The Secular Decline of Bank Balance Sheet Lending

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ECB ARC Conference

September 19-20, 2024, Frankfurt

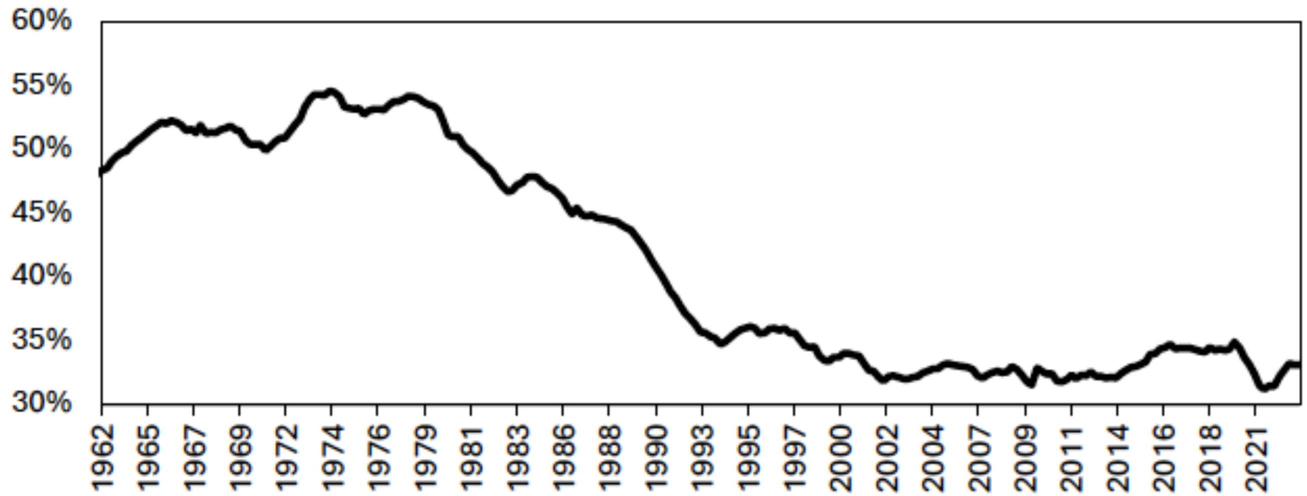
Disclaimer: The views expressed in this presentation are my own and do not necessarily represent the views of the Bank of England

This paper

Three key contributions:

1. Documenting three secular trends US bank balance sheets
2. Develop model interaction bank balance sheet and OTD model
    - Understand drivers behind trends
3. Assess impact capital and liquidity requirements 1960s vs 2023

