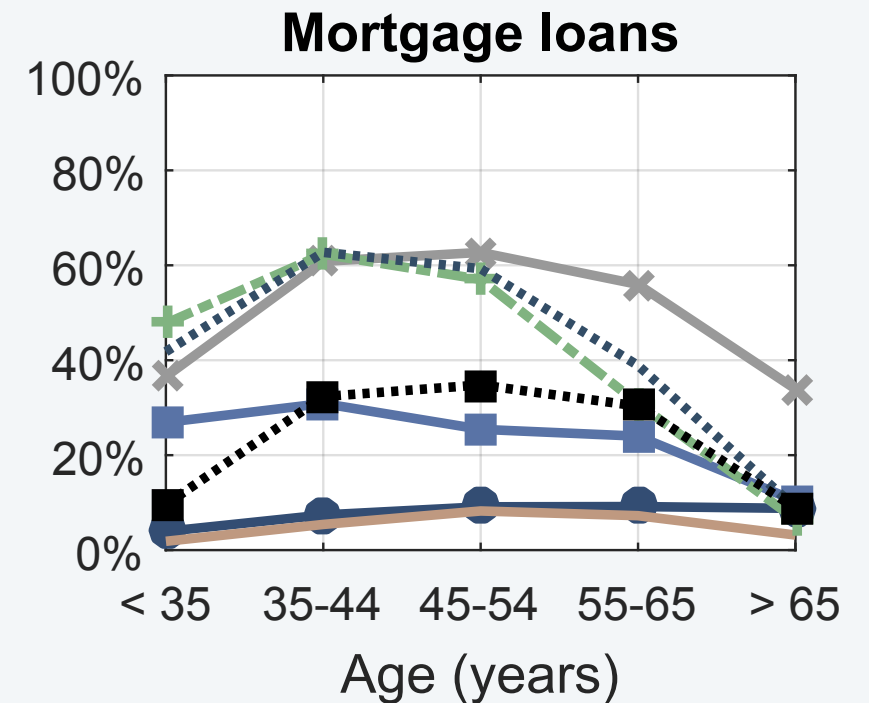
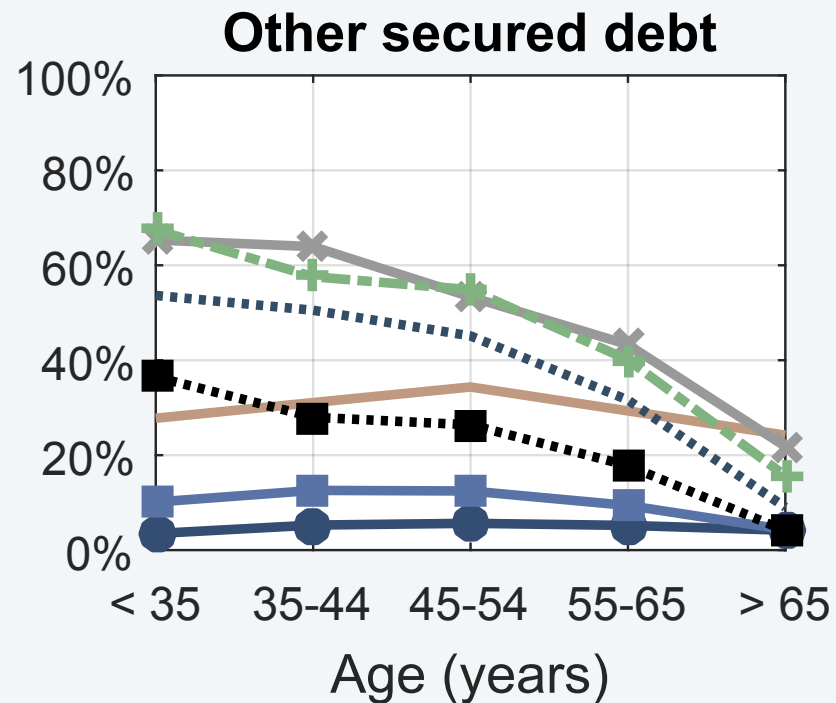
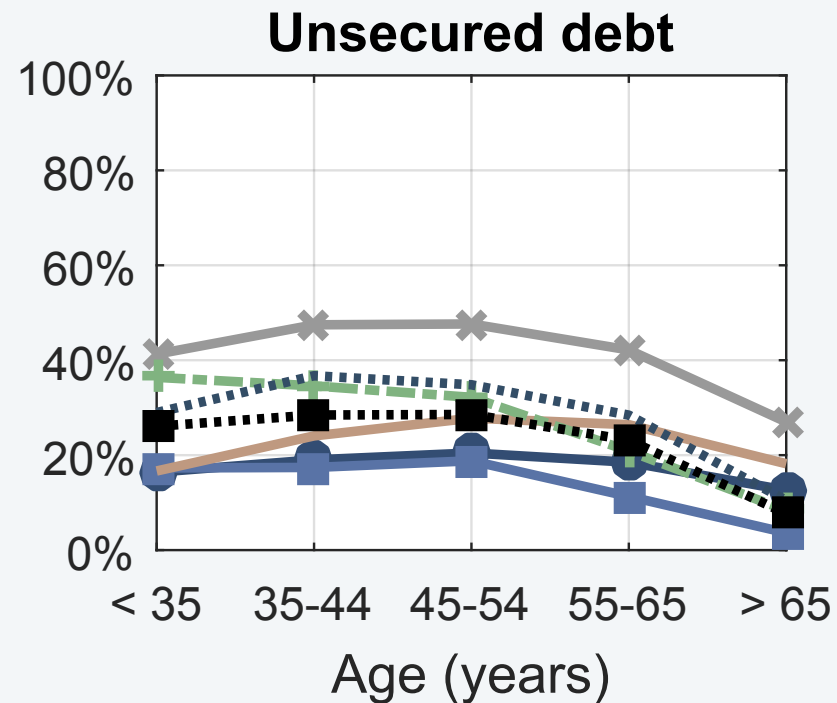
Asset side of the household balance sheet



- ▶ India and China: high rate of home-ownership and low participation rates in financial assets and pension accounts.

Participation over the life-cycle

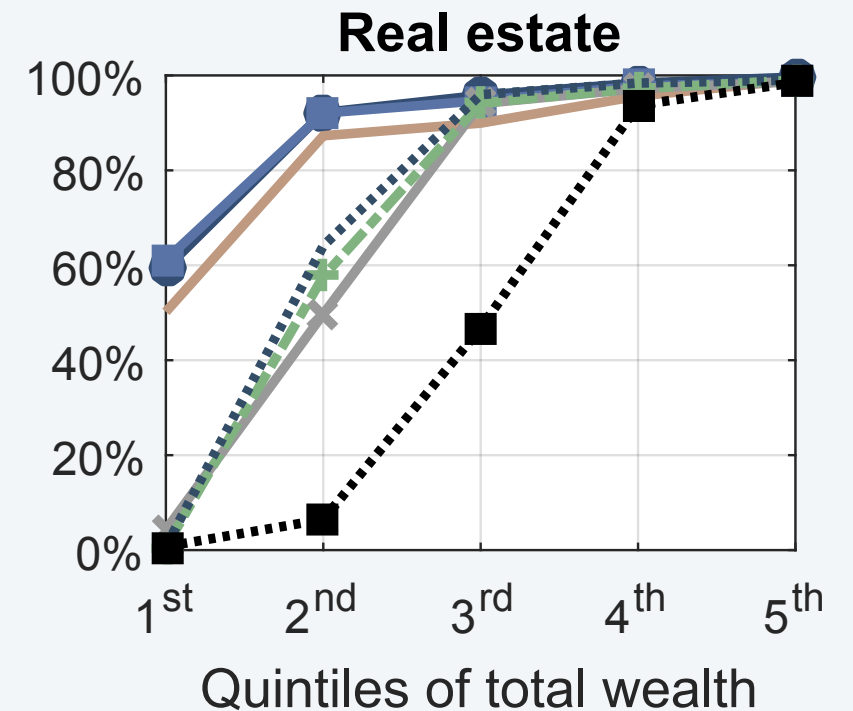
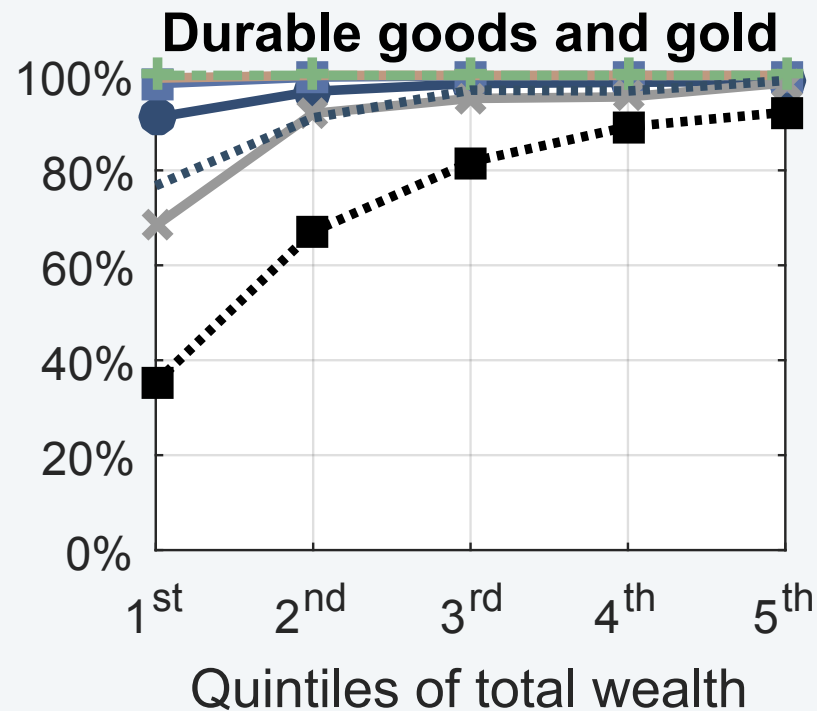
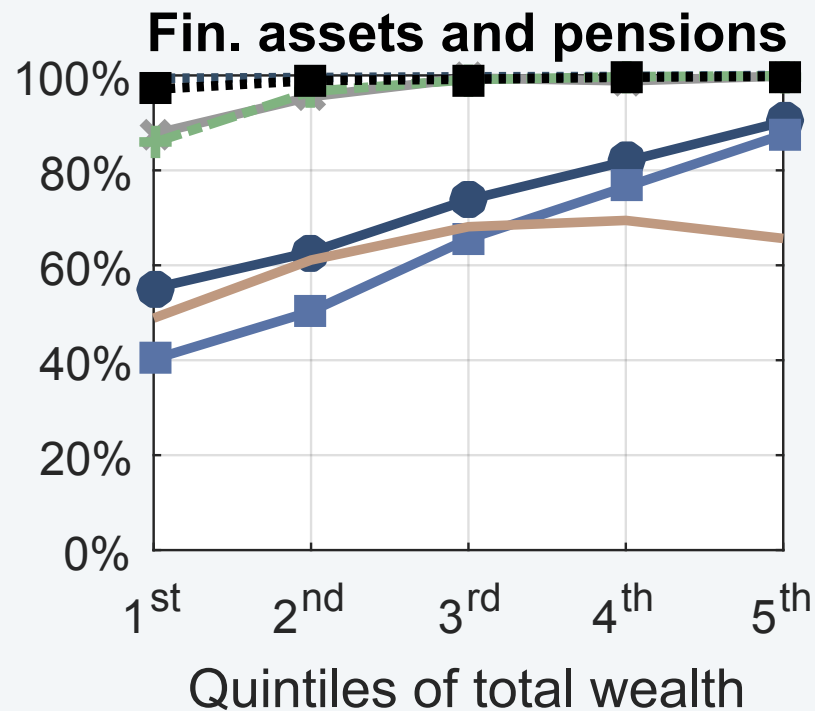
Liabilities side of the household balance sheet



- ▶ Significantly lower participation of households in all debt markets in both India and China.
- ▶ Reduction of debt as people approach retirement age less evident, or even reversed.

Participation across the wealth distribution

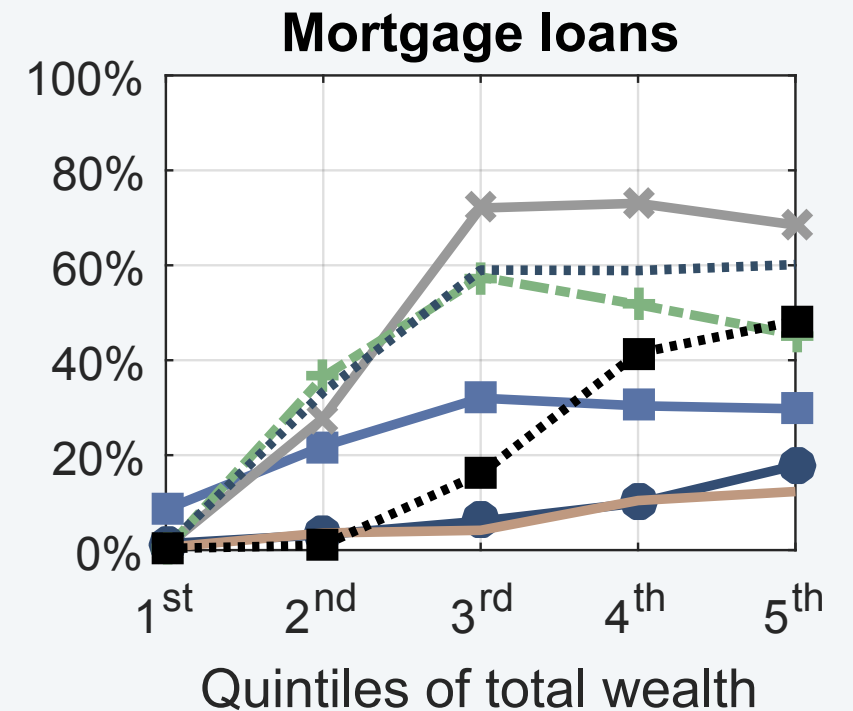
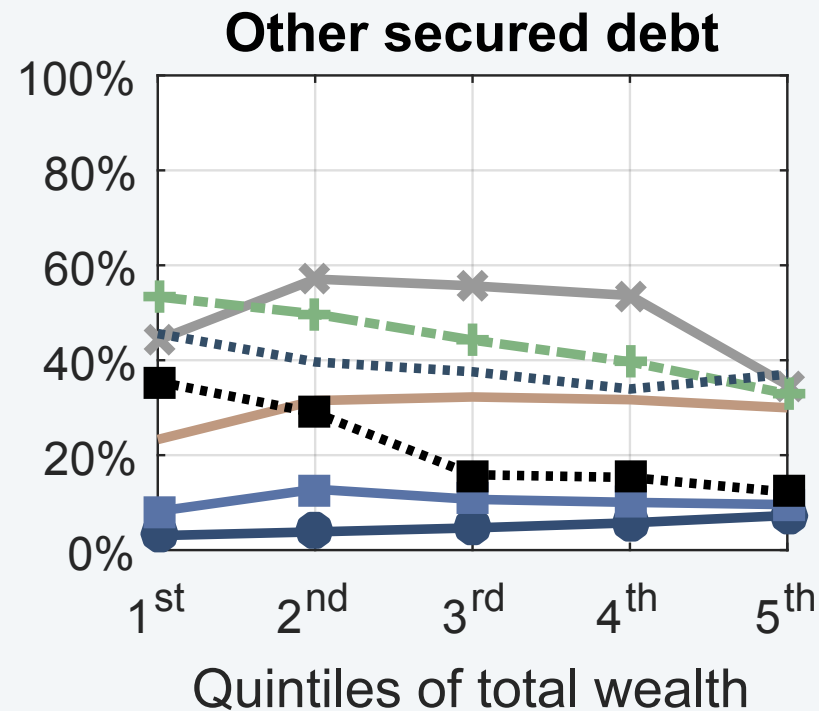
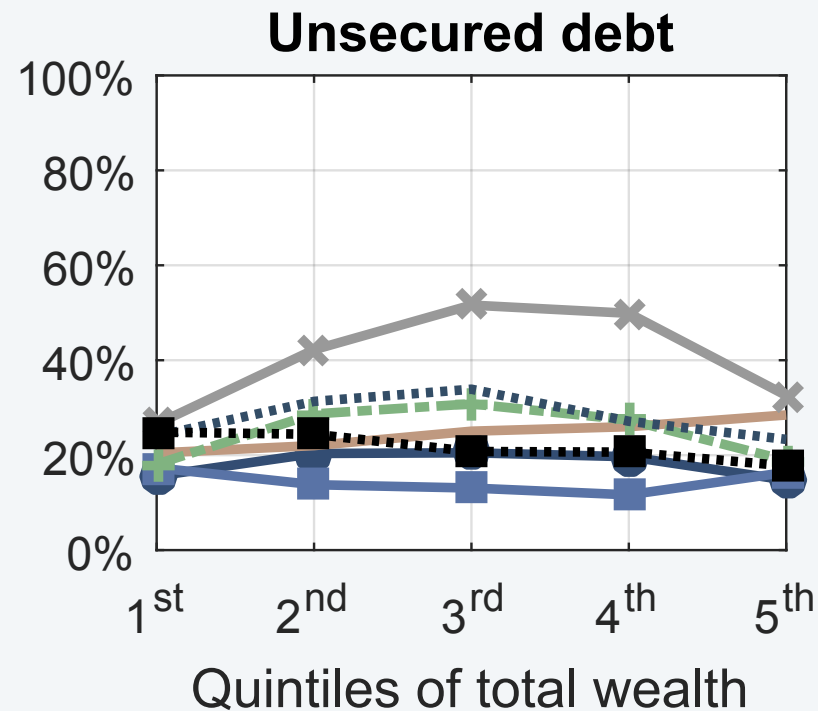
Asset side of the household balance sheet



- ▶ Top quintile similar to advanced economies.
- ▶ High participation rate in durables, gold, and real estate even for households with low wealth.

