# Response to Fundamental Change

**Michael Kumhof**

Senior Research Advisor, Research Hub, Bank of England

# Motivation

- A number of challenging developments in **society and the real economy** could ultimately trigger monetary and financial stability problems.

- Central banks will have to **anticipate** these challenges as much as possible, and **respond** to them when they lead to acute problems.

# Key Challenges

1. **Technical innovations** in the financial sector
   - Digital currencies → payments and credit systems may have to adjust
   - Peer-to-peer lending, crowd-funding → competition for bank credit
2. **Demographics**/aging → adjustments in insurance, asset prices, interest rates
3. Increased **income inequality** → lower interest rates, greater financial fragility
4. **Climate change**
   - Structural transformation → “stranded assets”, credit risk in “old” industries
   - Catastrophes → lower world growth, insurance industry losses

# Topic 1:
# Why Might Central Banks Issue Digital Currencies?

## Digital Currencies: Choices for Central Banks

- Finance is being changed by technology
- Central banks can respond in two ways:
  - By monitoring and responding to developments
  - By being proactive:
    - Central banks could issue digital currencies themselves
    - If done right, this could contribute to greater financial stability

# CB-issued Digital Currencies: Costs and Benefits

- Financial Stability:
  - Cost: Hard-to-predict effects on existing settlement and credit institutions
  - Benefit: More easily controlled means of settlement and exchange
- Regulation:
  - Cost: Many currently unresolved technical issues
  - Benefit: Regulation will be simpler because there are no credit risk issues
- Seigniorage:
  - Cost: Identification/verification has real resource costs
  - Benefit: Central bank issuance reduces identification/verification costs

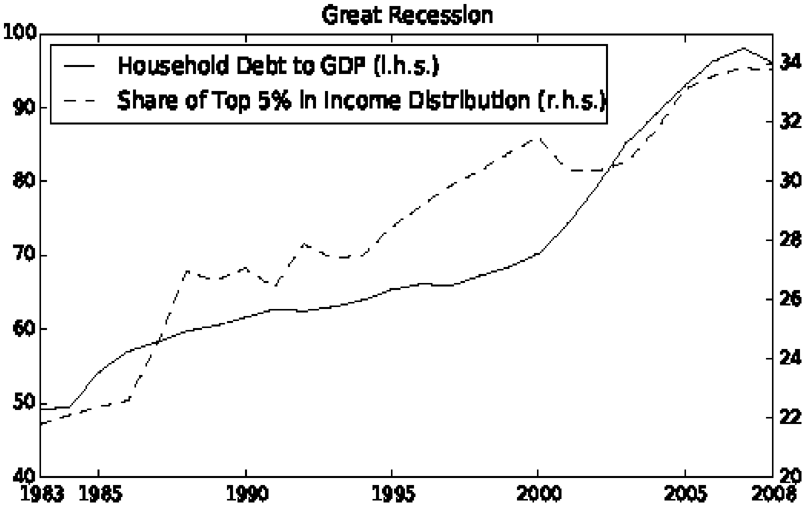
# CB-issued Digital Currencies: Key Policy Questions

- Monetary Control:
  - Who would receive digital currency: Banks only, NBFI, households, firms?
  - How would public digital and private credit-based currency compete?
  - How would the monetary transmission mechanism change?
  - What policy instruments do central banks have to influence this process?
- Prudential/Regulatory Control:
  - What are the implications for government-backed deposit insurance? How does it affect competition between digital and credit-based money?
  - How do we regulate institutions offering access to digital currency?

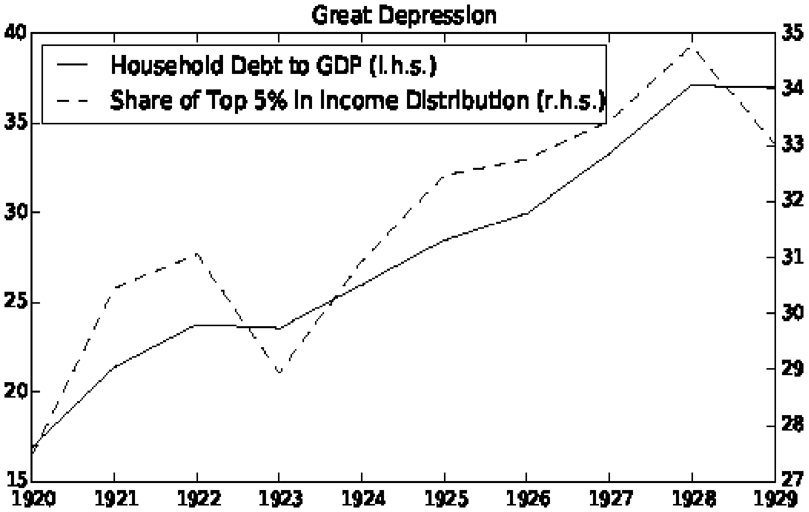
# Topic 2:
# Demographics, Income Inequality and the Financial System

- Secular Stagnation:
  - Demographics: Does aging drive down real interest rates?
  - Inequality: Does high saving propensity of the rich drive down interest rates?
- Monetary Policy Effectiveness:
  - Demographics: Is expenditure of the old less sensitive to interest rates?
  - Inequality: Is expenditure of the poor more or less sensitive to interest rates?
- Financial Stability – The Inequality-Leverage-Crises Link:
  - Individual economies: How important is this link? What factors affect it?
  - Open economies: Can this link affect net (CA) and gross capital flows?
  - Everywhere: Can monetary and macroprudential policies affect inequality?

# Chart: The Inequality-Leverage-Crisis Nexus Prior to Major U.S. Crises




Sources: Income shares from Piketty and Saez (2003, updated). Income excludes capital gains. Household debt-to-GDP ratios from Philippon (2013), based on Flows of Funds database and Bureau of Economic Analysis.




Source: Income shares from Piketty and Saez (2003, updated). Income excludes capital gains. Household debt-to-GDP ratios from Philippon (2013), based on Historical Statistics of the United States (Millenial Edition) and Surveys of Current Business.

# Conclusions

- As the two examples have shown, Theme 5 encompasses a very broad set of questions that traditionally would not have been thought of as core central bank problems.
- But these questions have potentially large financial stability implications, and financial stability has become a much more prominent aspect of central bank work.
- It therefore makes sense to broaden the research agenda of central banks in order to address these questions.