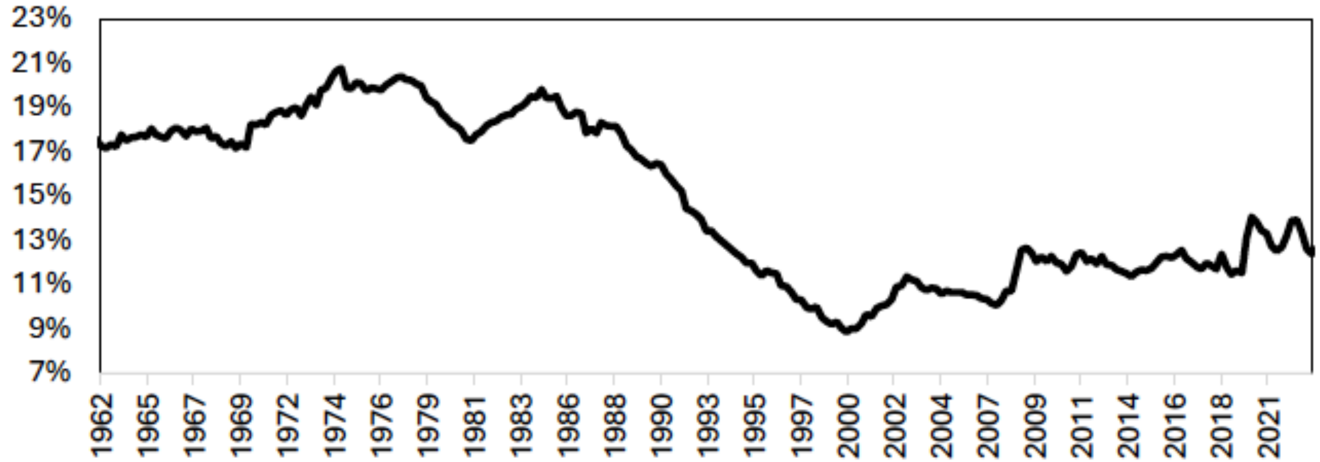
Three secular trends



(a) Informationally sensitive lending share

Decline (info sensitive) bank balance sheet lending

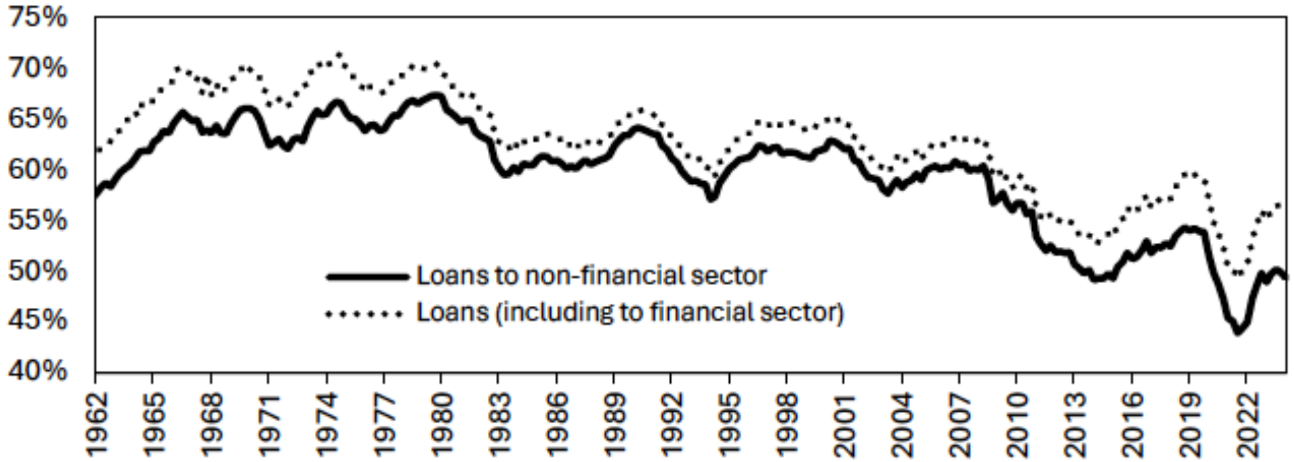
Three secular trends



(b) Deposit share of domestic non-financial sector financial assets

Deposit share of (household) savings fell

Three secular trends



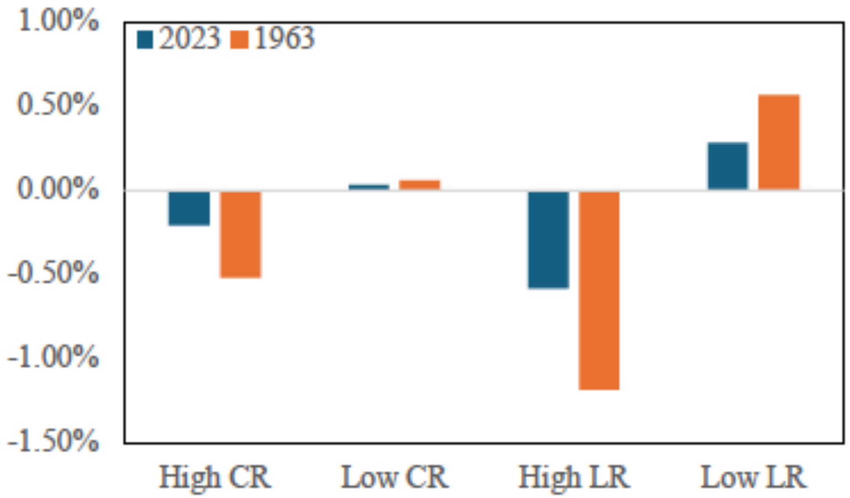
(c) Loan share of bank assets

Loans as percentage of bank assets dropped

Main drivers behind trends

- Technological improvements in debt securities issuance
  - Dominant, 1970s-1990s
  - Drive changes in aggregate lending
- Shifting saver preferences
  - Mid-1980s - 2000
  - Impact balance sheet size and amount deposit funding
- Evolving government regulations
  - Mainly after GFC
  - Altered balance sheet composition

Changing impact of capital/liquidity regulation



(a) % change in total lending

Tightening regulation now less impact on total lending

Substitution bank balance sheet loans with debt securities

Key take-away

Financial sector now more resilient to regulatory changes due to shifts in household preferences and declining frictions in OTD intermediation.