Participation along the wealth distribution

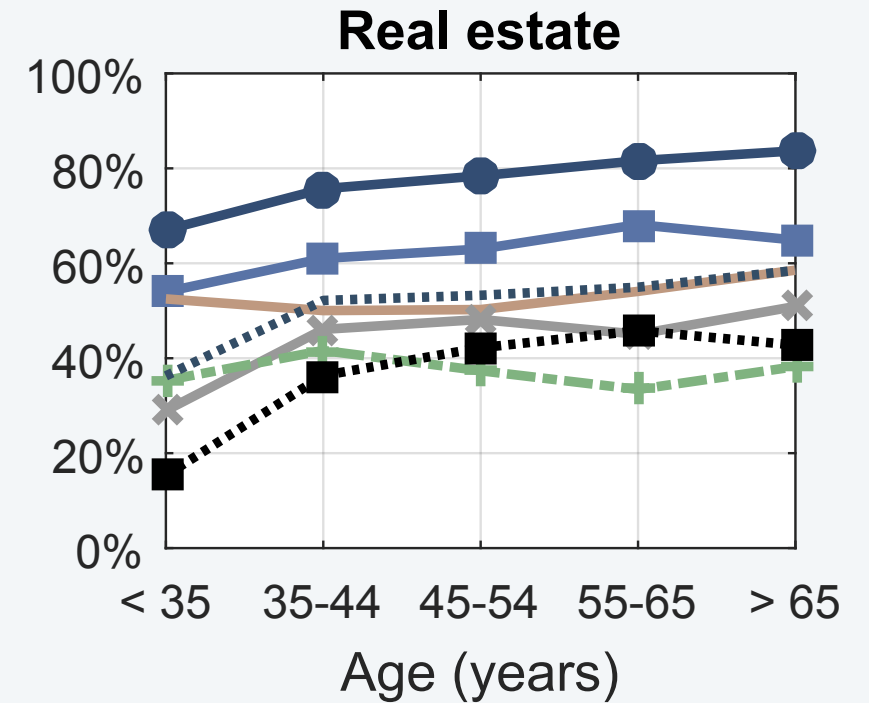
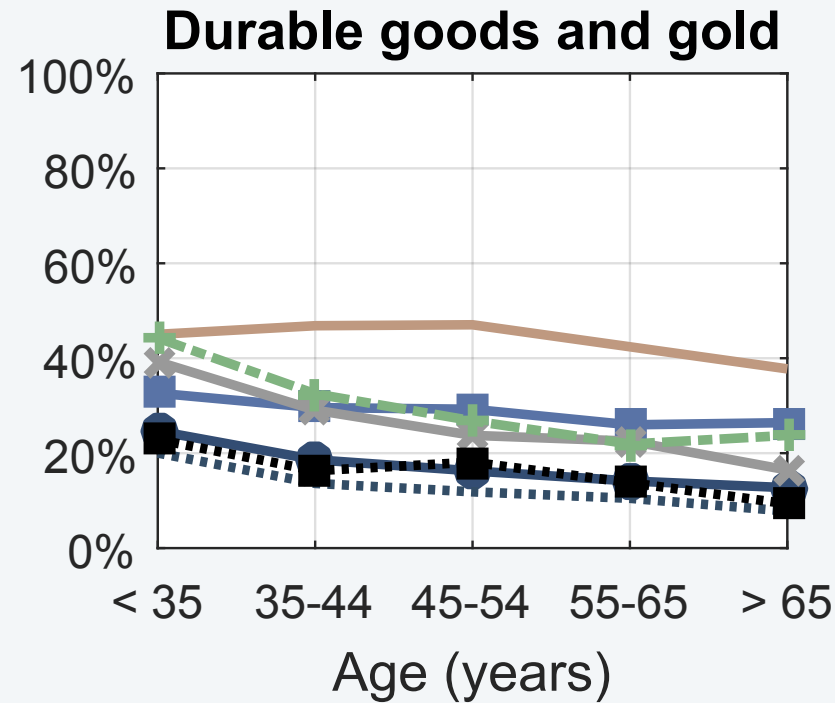
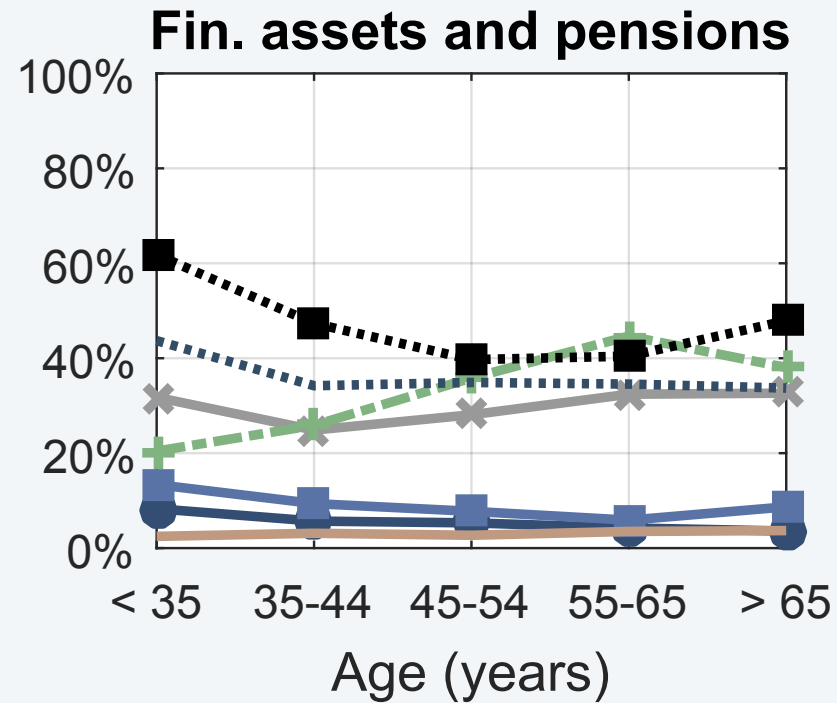
Liabilities side of the household balance sheet



- Low participation in all secured debt markets, especially stark for mortgages since households end life with high home equity.

Allocation over the life-cycle

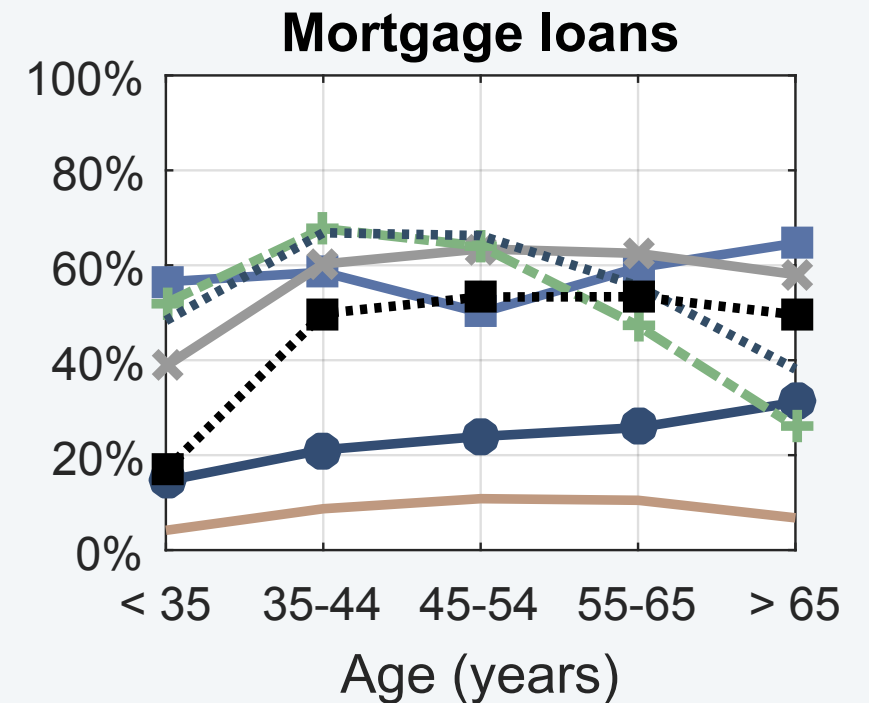
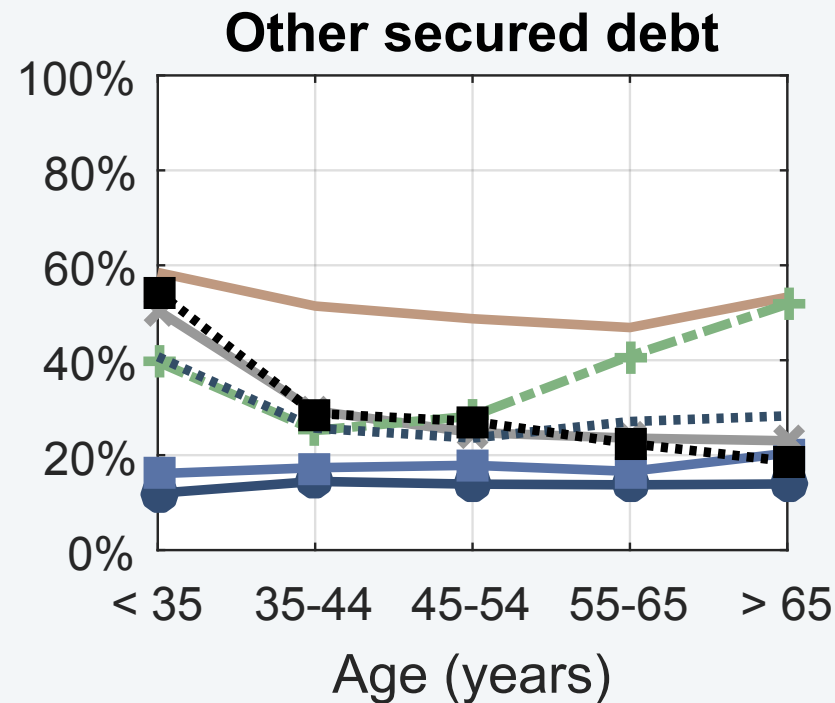
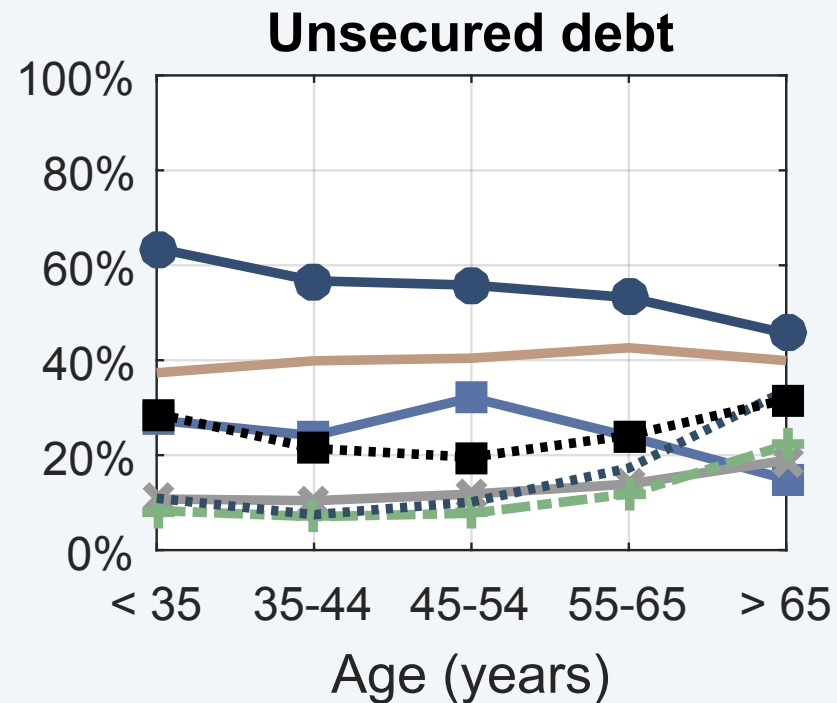
Asset side of the household balance sheet



- Over-exposure to non-financial assets, and pensions are a negligible fraction of assets.

Allocation over the life-cycle

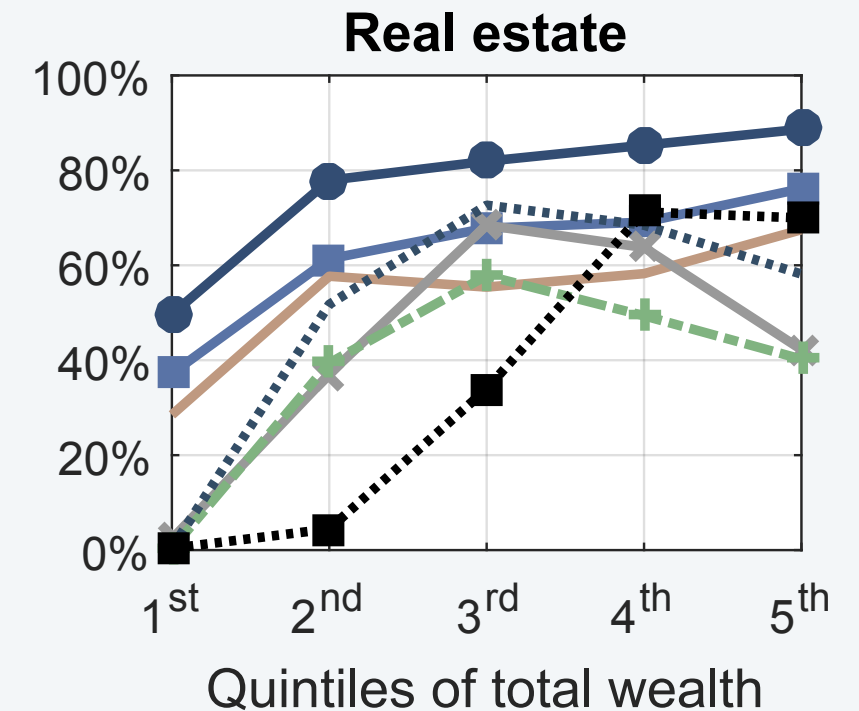
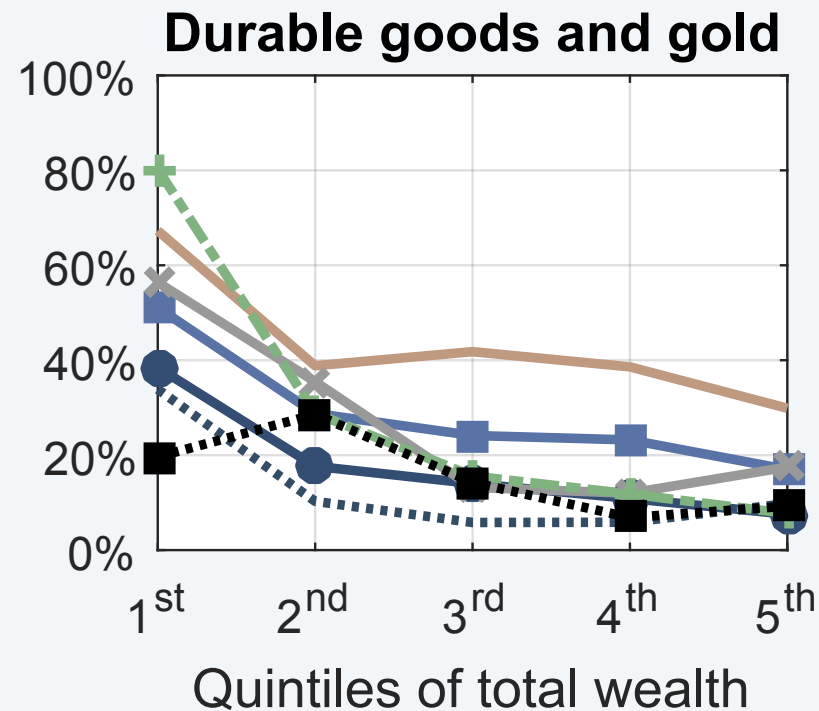
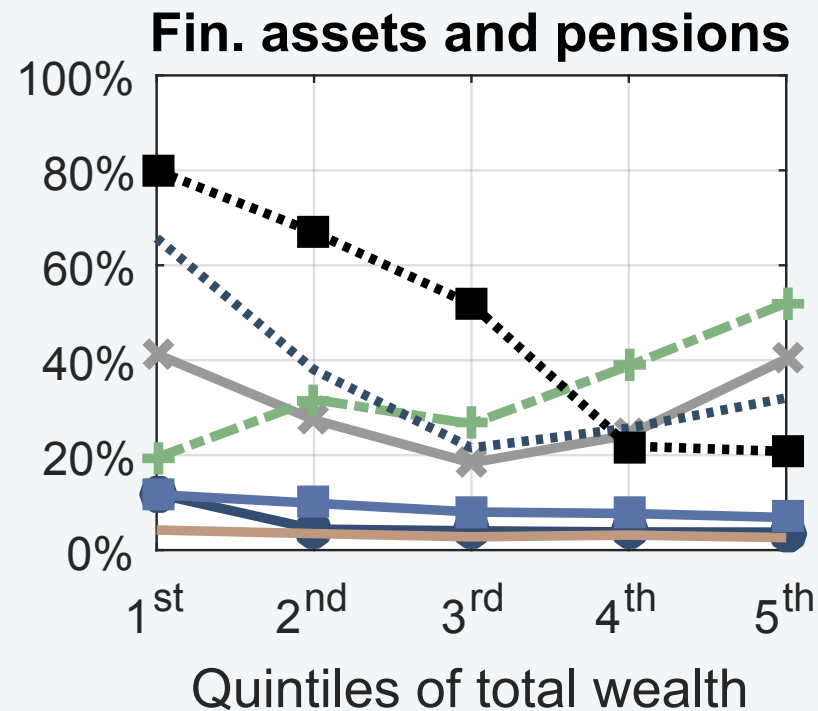
Liabilities side of the household balance sheet



- ▶ Intense reliance on unsecured debt, especially at young ages.
- ▶ In both India and China, life-cycle profiles are inconsistent with advanced economies, especially for mortgages.

Allocation across the wealth distribution

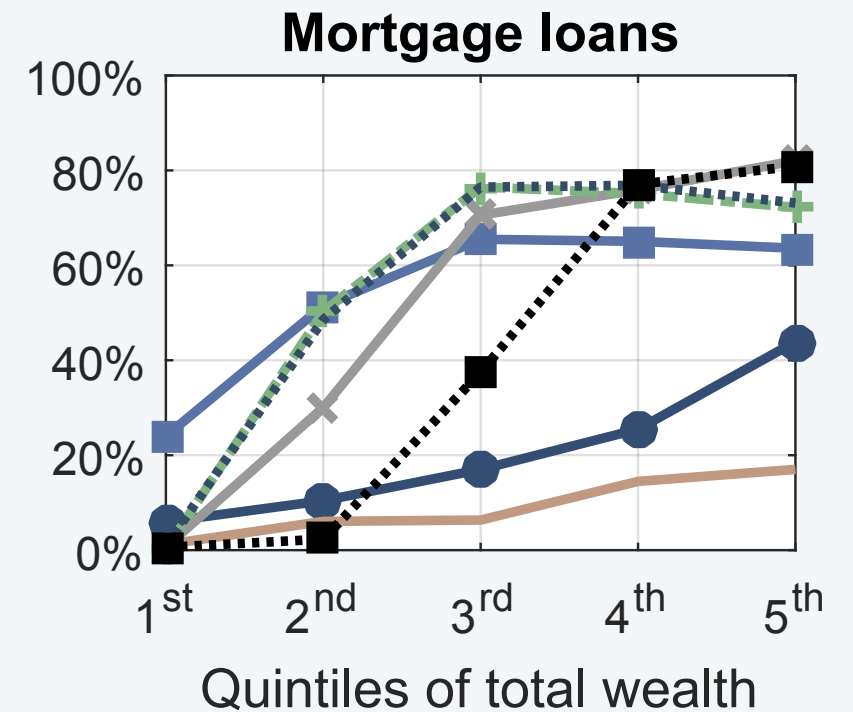
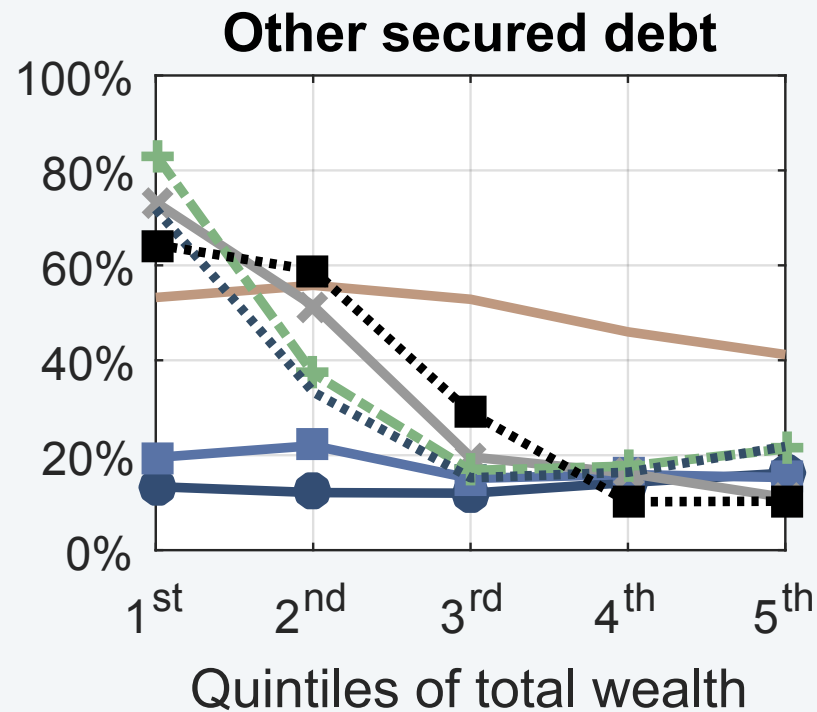
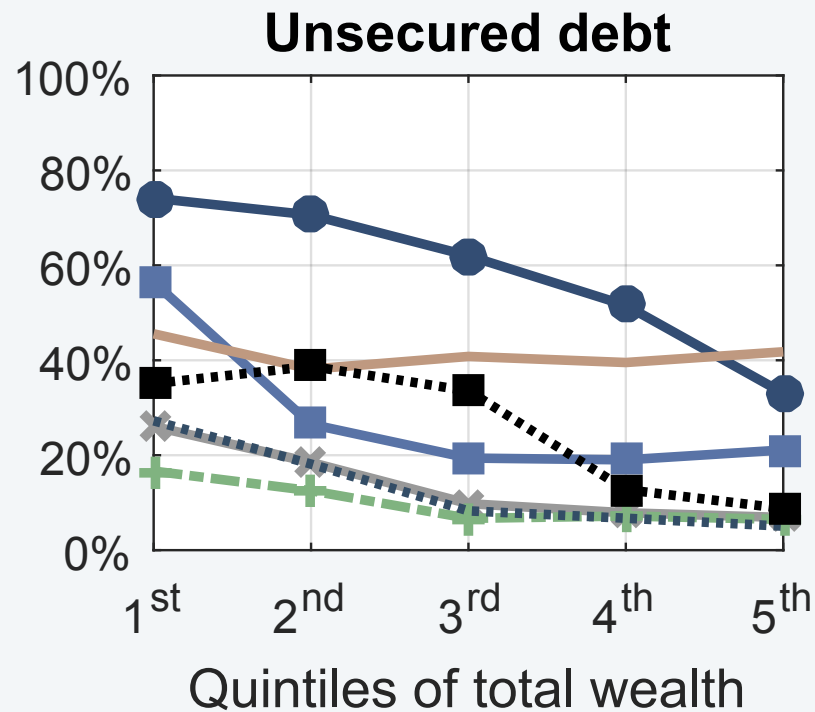
Asset side of the household balance sheet



- Differences in exposure to real estate are driven by households at the **bottom** of the wealth distribution.

