# Discussion on "Heterogenous Taxes and Limited Risk Sharing"

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#### Context

- The neoclassical world: Facts about the security are the only thing that matters
- Behavioural finance:
  - Individuals make mistakes. This is costly for them.
  - Managers make mistakes, there are principle agent problems in financial institutions. This is costly for them.

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- None of these have implications for asset pricing.
- Asset prices: Biases in investor behaviour are bubbling into asset prices.

#### Key takeaways

- Ownership segmentation can have implications for risk-sharing in equilibrium
- This in turn affects asset prices and the resilience of asset prices to shocks.
- This segmentation is driven by tax policy
- Tax policy can push certain assets into a "downward-sloping" portion of the aggregate demand curve for a security

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#### Tax privilege and home-bias

- We have always known that there is home bias.
- We know that home bias affects cost of capital (Lau et. al. 2010, JFE).
- Home-bias is driven by both "information" and "familiarity" (Pool et. al. 2012, RFS)
- Now you have one more driver of home bias "tax policy".
- Both these are coming together to yield highly inefficient portoflio choice.

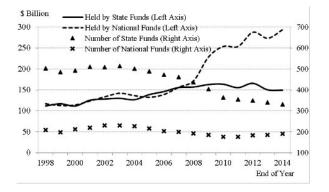
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## Part I

## Methodology

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#### Change in AUM



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- Huge shift in AUM between state funds and diversified funds
- Does this explain some of the results?

#### Methodology: Tax exemption and issuance

- A little more discussion on the differences between states that have these tax exemptions, and issue bonds – in terms of their state finances as well.
  - For example, debt/GDP(%) varies between 12.81 and 23.0.
  - Net iss/Debt varies between 5.66 and 8.74
  - "Only game in town" (Harrison et. al. 2008, JFE)
- Use controls but issue of common support?
- Do you control for when the bond is issued? For example, in times of close elections, do the high SFH states issue more/less bonds?
- Interaction terms in the DID regressions
- For example, effects are concentrated among states with high SFH and high debt/ high-tax income - what is the impact of just being high privilege?

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## Part II

## Implications

#### Implications: Tax policy

- The rational thing to do is to combat home bias.
- A government is better off it has a diversified pool of investors
- Mistakes in tax policy can actually subvert portfolio choice.
- "Residence based taxation" is the OECD standard: you do not tax non-residents. This is conducive to international financial integration.
- India does not do this. We do "source based taxation" we try to tax all portfolio owners no matter where they are.

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This exacerbates home bias.

Implications: Disclosure policy

- In India, ownership disclosures are poor.
- If the ownership of securities matters, how should we think about disclosure of ownership?

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#### Implications: Institutional issues

- Who is the institution that should care about the pool of investors in Indian government bonds?
- When the PDMA is formed, it should think about selling Indian bonds all over the world so as to have a globally diversified investor base.

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Thank you