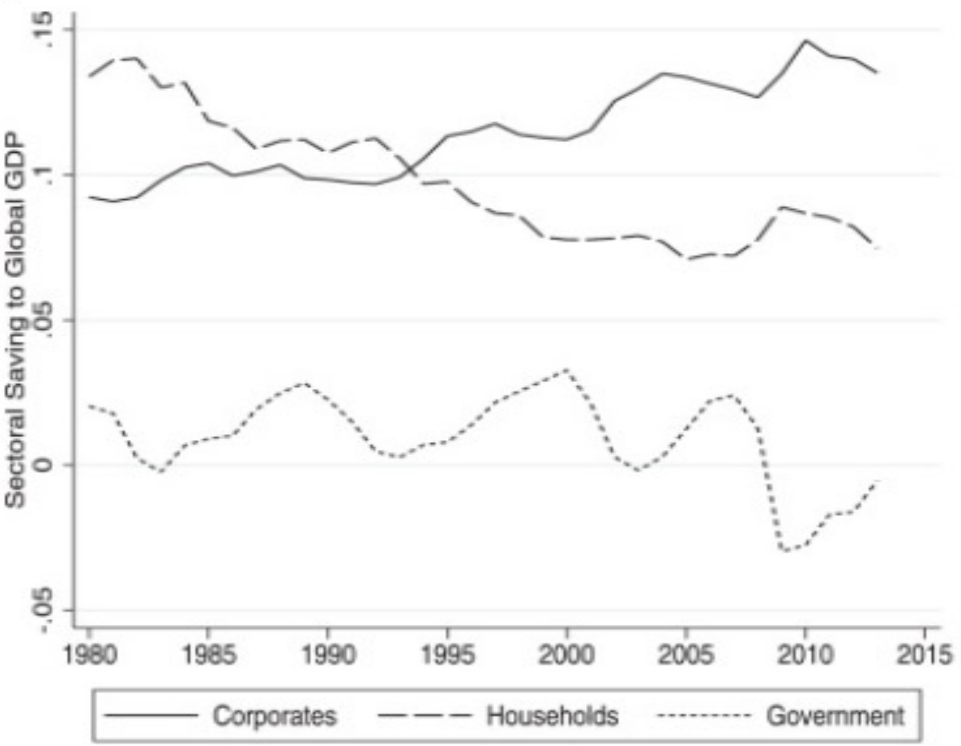
My comments

- Corporate savings
- Household vs corporate borrowers
- Banking concentration

Corporate savings

- "**Saver behaviour**, rather than borrower demand or bank lending opportunities, has become key driver in determining size and composition of bank balance sheets"
- Paper focuses on saving behaviour of **households**
- What about **corporate** savings?

Diverging trends in corporate and household savings



Chen, Karabarbounis and Neiman, JME 2017

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Drivers increase corporate savings

- Increases in firm profits (Chen, Karabarbounis and Neiman, JME 2017)
- Precautionary saving after a shock (Melcangi, AEJ-Macro, 2024)
- R&D intensive IPOs (Begenau, Palazzo, JFE, 2021)
- Desire minimize taxes (Faulkender, Hankins, Petersen, RFS 2019)
- Easier to fund investment outright or secure better terms

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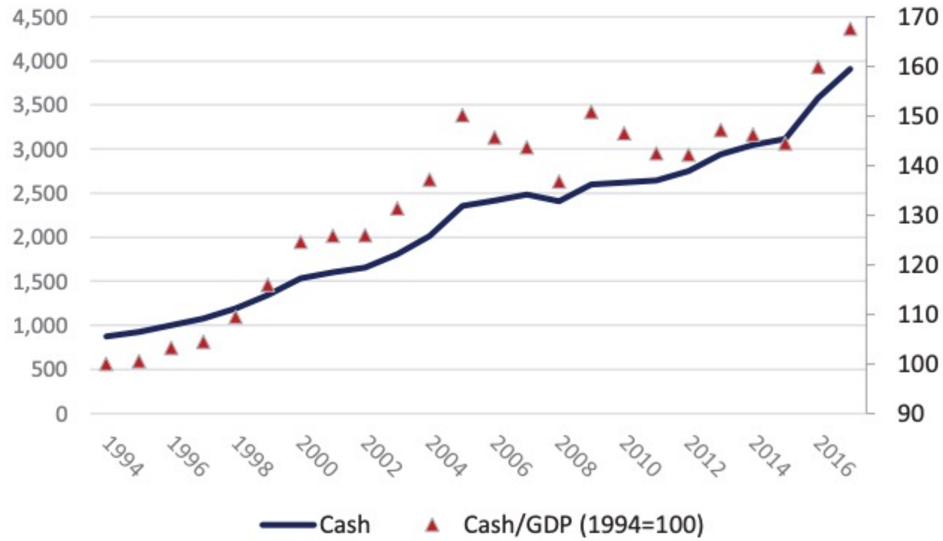
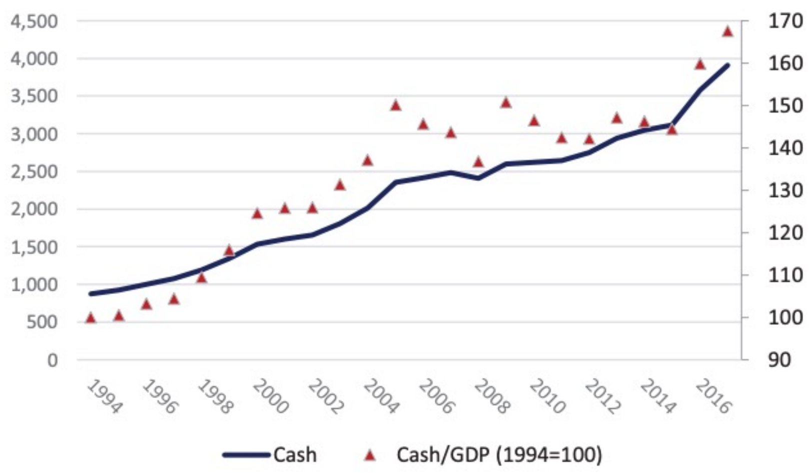
Secular trend US corporate savings