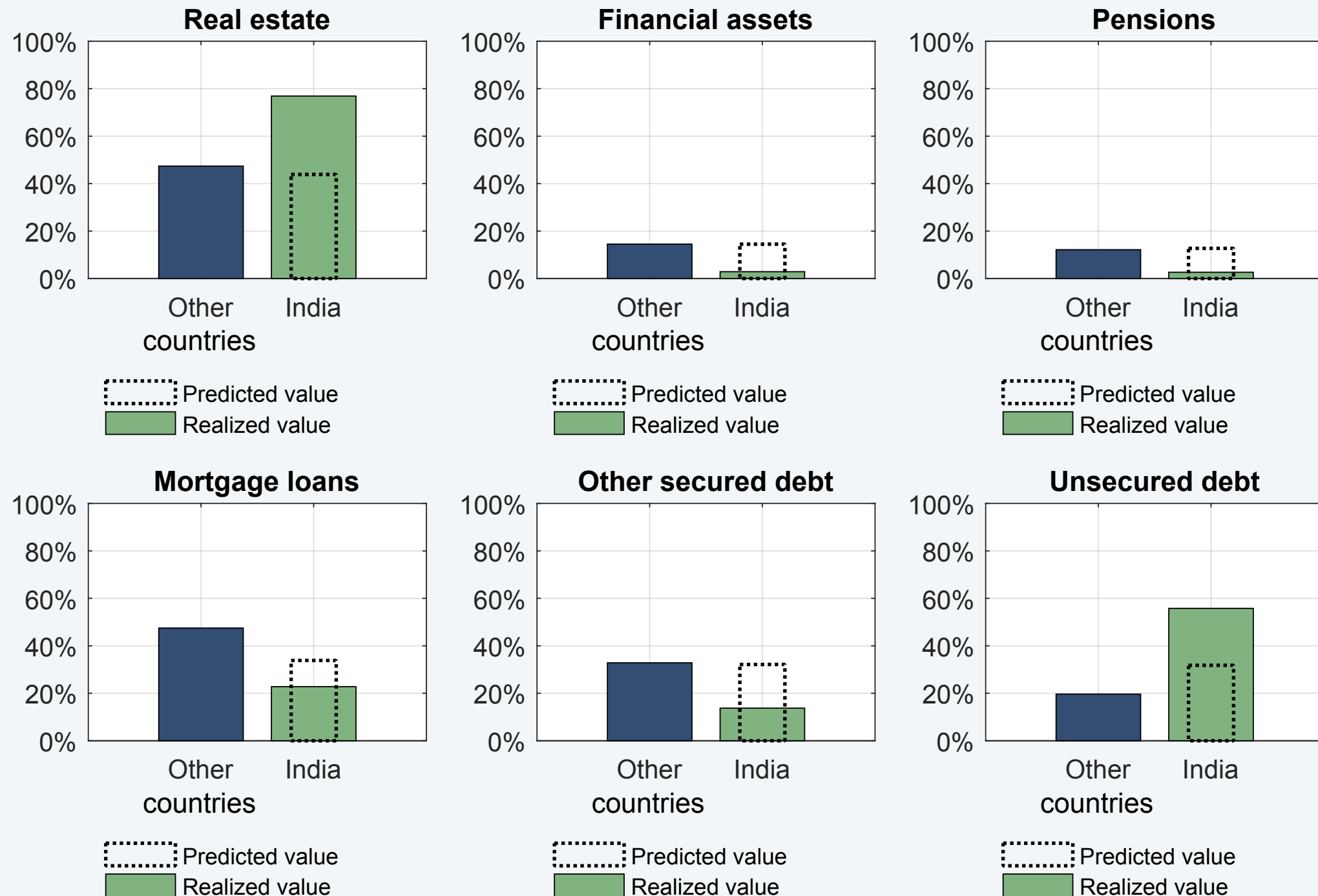
Allocation along the wealth distribution

Liabilities side of the household balance sheet



- ▶ Difference in mortgage indebtedness are driven by households at the **top** of the wealth distribution.
- ▶ Home equity accumulation evident from difference between real estate and mortgage allocation.

Cross-country comparison: Blinder-Oaxaca Decomposition



- Cross-country differences aren't well-explained by differences in household demographic characteristics.

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Enabling improved household finance outcomes

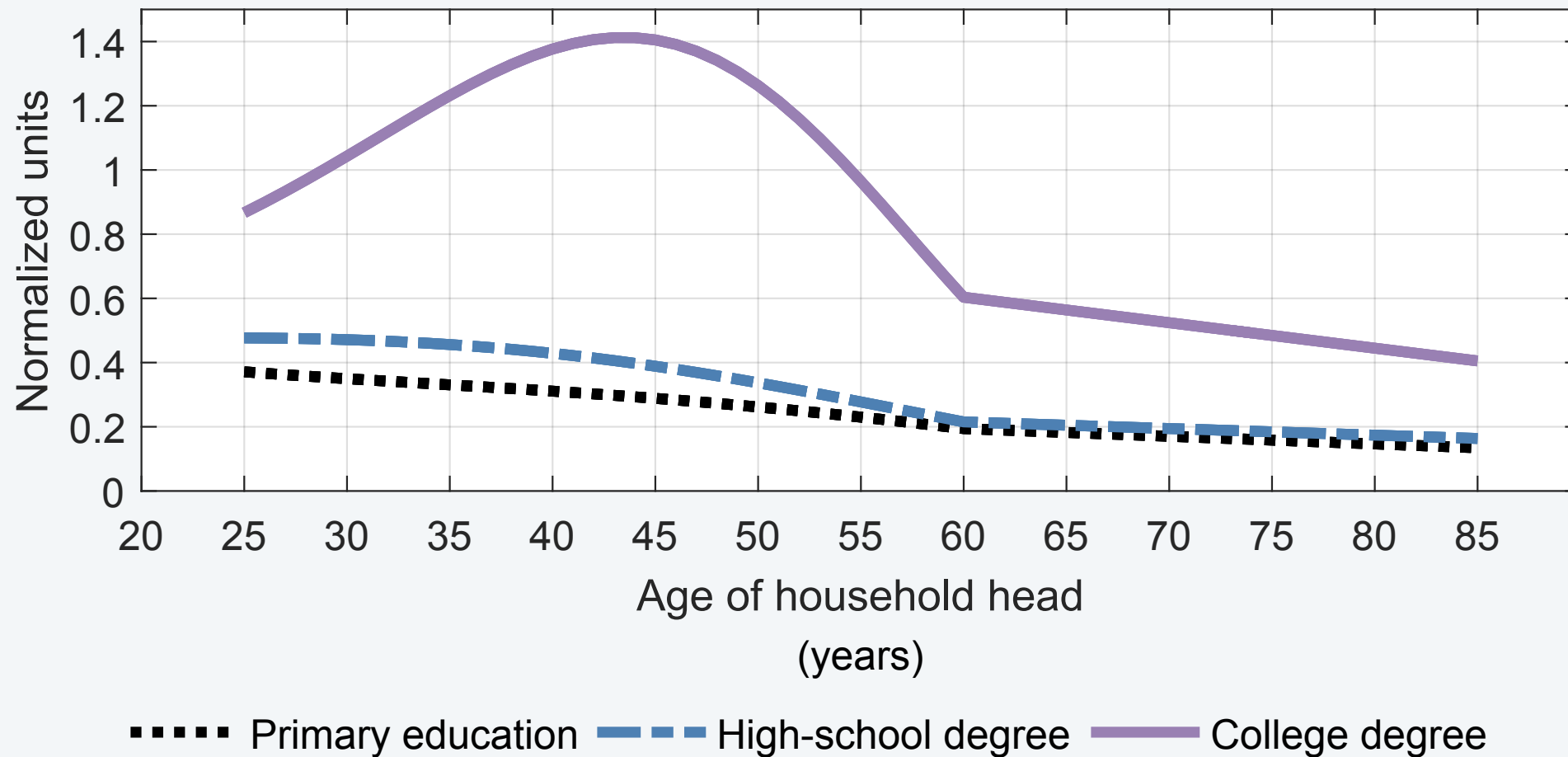
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Recommendations

Optimal allocations - Income profile

Units: Fraction of annual permanent income



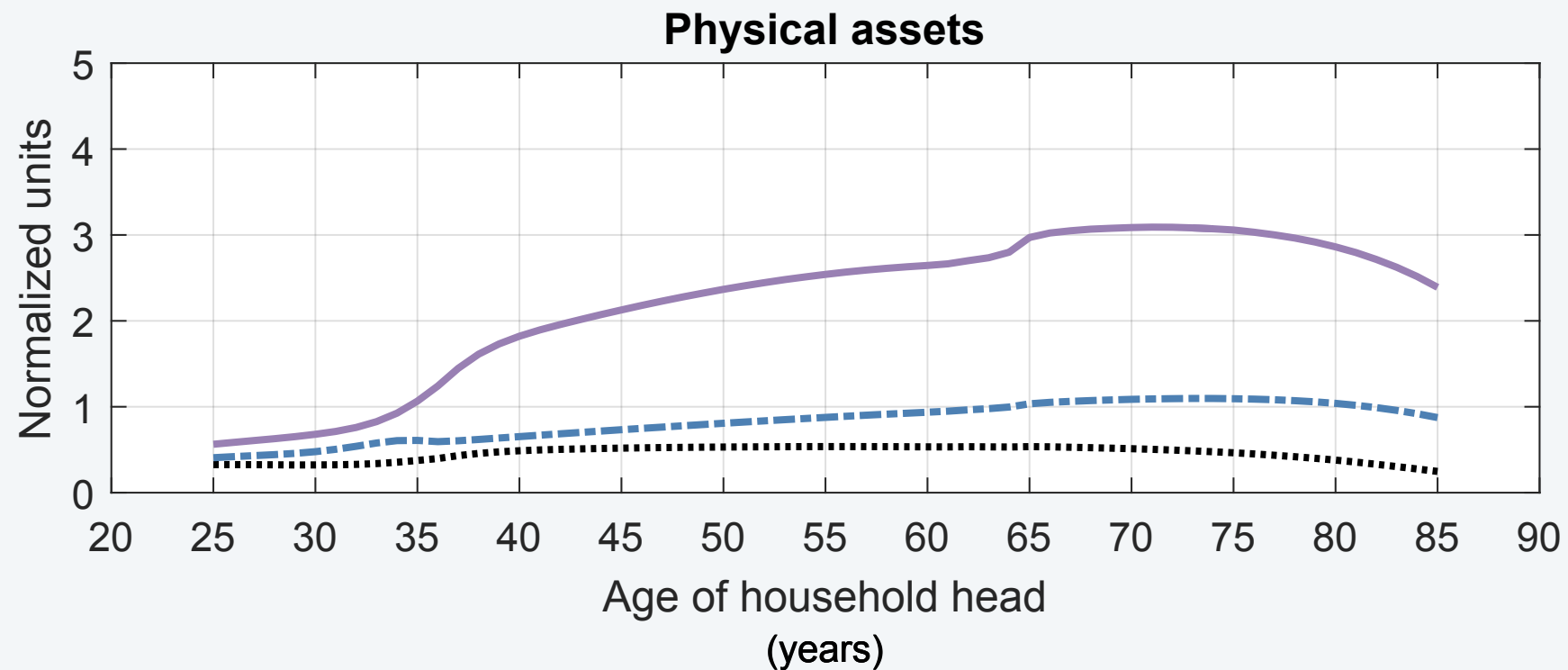
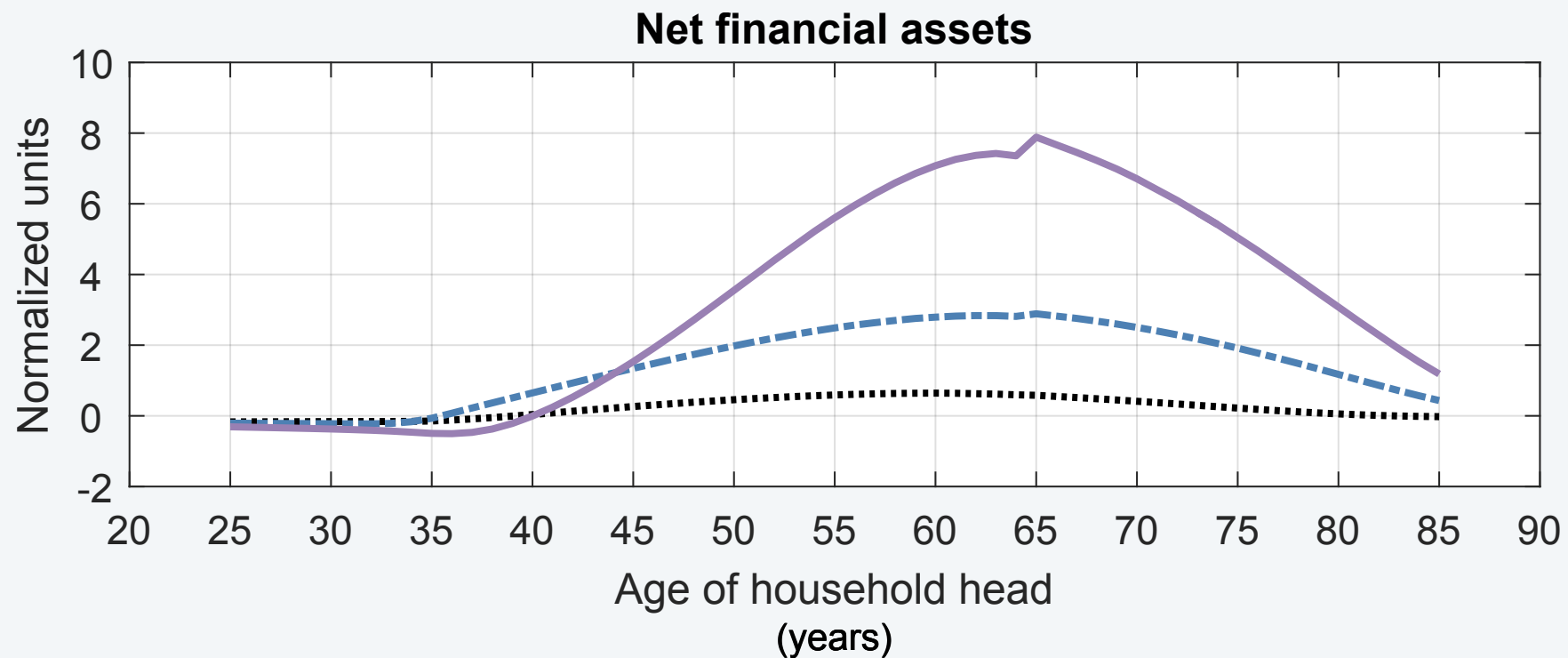
- ▶ Evolution of household income profiles (normalized by average income in the population).
- ▶ Fitted third-degree polynomial through coefficients on age dummies in a regression of family income on ages. Income after 70 is the median income of household whose heads are over 70 years of age.
- ▶ **Data Source:** India Human Development Survey, 2015

Optimal allocations - Model

- ▶ Individuals derive consumption utility from durable goods and also use durable goods as collateral.
 - ▶ Durable good can be frictionlessly and smoothly collateralized against debt – "best possible case."
- ▶ Uncertain exogenous labour income, consumption-savings problem with choice of financial (risk-free) asset, and durable good.
 - ▶ Can vary rate of return on financial relative to durable, comparative statics.
 - ▶ Financial assets earn interest, durables depreciate, quadratic adjustment cost between the two, linear component of which is 3%.
 - ▶ Collateral constraint – 75% (as in LTV for mortgages in India).
- ▶ Trying to understand model predictions on *extensive* margin between non-financial (durable) and financial assets.

