Essays on financial inclusion and macroeconomic policy

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Background

1. BA in Economics, *Honours* @ MGIMO, Russia (2015-2019)
2. MPhil in Economics, *Honours* @ University of Oxford, Brasenose College, UK (2019-2021) supervised by Andrea Ferrero (Trinity College, Oxford)
3. PhD in Economics @ Institute Polytechnique, Télécom Paris, France (2022 - present) supervised by *David Bounie* (Télécom Paris) and *Abel François* (University of Lille)

Research interests

1. Optimal monetary and fiscal policy
2. Financial inclusion (micro drivers and macro implications)
3. Quantitative methods in macro theory (LCP, LQA, MS VAR-DSGE)
4. Zero Lower Bound

Why is financial inclusion important?

Access to financial services and full financial markets are paramount to welfare. There are issues with inclusion in developed and emerging economies alike:

1. Emerging countries have low levels of financial inclusion - around 30-45% (Murakami, Viswanath-Natraj, 2021)
2. 80% of French cities do not have a single bank branch (OpenStreetMap, 2022)
3. Around 5% of UK population does not have access to a bank account (HM Treasury report, 2021) and only 60% actively use financial services (WorldBank)

Functioning of the project

The project is financed by Caisse des Dépôts group under Chaire Finance Digitale. One of the key goals of the project is to provide high-quality research into causes of financial inclusion and its macroeconomic consequences to bolster local and macro development through relevant policy recommendations.

What my PhD thesis is (going to be) about?

I work to understand the causes and implications of imperfect financial inclusion on macroeconomic policy and welfare.

1. How to measure financial inclusion and what are its determinants?
2. What are the implications of imperfect inclusion on economic development?
3. How does accounting for imperfect financial inclusion change the fundamental policy results that rely on perfect inclusion assumption?

Measuring financial inclusion

Quantifying FI is paramount to studying its consequences & important for CDC to guide public policy.
I participate in a project which is to measure access to financial services in France.

1. We obtain spatial data on financial services' availability across France
2. We analyse the data and see that a striking 80% of cities in France do not have any banking services
3. We obtain a spatial metric to measure access to financial services

How one can use this financial availability data and index

Proximity of financial services is related to costs of using them & is important for policy makers' decisions on augmenting inclusion

1. Availability as a proxy for costs
2. A composite variable that can explain variations in local development
3. Important determinant of optimal fiscal and monetary policy

CBDCs, Financial Inclusion, and Monetary Policy

This paper is with David Murakami (University of Oxford) and Ganesh Viswanath-Natraj (Warwick Business School)

What do we study? - how does introduction of a central bank digital currency (CBDC) as a legal tender change welfare outcomes?

- What are the benefits of being banked?
- What are welfare implications of different CBDC regimes?
- What are implications for optimal policy?

A (very) non-technical summary of methodology

We build three DSGE models.
Benefits of being banked - Two Agent endowment economy; we isolate two channels - consumption smoothing and remunerative savings
Different CBDC regimes and welfare - Two Agent RBC model with endogenous production and financial sector; we study banking channel
Monetary policy - Two Agent New Keynesian model; we study optimal Ramsey policy and optimal simple rules

A (very) non-technical summary of results

What are the benefits of being banked?
1. They can better smooth consumption through saving/borrowing
2. They receive interest income on their deposits

What are welfare implications of different CBDC regimes?
We consider retail indirect (CBDC is a claim on commercial bank) and retail direct (CBDC is a claim on central bank)
1. Under retail indirect, banking intermediation is more potent, augmenting capital, production, and HH welfare 2. Introduction of CBDC is welfare improving for economies with low(40% and less) and very high(90%) financial inclusion

What are implications for optimal policy? - work in progress
1. In the class of suboptimal Taylor (instrumental) rules, inflation targeting remains optimal