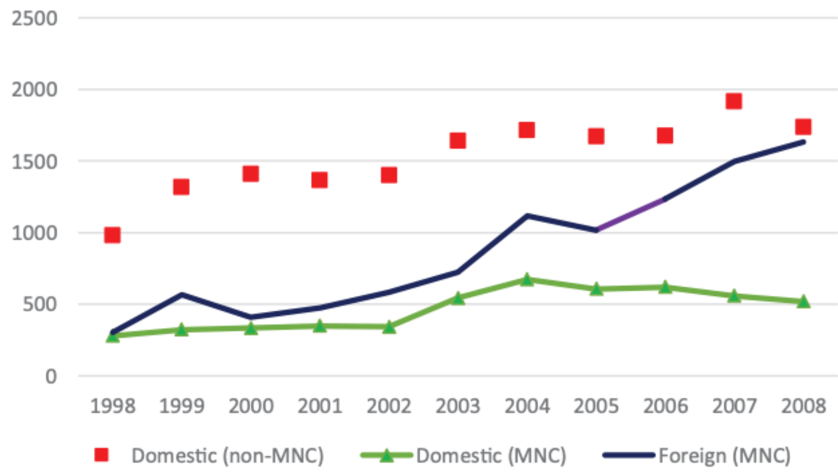


Faulkender, Hankins, Petersen, RFS 2019

Cash held by US companies increased from \$1 trillion in 1994 to \$4 trillion in 2016 (and \$5.8 trillion in 2022)

Not just multinationals

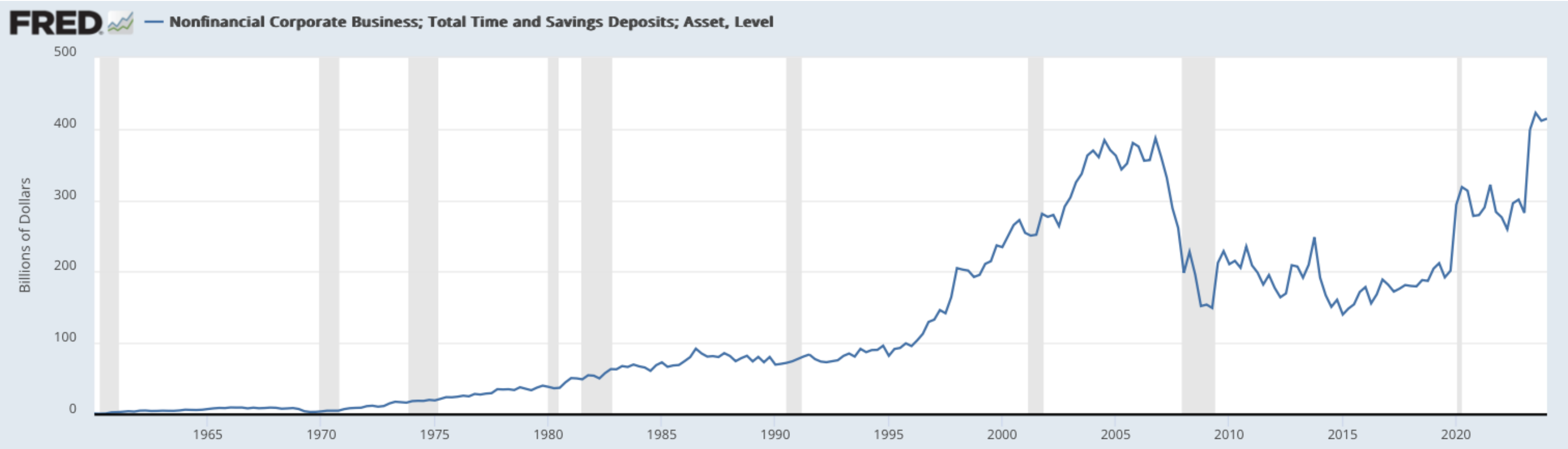




Faulkender, Hankins, Petersen, RFS 2019

Domestic holdings predominantly non-MNCs

Significant amount on banks balance sheets



Secular increase in (quite volatile) corporate deposits

Corporate savings

- Secular changes saver preferences also take corporates into account
- Share and composition deposits on *bank balance sheet*
- Implications for model
  - Should we expect α_j (utility weight) and σ_s (substitutability) be the same?
- Differential behaviours household and corporate deposit holders
  - Corporate savings more flighty (Carletti, De Marco, Ioannidou, Sette, 2024)
  - Might be more responsive to business cycle fluctuations