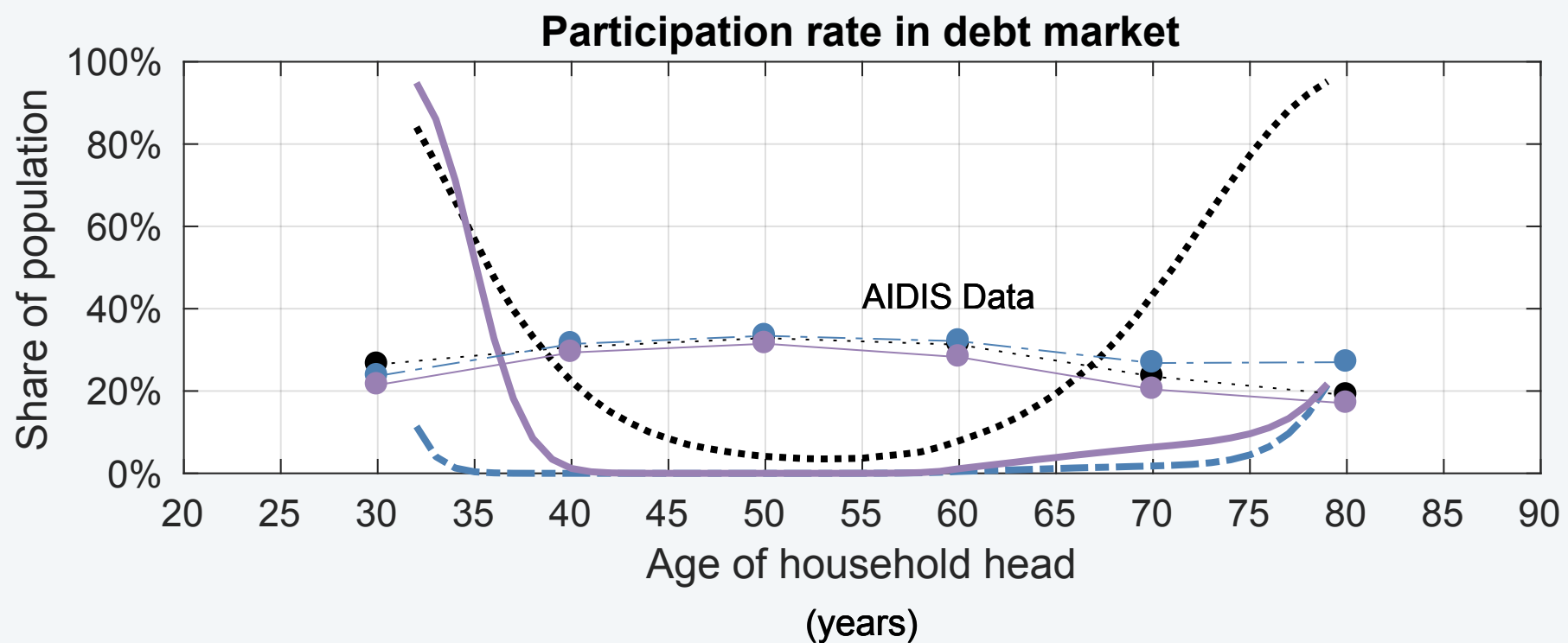
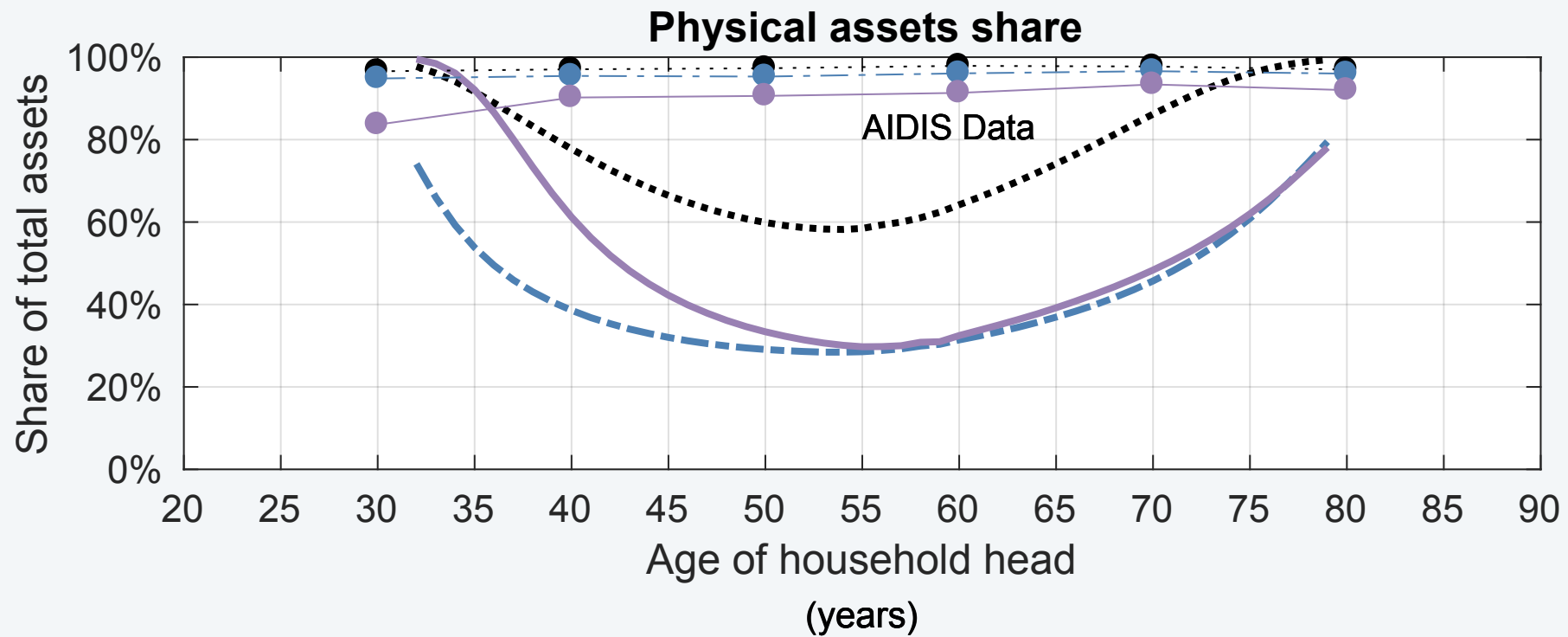
Life-cycle profile

Units: Fraction of annual permanent income



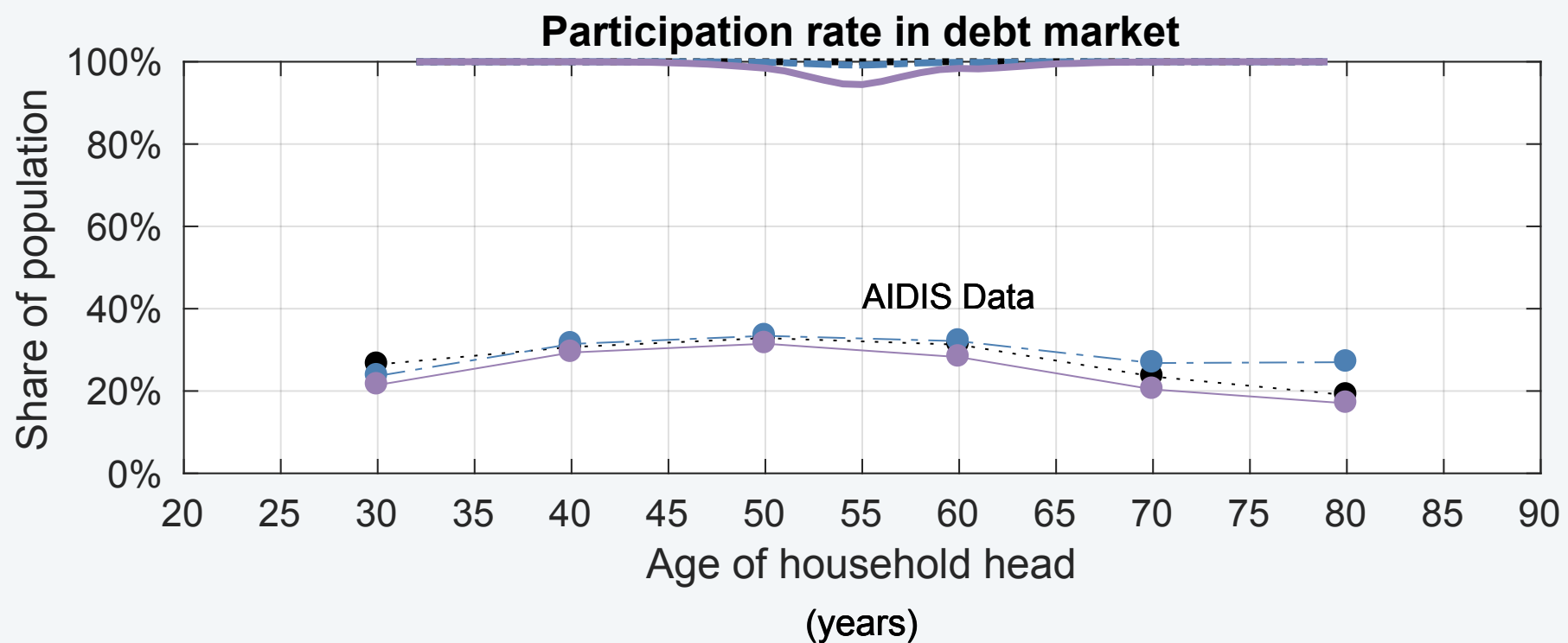
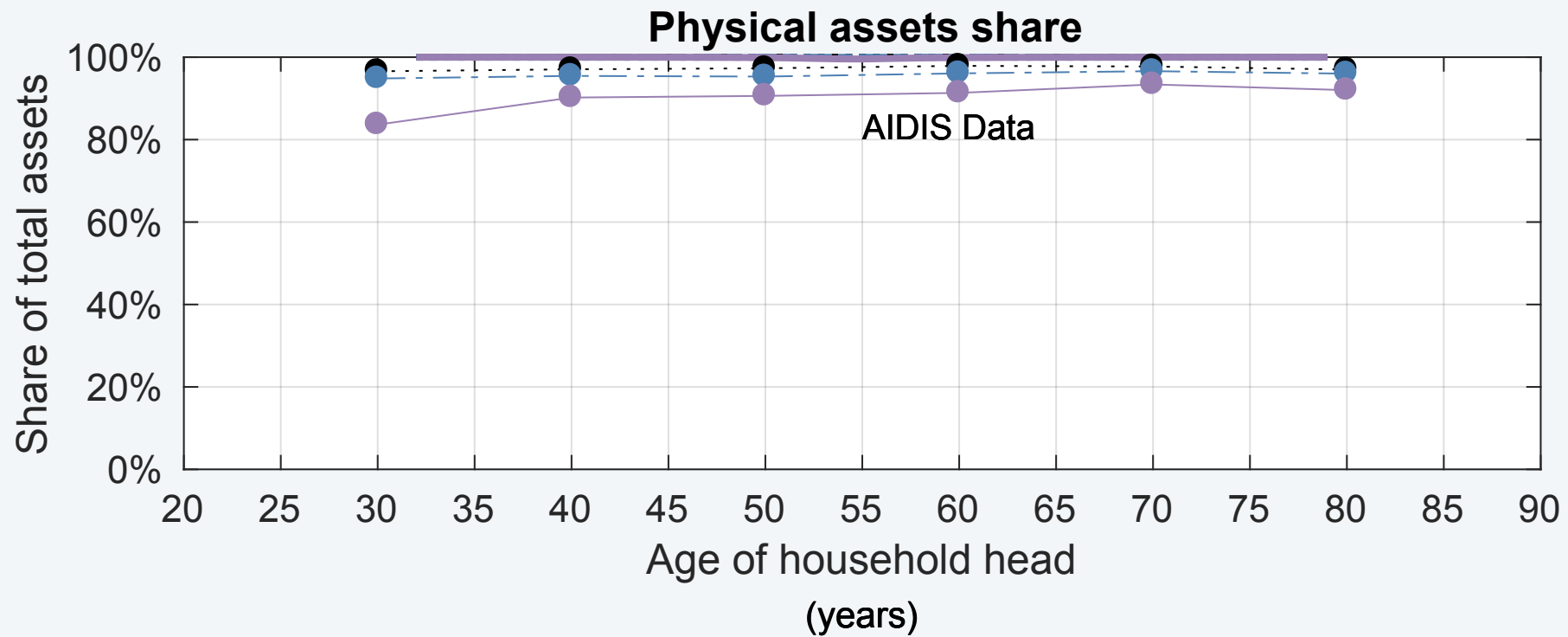
Optimal allocations

Advantage to investing in financial assets (return at 6%)



Optimal allocations

No advantage to investing in financial assets (return at 1%)



Roadmap

International comparative analysis

- Broad trends

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Optimal decisions along the life cycle

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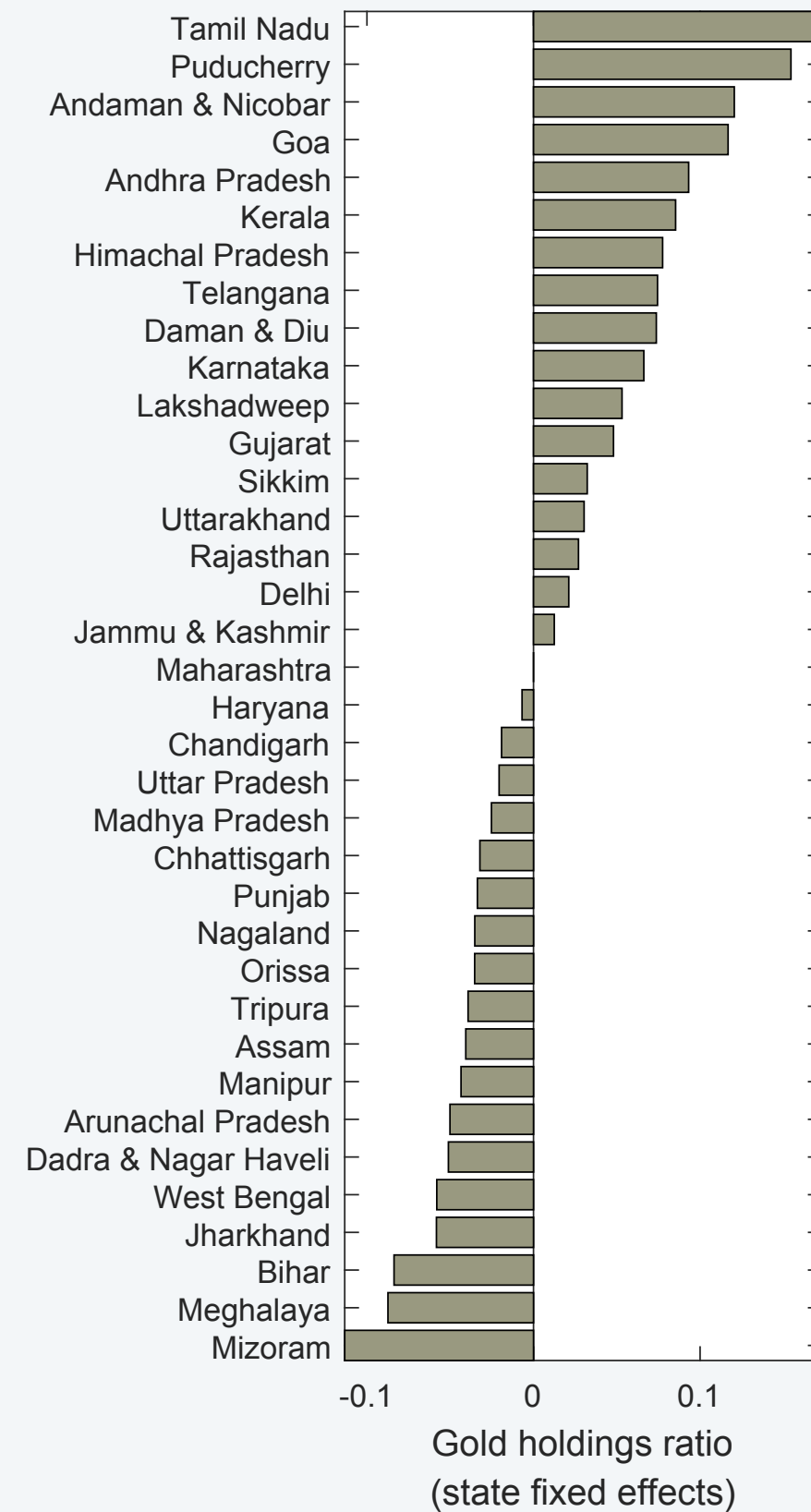
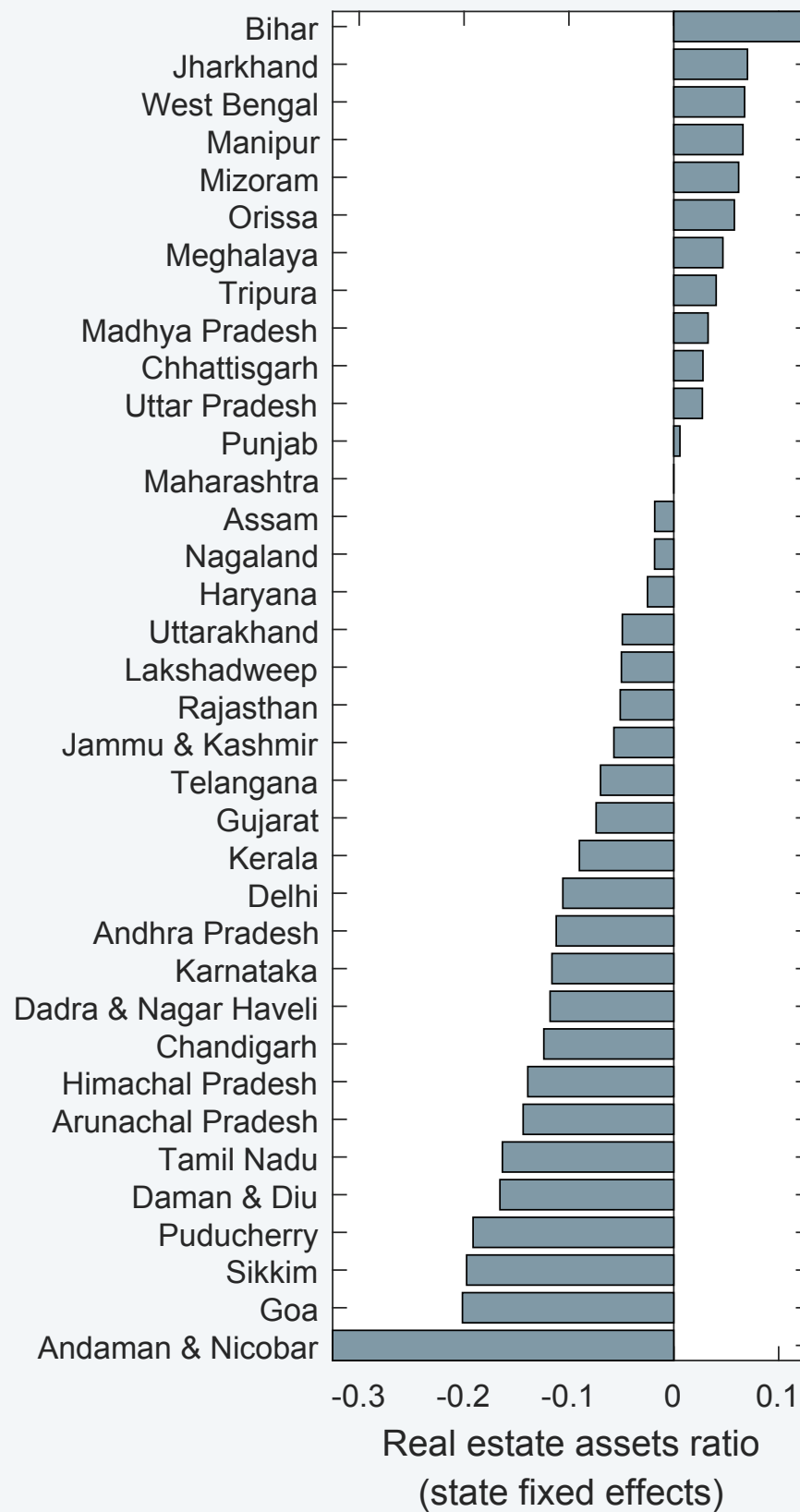
Enabling improved household finance outcomes