Borrower demand for lending technologies (1960)

Info sensitive loan

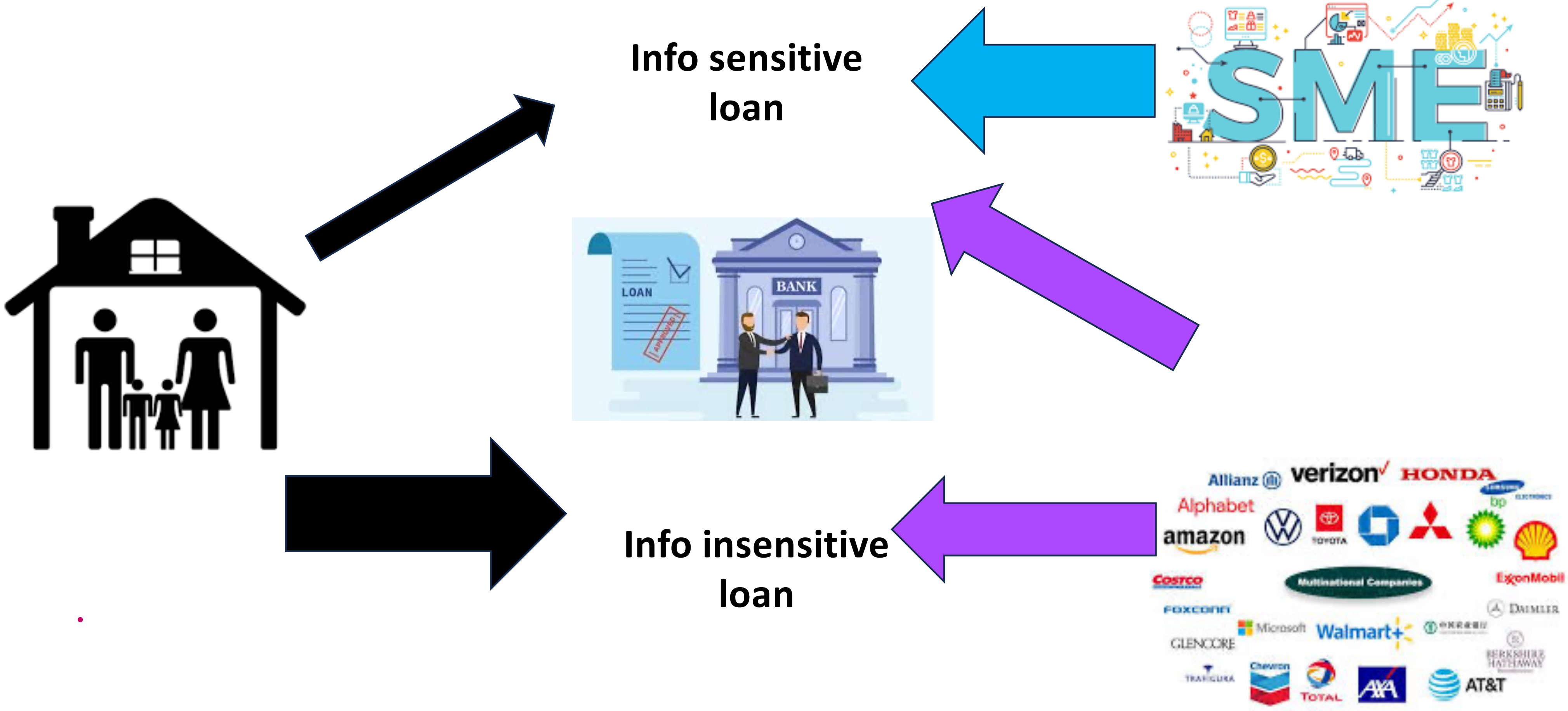
Info insensitive loan

Borrower demand for lending technologies (1960)

Info sensitive
loan

Info insensitive
loan

Borrower demand for lending technologies (2023)

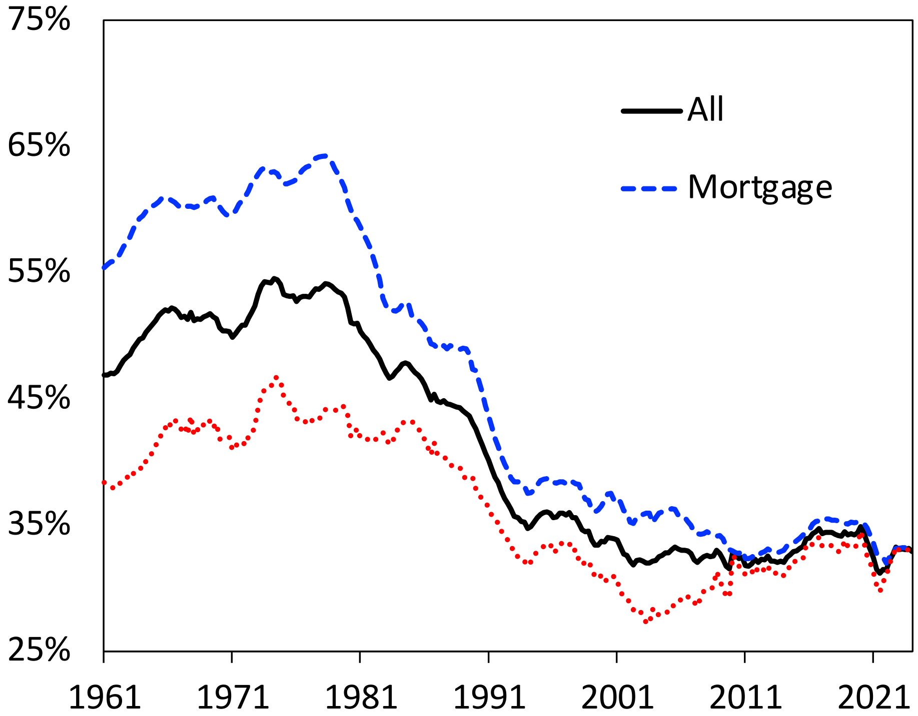


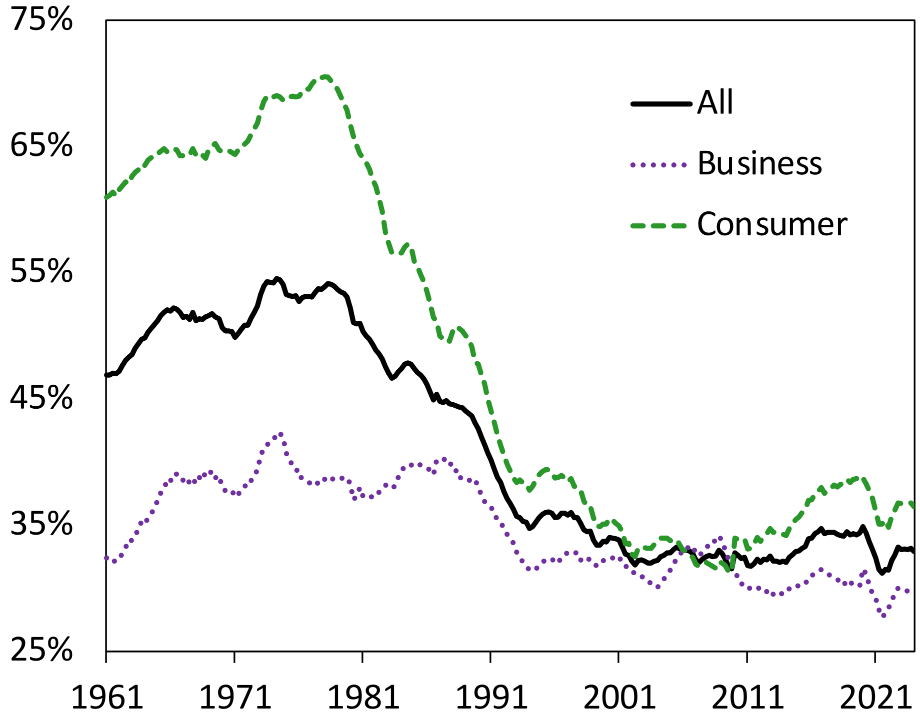
Borrower demand for lending technologies

- Households:
  - High preference info insensitive borrowing and limited substitutability
  - Trend toward info insensitive loans

- Corporates
  - Preference info sensitive loans and substitutability depend on corporate type
  - *Aggregate* trend towards info insensitive loans, but less than households
  - No change in preferences SMEs