- Explaining household behaviour

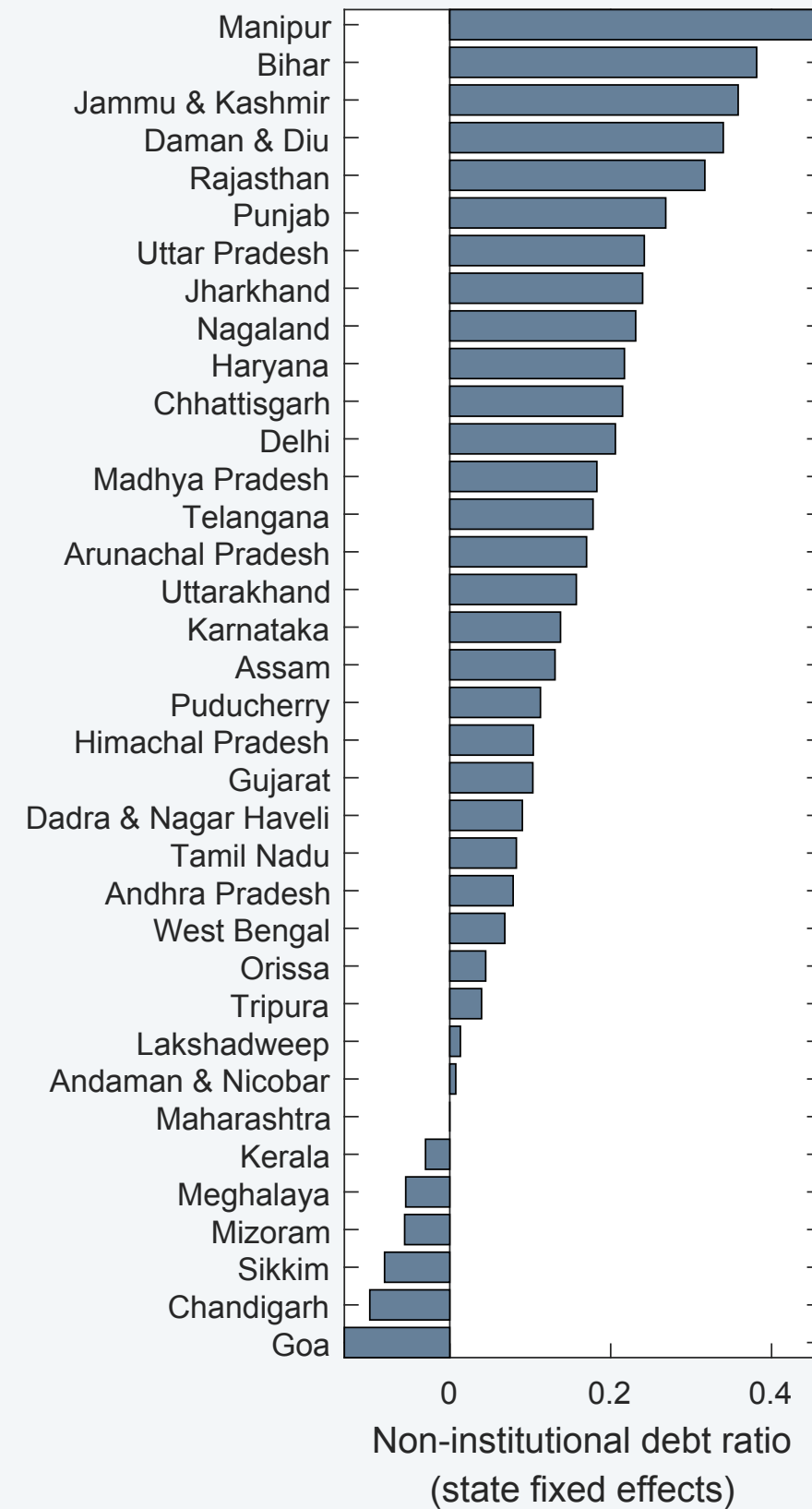
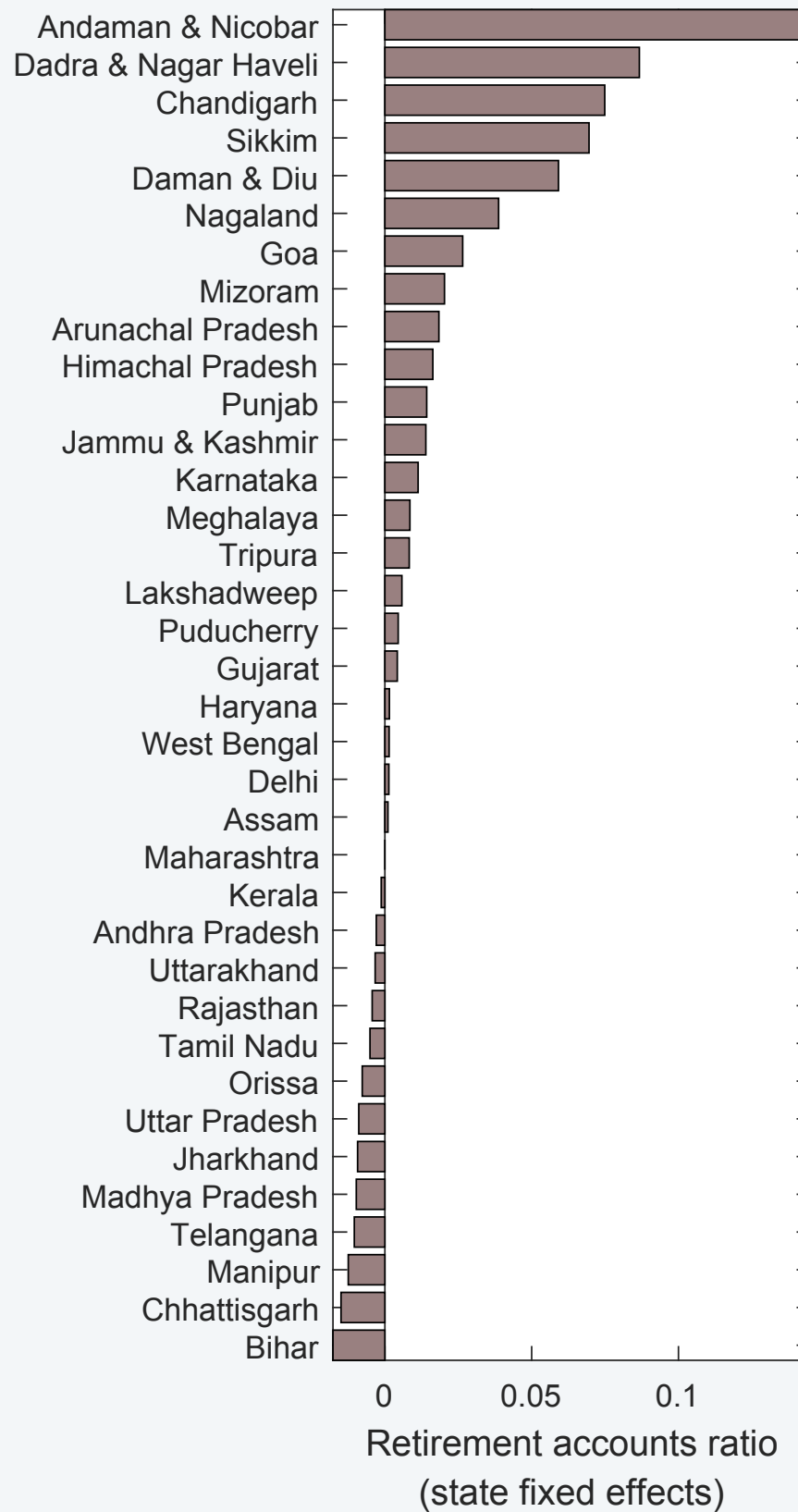
- Qualitative principles for household finance policy

Recommendations

Asset and Debt variation across states

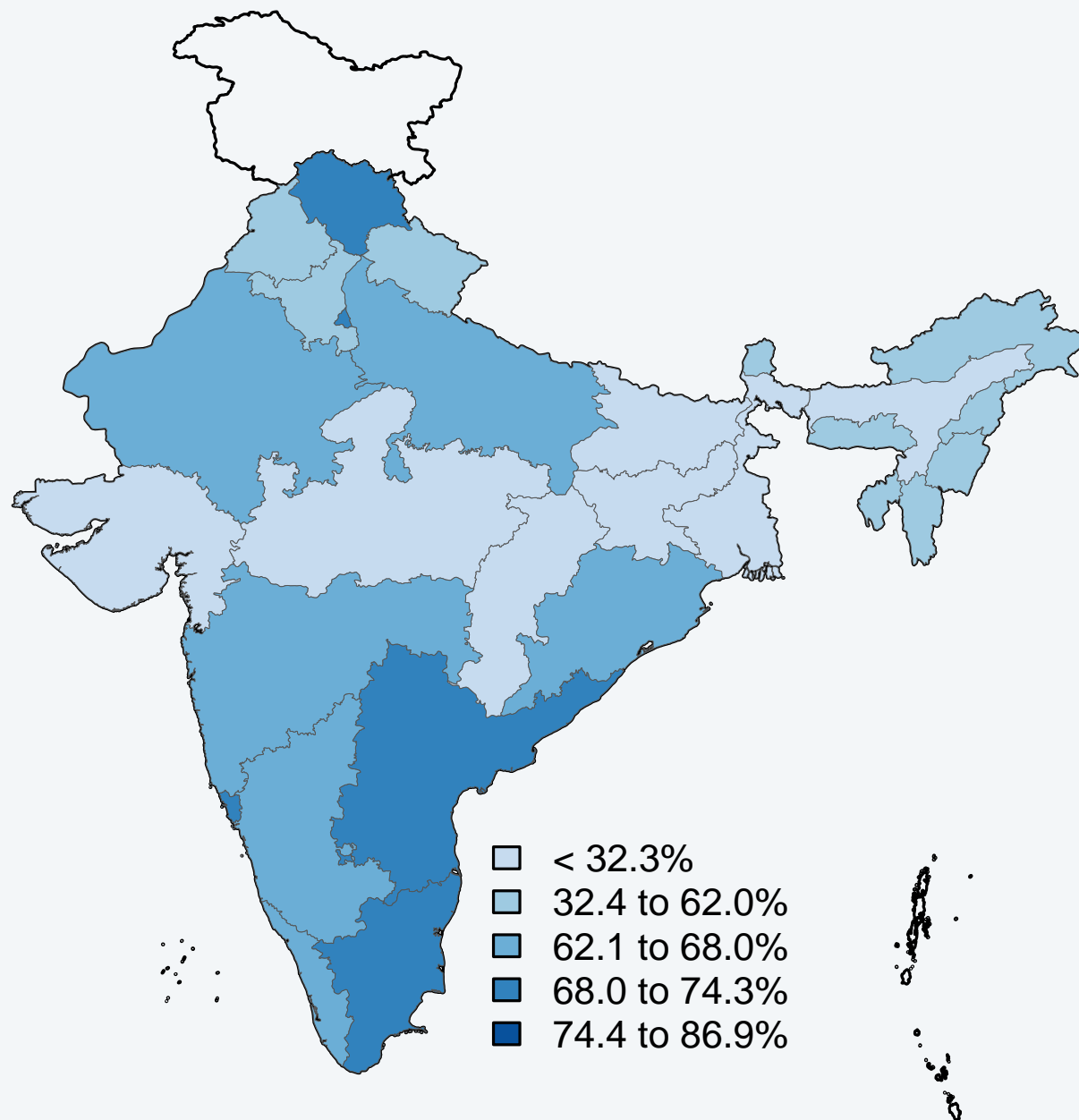


Asset and Debt variation across states



Access to Bank Accounts

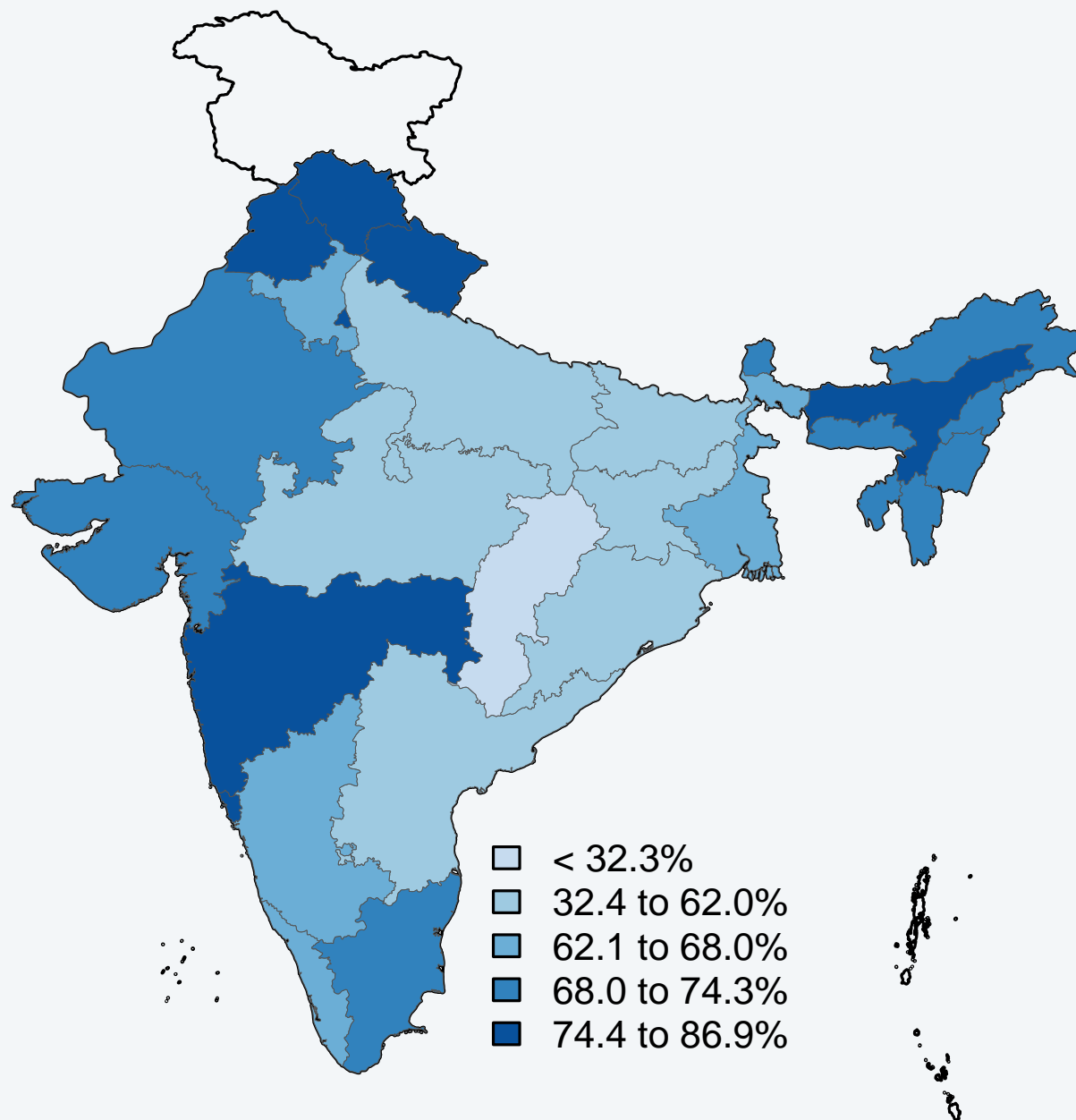
Source: Financial Inclusion Insights Survey, Wave 3, 2015.



- ▶ Access: Have a bank account.
- ▶ Highest access regions: Himachal Pradesh, Tamilnadu, and Goa.
- ▶ Poorest access regions: Jharkhand, Chattisgarh and Gujarat.
- ▶ At least 50% in each state have access.

Use of Bank Accounts

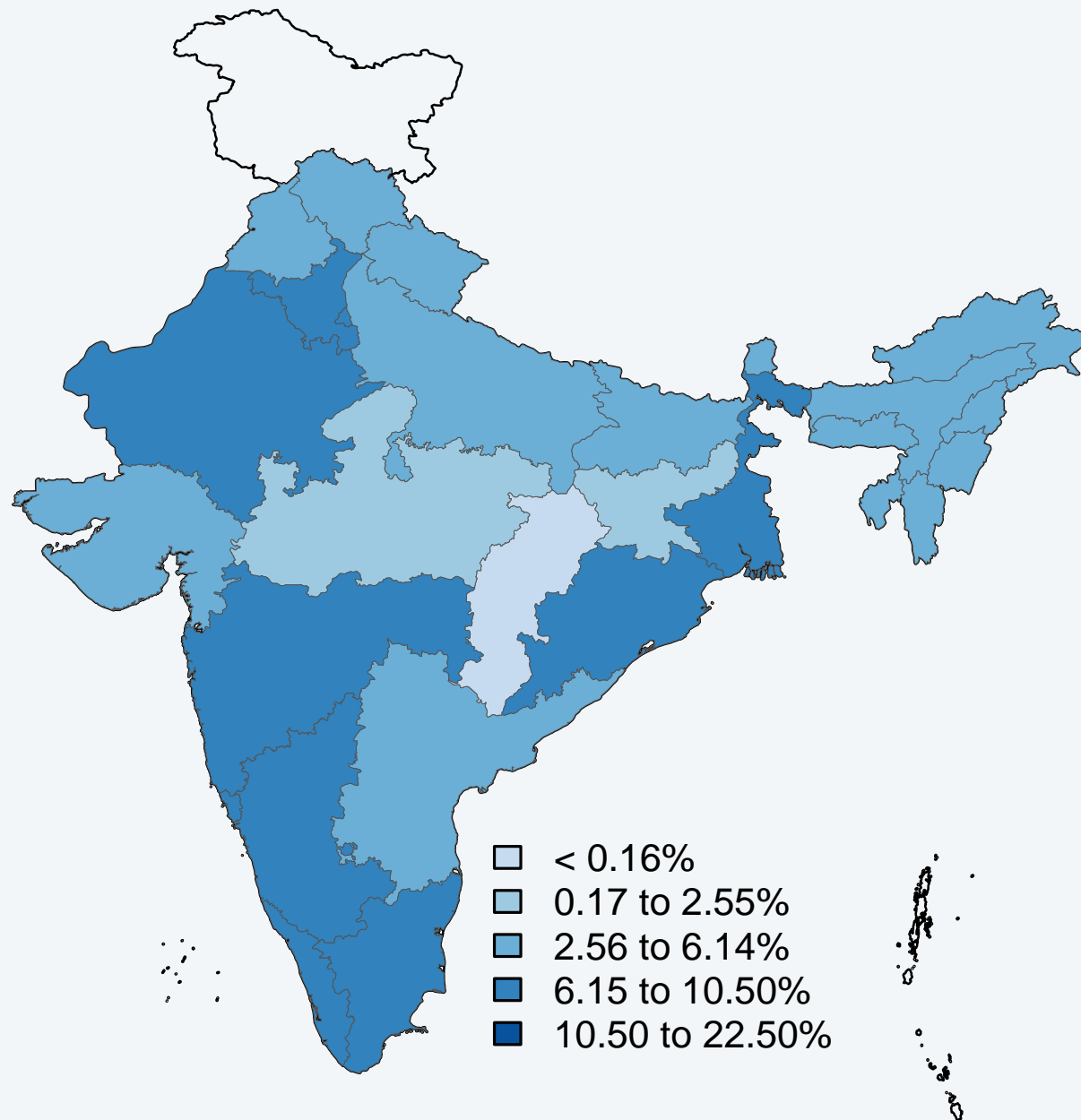
Source: Financial Inclusion Insights Survey, Wave 3, 2015.



- Use: At least one active use in the past 90 days.
- Example: Although 58% in Chattisgarh have bank accounts, only 18.30% use them.

Life insurance penetration

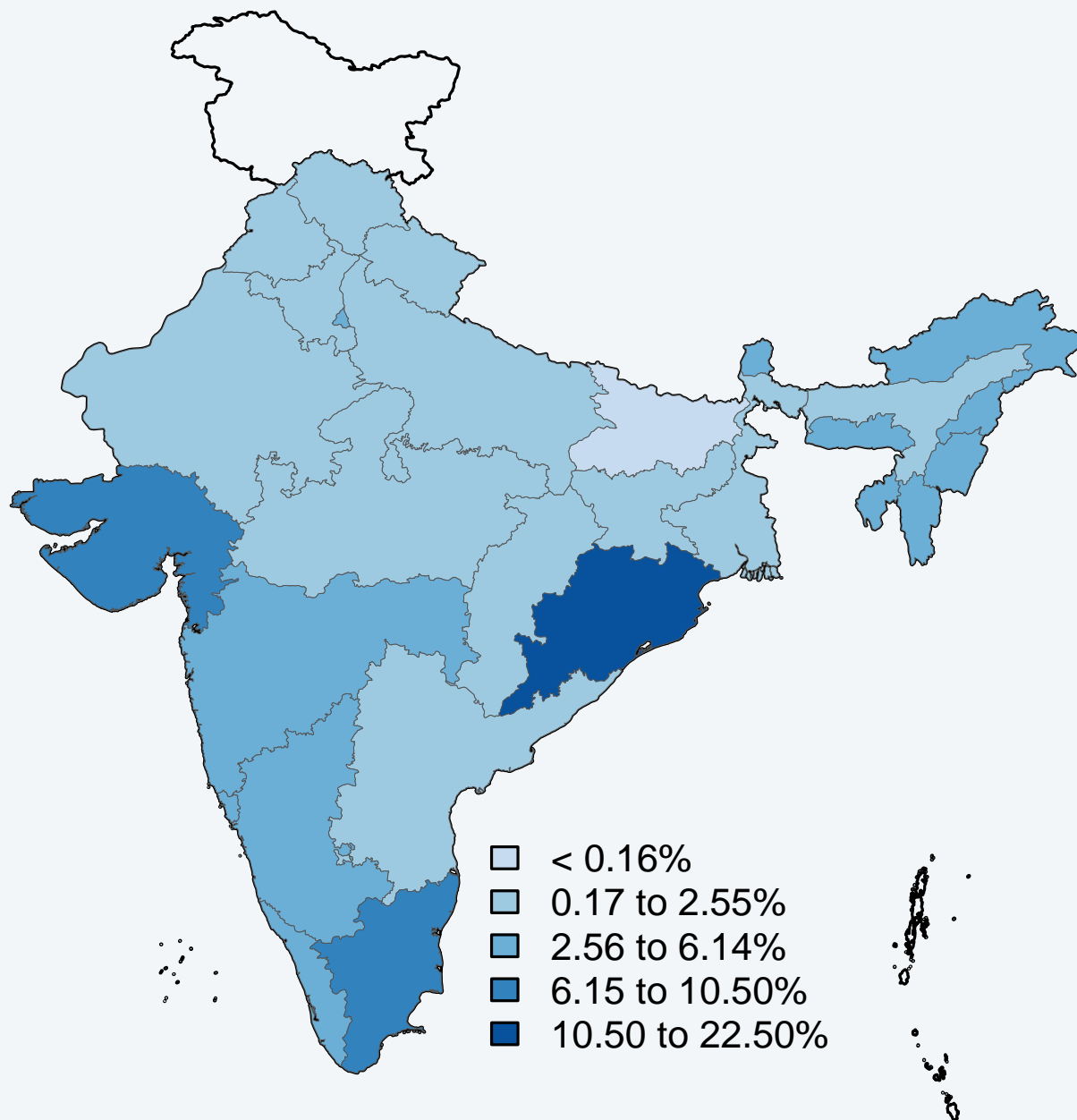
Source: Financial Inclusion Insights Survey, Wave 3, 2015.