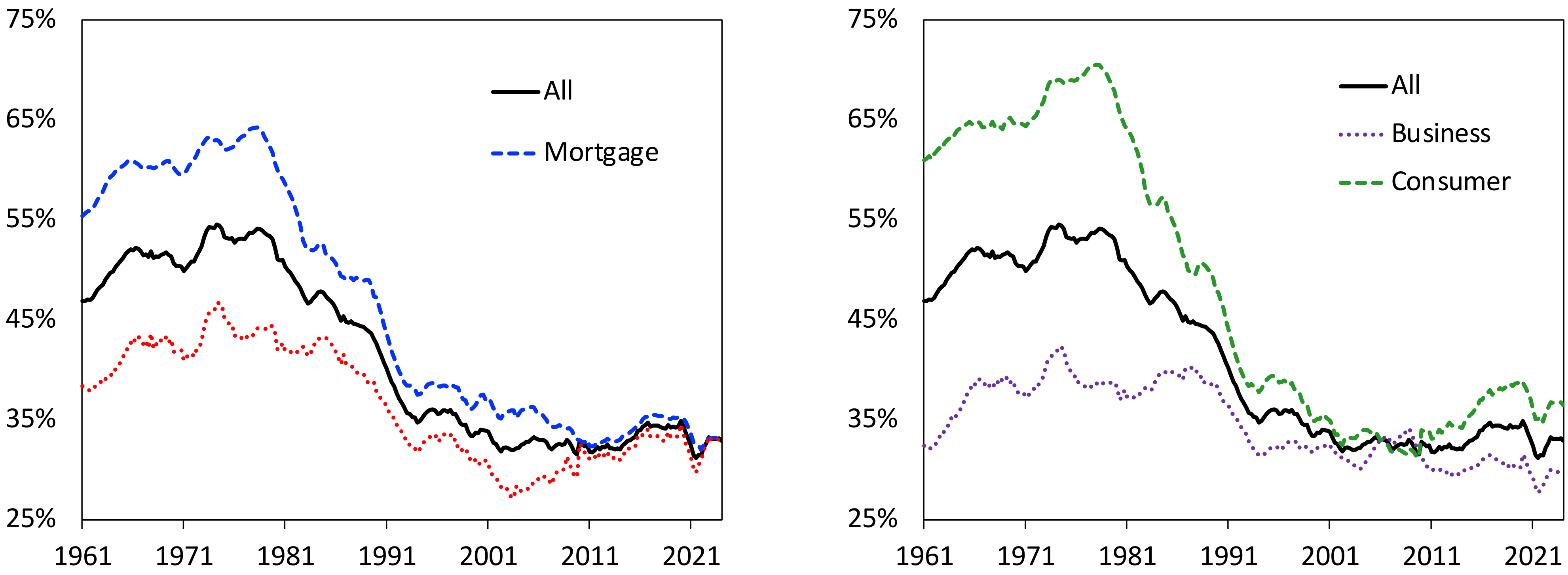
Household vs corporate info sensitive lending





Clear secular decline **mortgage lending**

Household vs corporate info sensitive lending



Some secular decline **corporate lending**, but much less pronounced

Borrowers - Model

- Representative borrower: "all non-gov net borrowers in economy"
  - Combination of household and firm
- Time series info sensitive (L) and info insensitive loans (S) takes together
- Key parameters as well:
  - σ_b = elasticity of substitution
  - β_j = borrower preference for specific technology
- Assumption: composition of financeable projects largely fixed over time
- Is this a reasonable assumption?
- Model household and corporate borrowers separately?

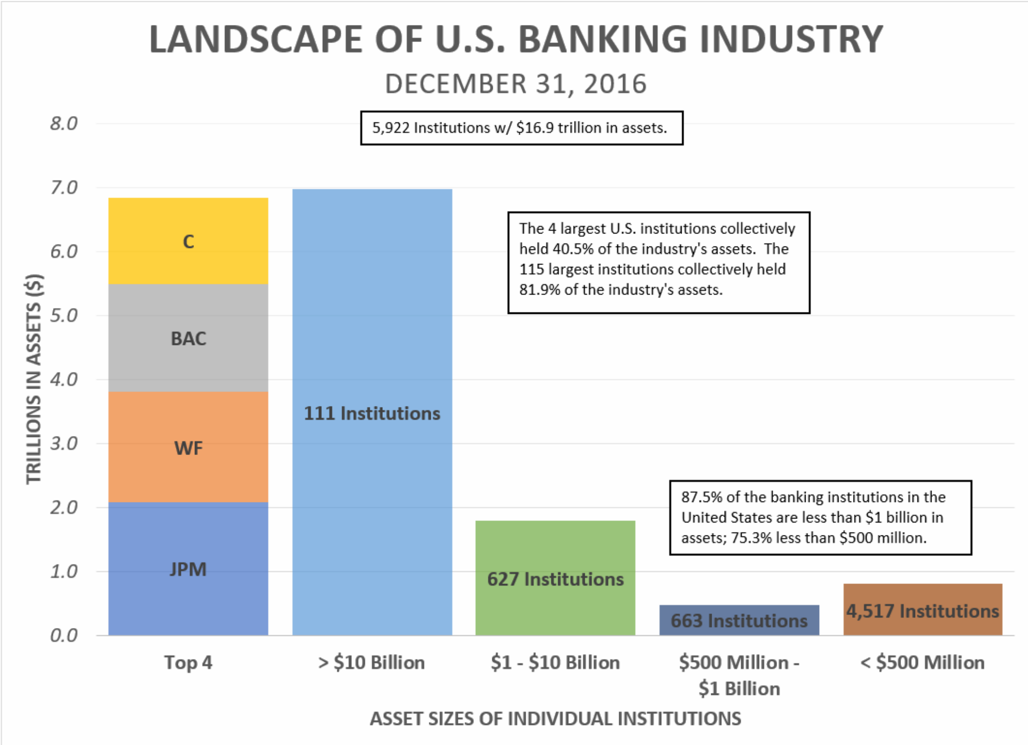
Changed impact tightening capital/ liquidity ratio

- Tightening of capital/liquidity ratios now weaker impact total lending
- Mainly reallocation of credit
    - Substitution info sensitive to info insensitive lending
- Good news … or not?

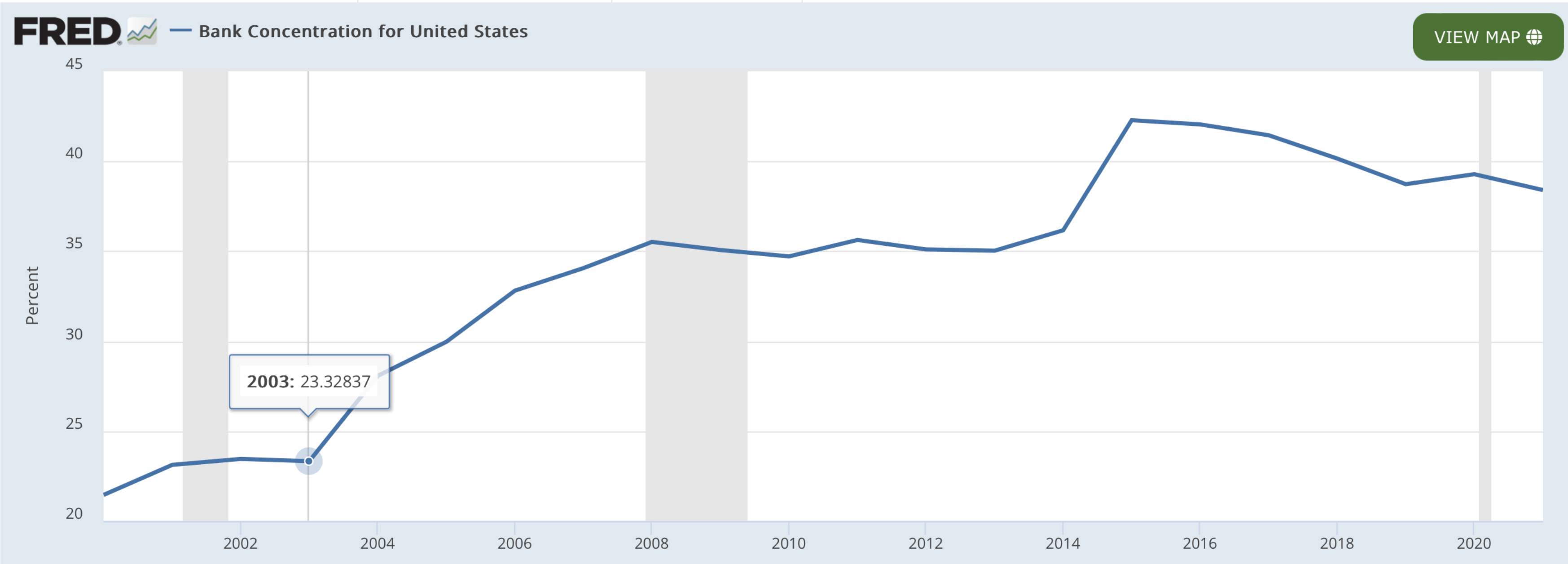
Changed impact tightening capital/ liquidity ratio

- 1960s all segments "equally" affected
- Currently segments very differently affected
  - Households might benefit
  - Large corporates can substitute, mostly unaffected
  - SMEs will take the brunt
- Market segmentation impact tightening
- Model can potentially shed light on this

Aggregates driven by very small number banks



”Secular” increase in banking concentration



Are the secular changes bank balance sheets general or increased heterogeneity?

Conclusion

- Great insights in how banks balance sheets have changed over past 60 years, including drivers and implications.

- My wish-list for this or future papers
  - Add corporate savings
  - Differentiation between mortgage and corporate lending
    - SMEs and large corporates

THANK YOU