- ▶ Life insurance: Chattisgarh has the lowest rates of penetration (2.15%).
- ▶ Life insurance: Karnataka and Tamilnadu have the highest penetration rates of 22.51% and 17.10%.
- ▶ US: 59% (Prudential)

Non-Life insurance penetration

Source: Financial Inclusion Insights Survey, Wave 3, 2015.

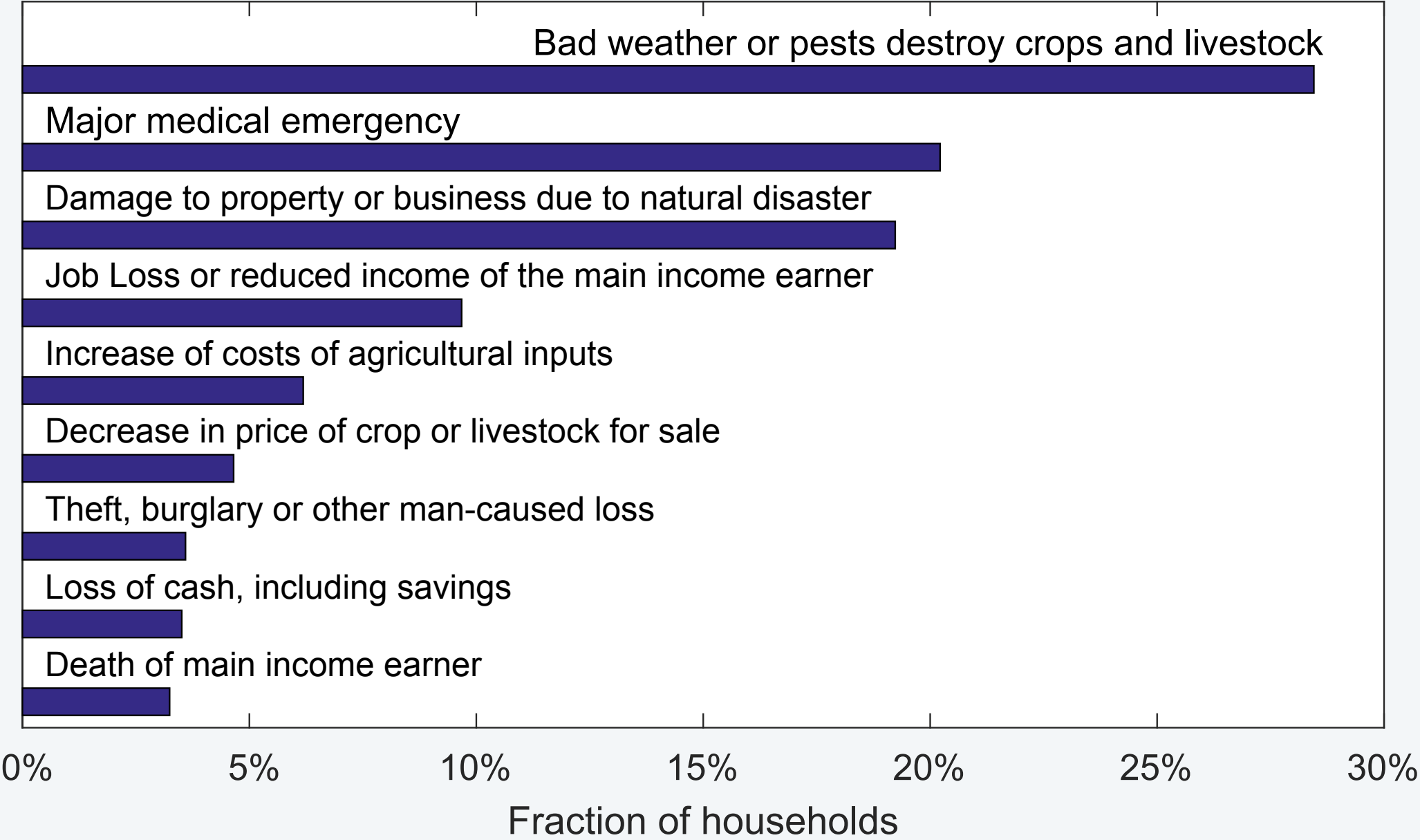


- ▶ Non-life insurance: National average in single digits.
- ▶ Non-life insurance: Jharkhand, Bihar, UP, Himachal Pradesh less than 1% penetration rates.

Household behaviour: Understanding the risks

Source: Financial Inclusion Insights Survey.

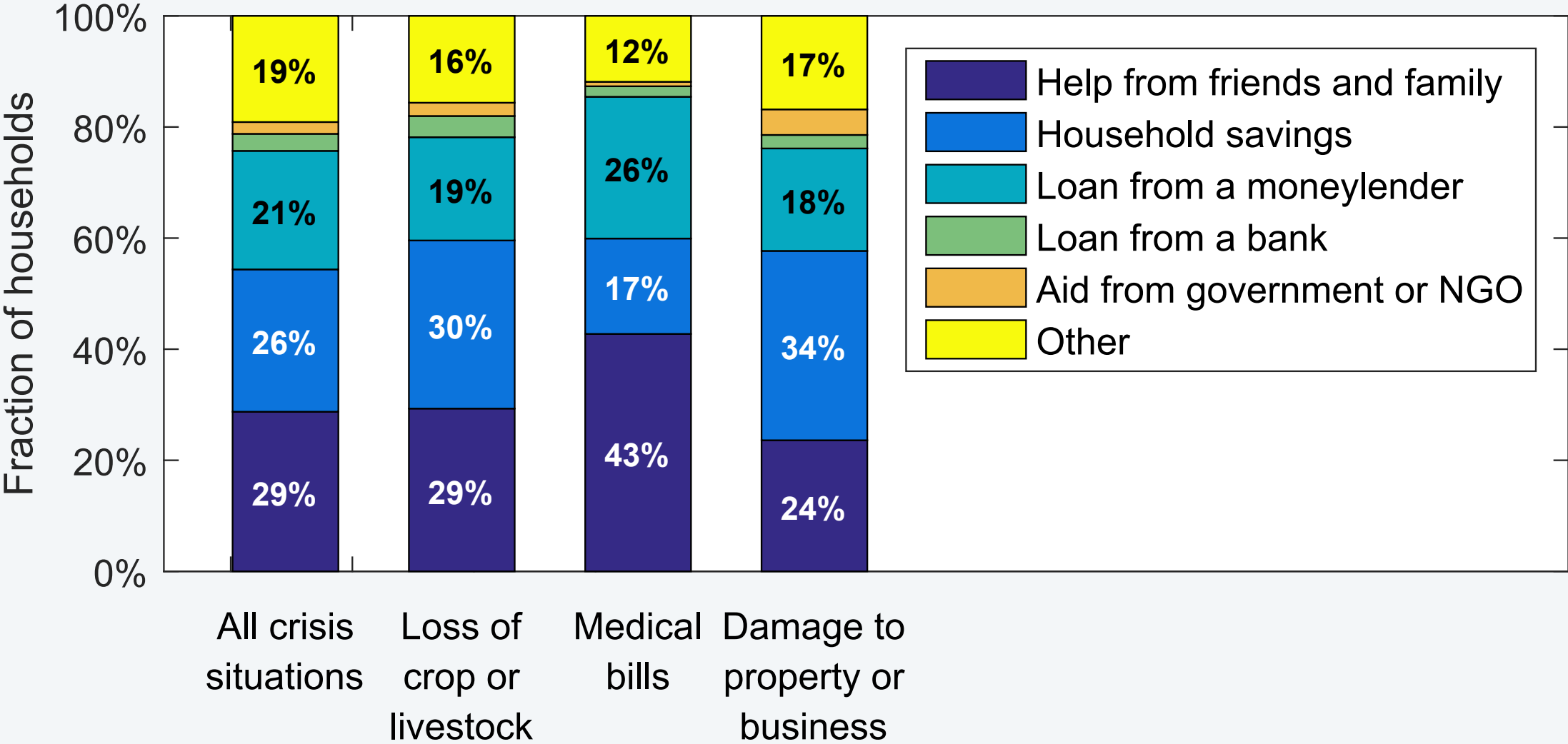
Sources of risk for Indian households



Household behaviour: Coping with emergencies

Source: Financial Inclusion Insights Survey.

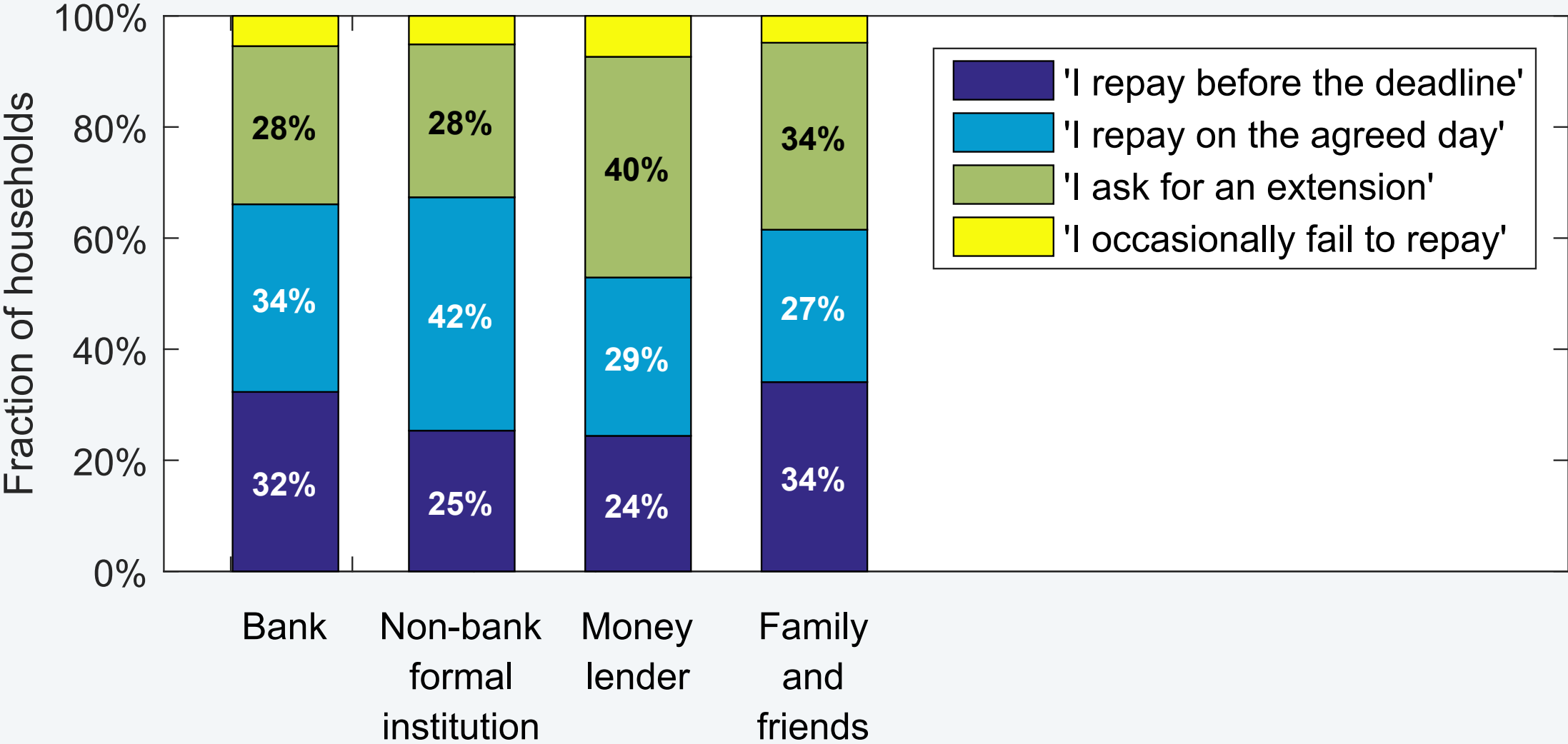
Sources of emergency funds



Household behaviour: Financial decisions

Source: Financial Inclusion Insights Survey.

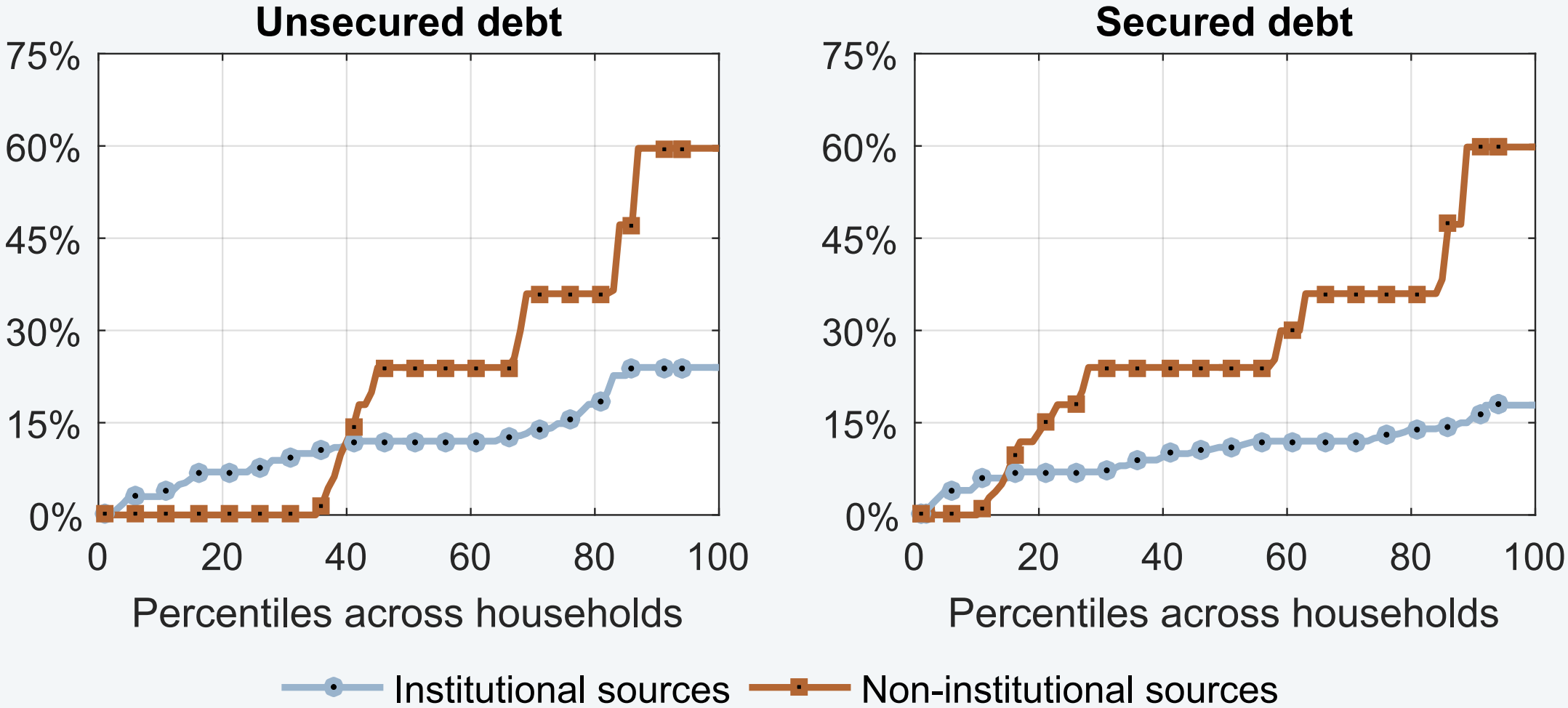
Loan repayment behaviour



Household behaviour: Financial decisions

Source: All-India Debt and Investment Survey.

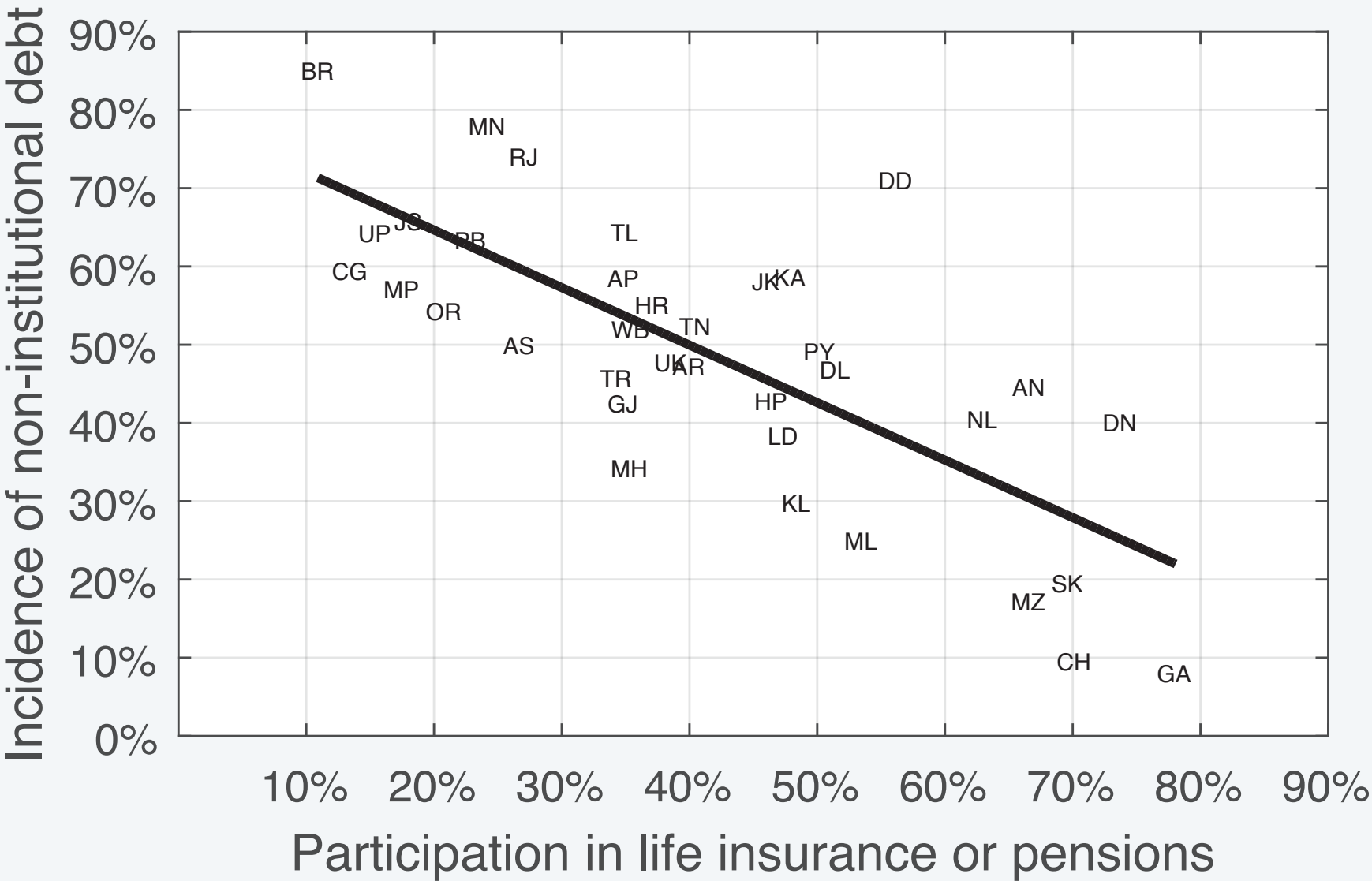
Loan interest rates (per year)



Household behaviour: Financial decisions

Source: All-India Debt and Investment Survey.

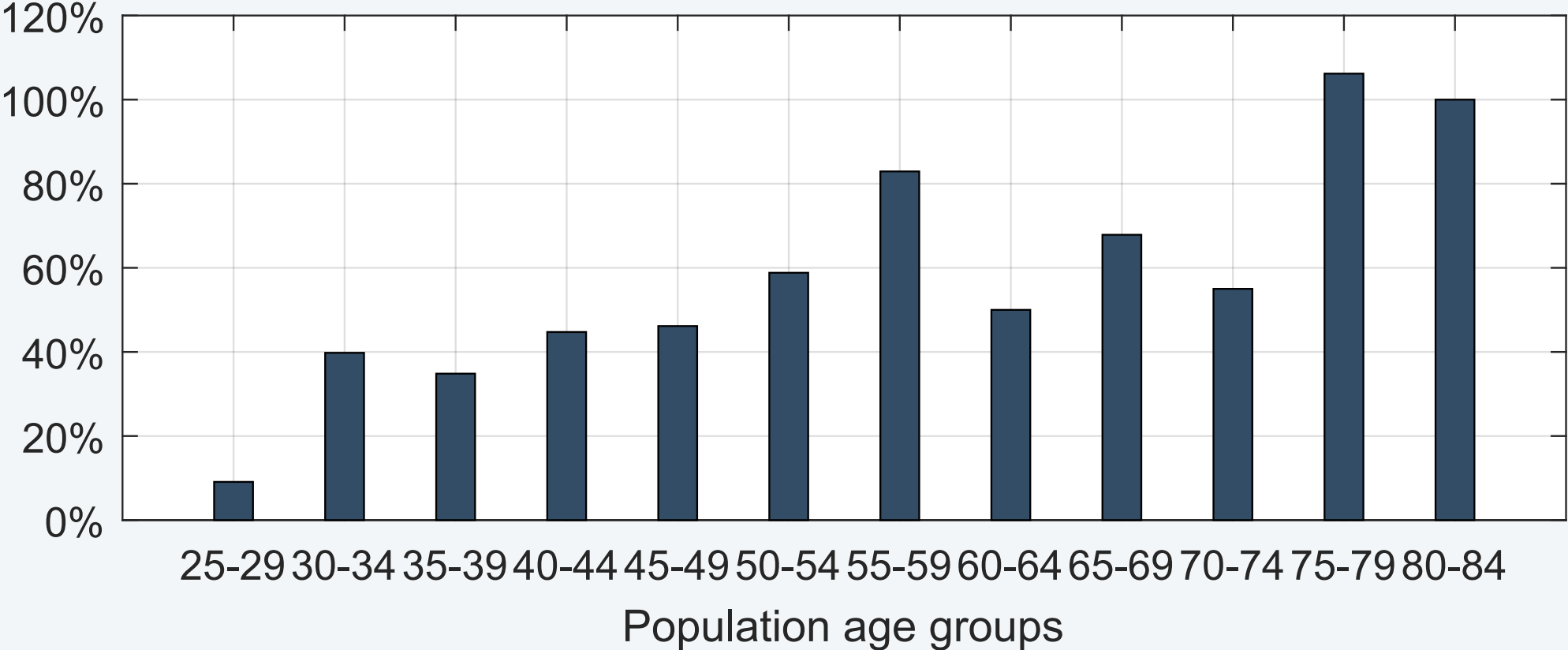
Substitution effect between insurance products and non-institutional debt



Medium-term projections

Source: Centre for Development Studies, Tiruvananthapuram, India

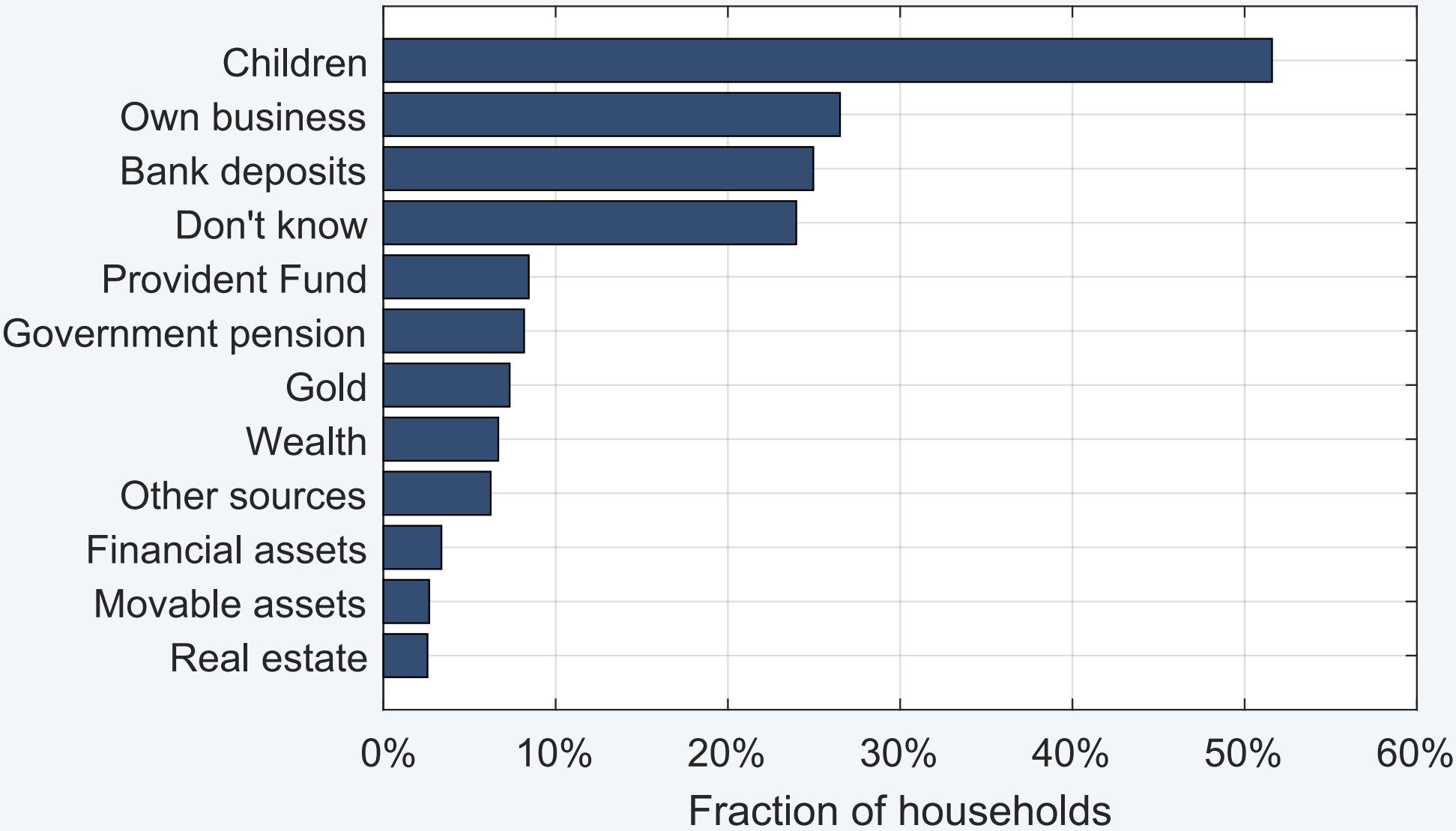
Predicted relative change in population



Medium-term projections

Source: ICE 360 Degrees National Household Survey

Sources of funds in retirement

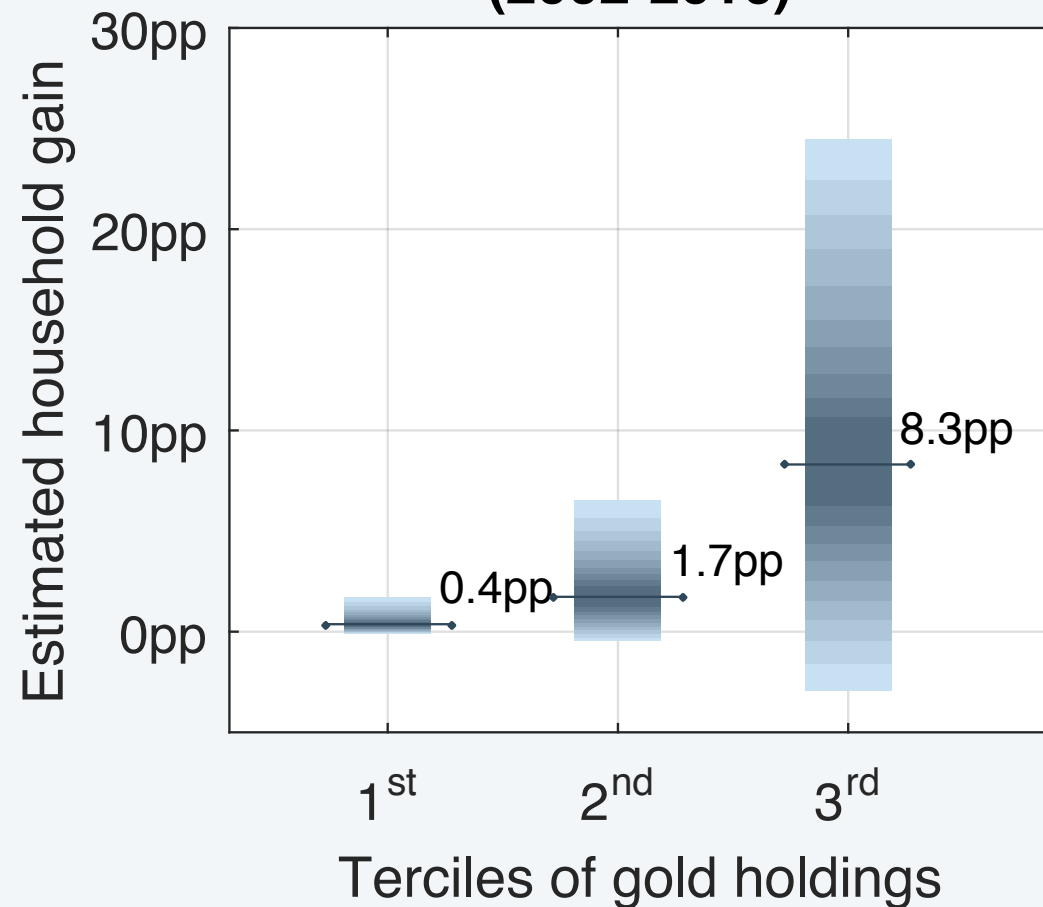


Gains from re-allocation of household wealth I

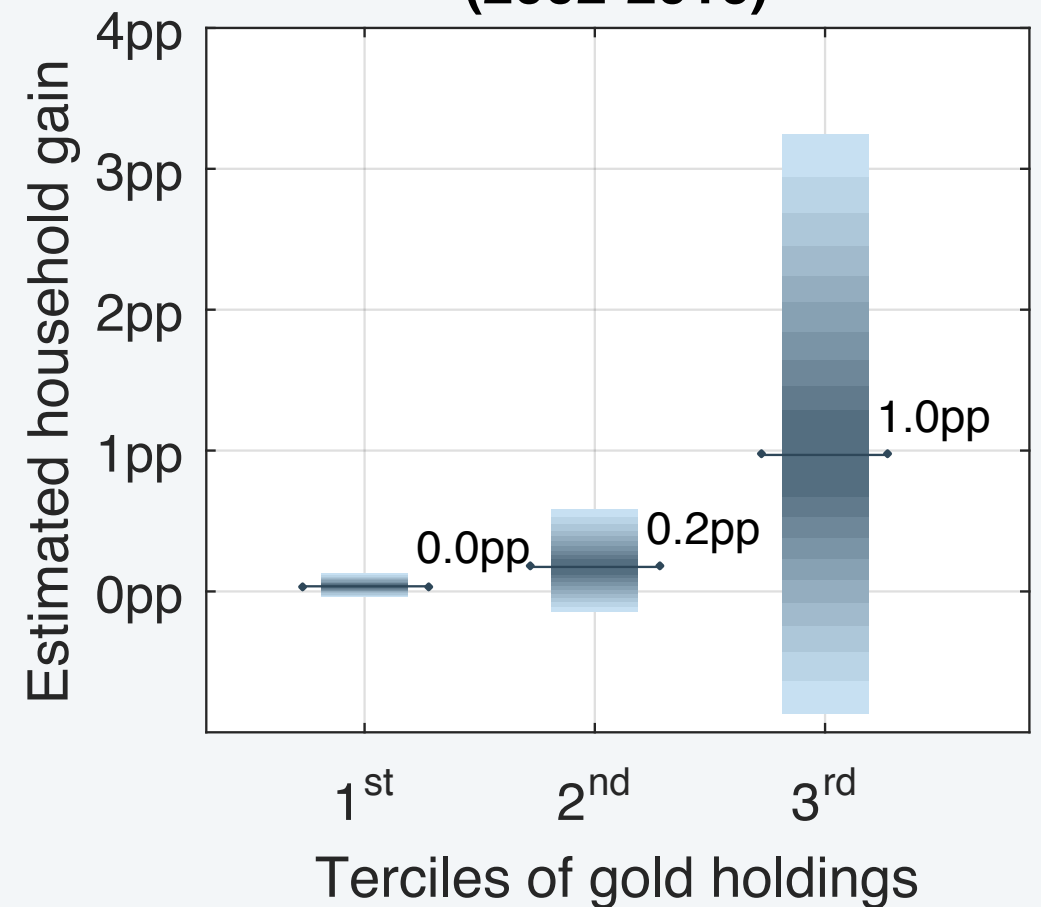
Percentage point movement along the wealth distribution

Gold holdings

**India return profile
(2002-2016)**



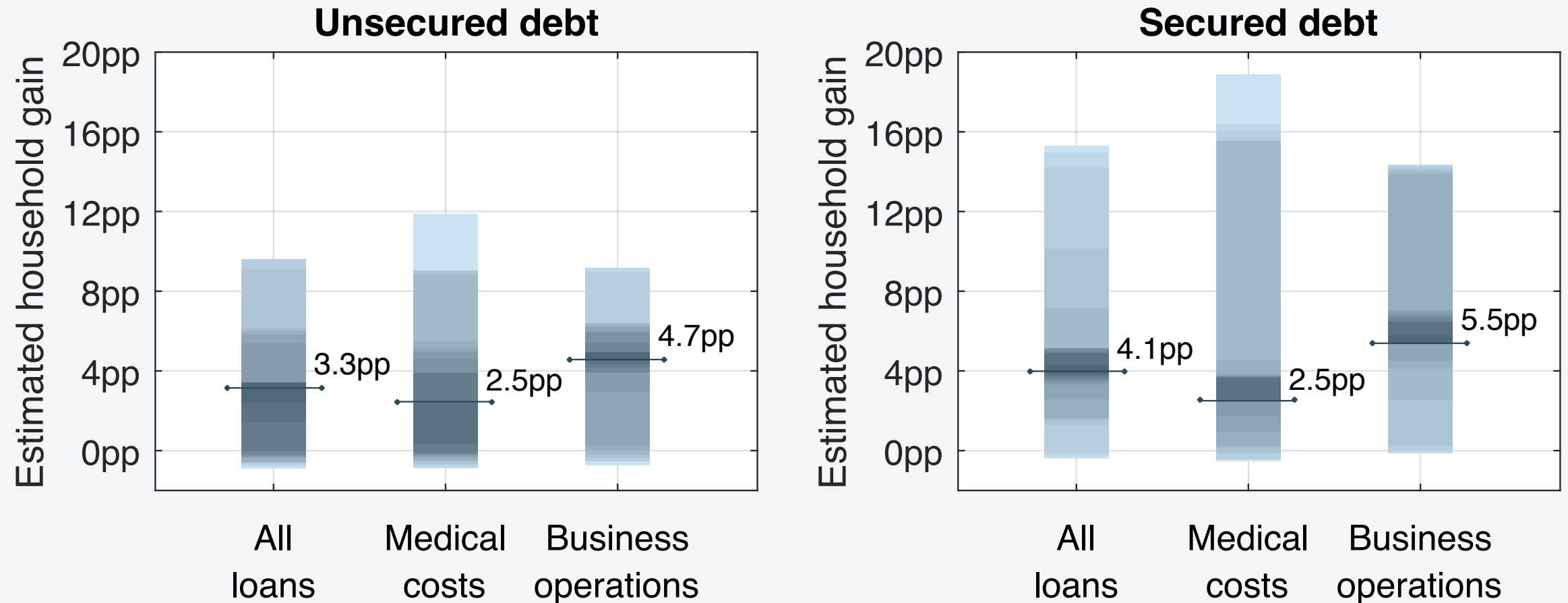
**United States return profile
(2002-2016)**



Gains from re-allocation of household wealth II

Percentage point movement along the wealth distribution

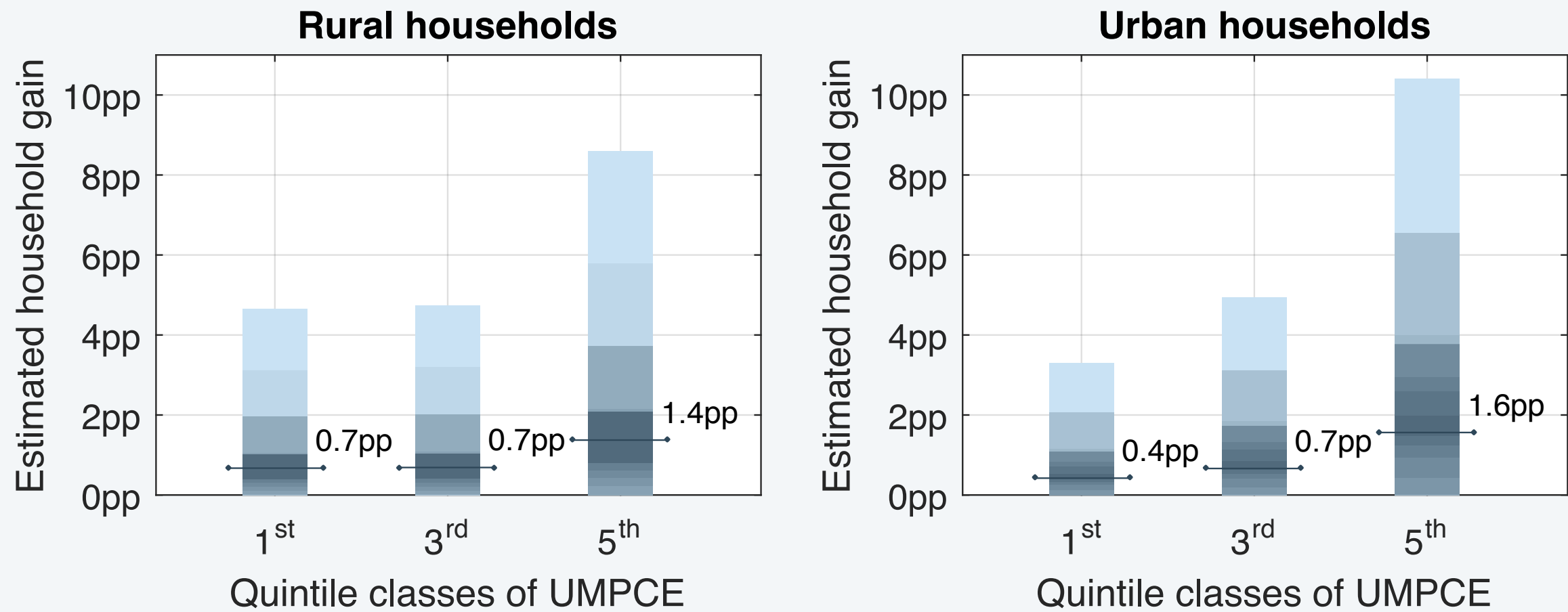
Non-institutional debt



Gains from re-allocation of household wealth III

Percentage point movement along the wealth distribution

Health insurance



Roadmap

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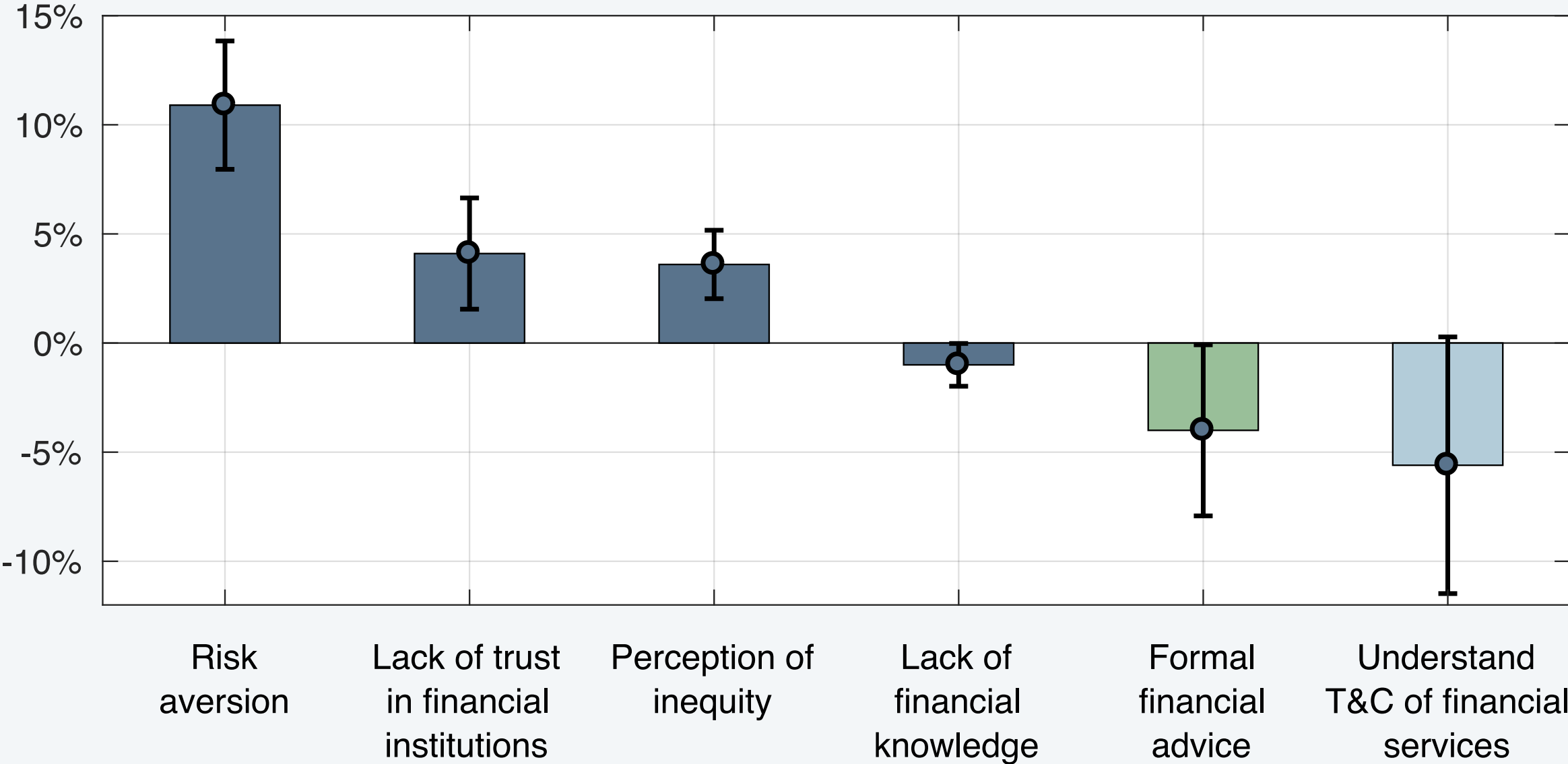
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Recommendations

Potential explanations for observed allocations I

Sources: Financial Inclusion Insights Survey, ICE360 Survey, Finscope.

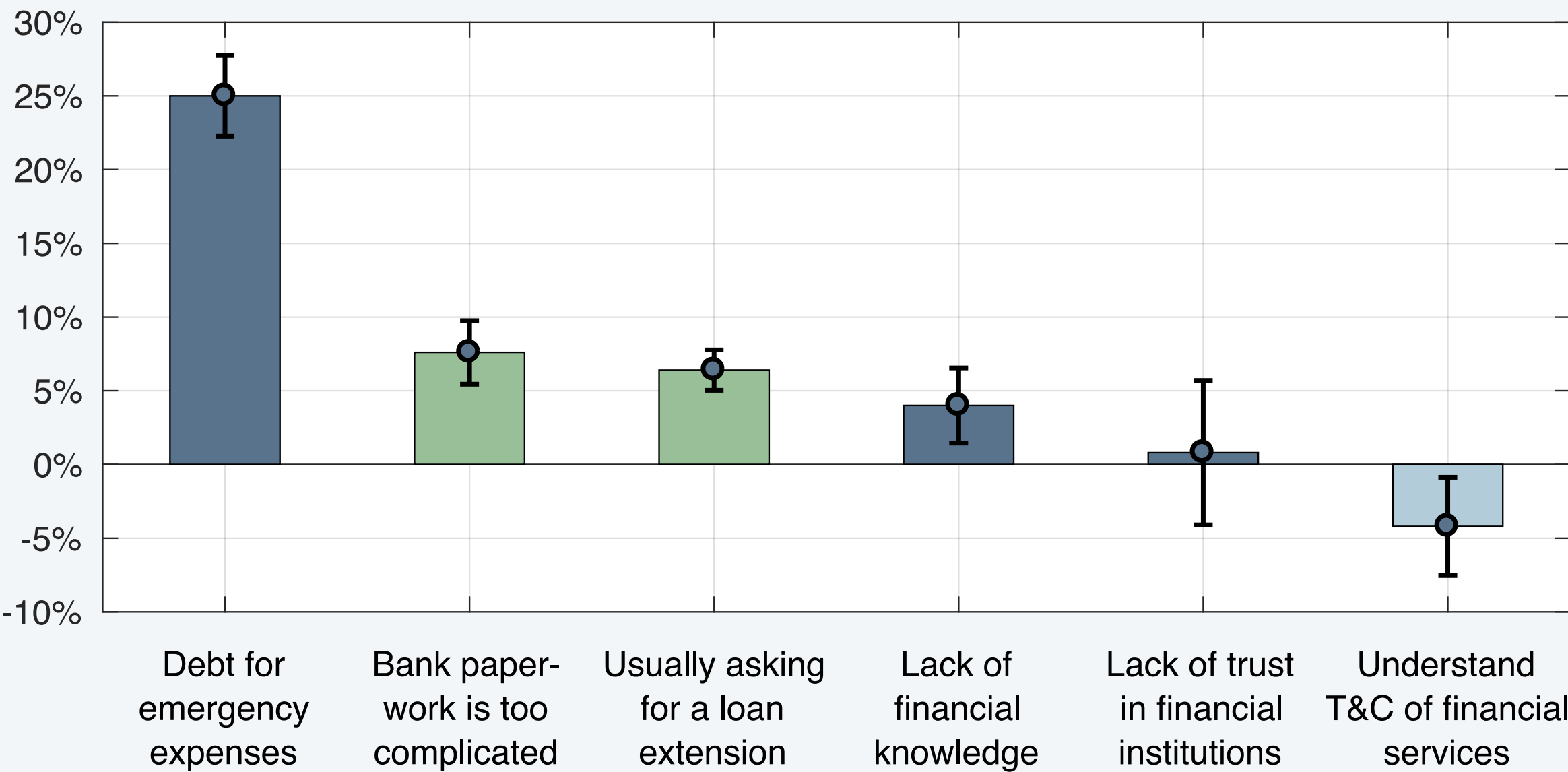
Gold holdings



Potential explanations for observed allocations II

Sources: Financial Inclusion Insights Survey, ICE360 Survey, Finscope.

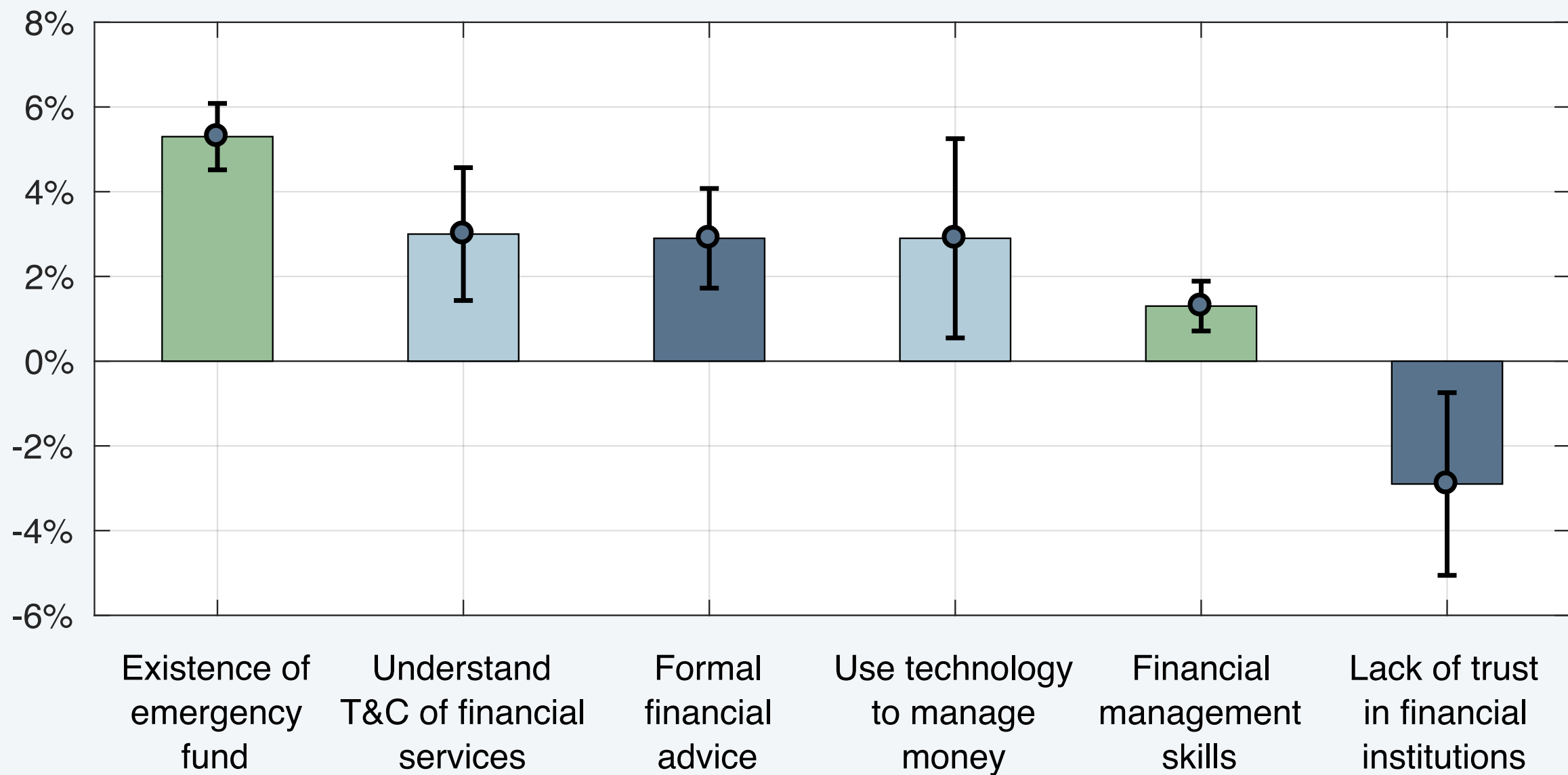
Non-institutional debt



Potential explanations for observed allocations III

Sources: Financial Inclusion Insights Survey, ICE360 Survey, Finscope.

Life insurance



Financial Capabilities

Source: Financial Inclusion Insights Survey, Wave 3, 2015.

Question		Correct	False	Don't Know
Basic Numeracy				
	Imagine you have 100 Rupees. Somebody gave you 20 Rupees. How much total money will you have?	95.1%	1.8%	3.1%
	Imagine you have 100 Rupees and you have to divide it among 5 people. How much money will each person receive if you divide it equally?	90.3%	3.6%	6.1%
Compound Interest				
Savings	Imagine you have 100 Rupees in your savings account. Your account is earning 2% interest every year. How much money will you have on your account in 5 years if you do not withdraw anything during that period?	69.1%	11.3%	19.6%
Loans	Now, imagine you took a loan of 100 Rupees for 1 year and you have to pay an interest of 2% each month until you fully repay it. How much total money will you have to repay in 1 full year (12 months)?	65.7%	11.4%	23.0%

Note: Number of respondents: 45,036

Financial Capabilities: International Comparison

Source: Financial Inclusion Insights Survey, Wave 3, 2015.

Compound Interest Savings			
	Correct	False	Don't Know
India	69%	11%	20%
Netherlands	85%	6%	9%
Germany	82%	7%	11%
Indonesia	78%	7%	15%
United States	71%	25%	4%
Japan	71%	16%	13%
Chile	45%	41%	14%
Mexico	45%	53%	2%

Source: Various Micro-surveys

Financial goals of the household

Source: Kshetriya Grameen Financial Services

- ▶ Financial goals (fraction of annual income):

	Income Quintiles				
	1	2	3	4	5
Education	0.76	0.31	0.24	0.15	0.07
Private business	0.55	0.34	0.27	0.26	0.15
House purchase	1.16	0.75	0.47	0.41	0.23
Marriage	1.17	0.58	0.40	0.27	0.15
Other life events	0.48	0.29	0.08	0.19	0.07
Loan repayment	0.65	0.10	0.01	0.07	0.02

- ▶ Financial goals are often driven by "life-events" such as marriage.
- ▶ Health and retirement conspicuously absent in households' self-reported key financial goals.
- ▶ Poor access to credit markets for micro-enterprise cause household financial goals to also reflect small business goals.

Qualitative principles for financial innovation I

- ▶ Five principles that should guide policy framework to improve participation and allocations.

Relevance: Suitable financial products delivered using distribution mechanisms with appropriate incentives, and if needed, financial advice that is in the best interests of the household.

Intuitiveness: The producer of a financial product should make the key aspects of product terms and conditions intuitive and salient at the point of sale, by leveraging natural communication patterns, behavioural heuristics, etc.

Customisation: In response to the diversity of household needs, financial products should be customised to help achieve household-specific objectives.

Qualitative principles for financial innovation II

- ▶ Five principles that should guide policy framework to improve participation and allocations.

Scalability: Policy that enables and filters for suitable supply-side solutions that can be scaled up at relatively low cost is essential.

Fair pricing: Pricing regulation needs to take into consideration the incentives and competitive structure of product suppliers, arbitrage across similar products, the options for consumers who do not have access to the product due to the regulation, and whether consumers will be worse off as a result of intervention.

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Recommendations

Mortgages I

- ▶ Real-time reset of floating interest rates, common quotation conventions.
- ▶ Quoting loans to customers in the form of a market-wide standardised rate + spread as opposed to MCLR + spread, to facilitate cross-product comparison.
- ▶ Standardising the reset period across banks, to be immediate.
- ▶ Banks should quote the rate for every fixed rate product relative to the repo rate.
- ▶ Remove the tax exemption for income from house property to discourage real estate as an investment.

Mortgages II

- ▶ Do not specifically tie tax exemption on sale of residential property to re-investment in the property sector.
- ▶ Increase incentives for first-time home buyers with a mortgage interest tax deduction.
- ▶ PSL-confirming home loan limit to be indexed to level of house prices.
- ▶ Granular loan-level data to be provided by banks and NBFCs to RBI to facilitate research.

CERSAI and SARFAESI

- ▶ Digital interface of CERSAI should be recalibrated to minimise time and cost of regulatory compliance.
- ▶ Make SARFAESI applicable to small as well as large loan sizes.
- ▶ Allow digital transfer of titles for collateral, digitize physical NACH form for enabling repayment.

Gold

- ▶ Propose variant of gold bonds introduced with default matrilineal inheritance.
- ▶ Propose variant of gold bonds that can be physically redeemed at choice of household.
- ▶ Improve state and municipal bond market, and wider publication of local inflation indexes to facilitate exchange-traded products against these indices.
- ▶ Offer tax incentives to investors in inflation-indexed bonds.
- ▶ Support creation of a spot gold exchange.
- ▶ Propose PAN card requirement for gold transactions from jewellers be extended to all transactions regardless of size.
- ▶ Make unsecured credit widely available to households at favourable rates in the event of emergencies.
- ▶ All gold transactions to be registered electronically.

Pensions

- ▶ Enable digital end-to-end applications for pension products and authorise Aadhaar-enabled enrolment.
- ▶ Ease of switching and choice in annuity plans; segregate annuity investment from insurance investment.
- ▶ Increase transparency in annuity market in terms of expenses, commissions, annual fees and surrender charges.
- ▶ Investigate whether cap on NPS management fees is internationally comparable.
- ▶ Relax mandatory requirement that only point of presence (POP) entities can engage in sales, and allow digital marketing of pensions.

Insurance I

- ▶ Propose simple home insurance policy covering structure and contents at a low premium.
- ▶ Propose low-cost travel insurance plan for senior citizens.
- ▶ Mandatory catastrophe insurance with automatically triggered pay out in zones with high natural disaster (floods, etc.) risk.
- ▶ Publish highly granular insurance claims statistics in machine readable format.
- ▶ Rationalize distribution incentives, level commissions structures between initial sale and policy renewal, encourage renewal.

Insurance III

- ▶ Rationalize discrepancy in commissions between products, incentivise purchase of simple term insurance products.
- ▶ Make PoS disclosures simple and comprehensible.
- ▶ Continue clamping down on mis-selling.
- ▶ Permit redress using delegated representatives, especially in rural areas.

Financial advice

- ▶ Uniform and consistently stringent standards across regulators for provision of financial advice. Insurance and mutual fund intermediaries brought under uniform advisory regulations.
- ▶ Advisory and distribution functions effectively segregated in a manner that avoids conflicts of interest.
- ▶ Unique license number for financial advisors. Information about financial advisors and standards of competence verified and available online.
- ▶ Fiduciary model for advice.

Financial technology I

- ▶ Robo-advice encouraged subject to checks and balances including granular data on ultimate financial advisor providing advice.
- ▶ RBI's account aggregator rules amended so that it is mandatory for financial institutions to share information on authorization from the customer.
- ▶ Support e-KYC, and elimination of all paper processes or wet signatures.
- ▶ Propose DigiLocker service be extended to brokers, insurance companies, and nationalised banks, and link CERSAI to DigiLocker.

Financial technology II

- ▶ Seamless switching across financial products at the request of the consumer at low cost, portability of e-KYC across products.
- ▶ Further simple financial products to be seeded using PMJDY as a platform.
- ▶ More complicated financial products to require explicit “opt-in” by consumers.
- ▶ Support new data privacy framework to protect household data, using a rights-based approach.

Regulatory Sandbox

- ▶ Propose establishment of a cross-regulator “Regulatory Sandbox”, a safe space in which the regulator can facilitate small-scale tests by temporarily relaxing certain regulations to collect empirical evidence whilst containing risks.
- ▶ Report provides a detailed blueprint for the Sandbox.

