

MEASURING MORTGAGE AVAILABILITY & TAKE-UP

AN APPLICATION TO MACRO-PRUDENTIAL POLICY

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POLICY: EFFECTIVENESS, INTERACTIONS AND SPILLOVERS"



- **A frontier analysis to estimate 1) the loan frontier and 2) credit utilization in the Irish economy**
 - **Frontier analysis?** Given inputs, obtain outputs
 - **Loan-level analysis**
 - **Inputs: mortgage/borrower characteristics**
 - **Output: 1) Loan frontier** (maximum borrowing capacity) +
2) Credit utilization (estimated take-up)
 - **Policy application**: evaluate the impact of new BBM
- **Original methodology for a complex issue**
 - Almost no loan-level frontier estimations before (Anenberg et al., 2019)
 - Frontier analysis explored in other fields (Galán et al., 2014)
 - Challenge: Loan frontier is not observable

- The authors estimate the loan frontier as a function of borrower/mortgage characteristics (income, age, deposit, rates, residence in Dublin...)

 **loan frontier:** income, down-payment

 **loan frontier:** age, interest rates, FTB

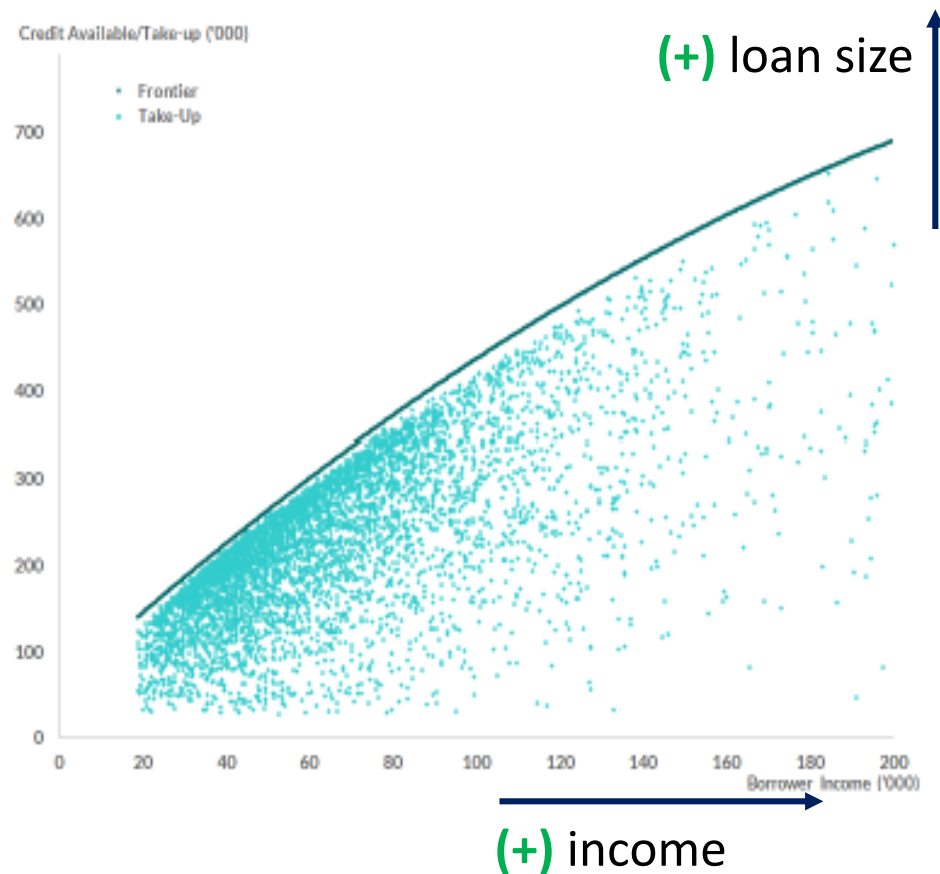
- **Comment #1.1. Validate the frontier (see next slide)**

- **Validate the frontier**
- ✓ The frontier is not observable, by definition
- ✓ Strategy: depict the frontier
- 1. Predicted loan sizes (chart)**
- 2. Observed loan sizes?**

- **Good frontier?**

- + During expansions: observations closer to the frontier
- **Recessions**: observations far away from the frontier

Figure 3: Credit Available and Take-up



Source: Kelly and Mazza (2019)

- Determinants loan frontier = Determinants take-up



take-up: income, age, FTB



take-up: down-payment, interest rate

- **Comment #2.1.**

✓ **Loan-level data: what drives the take up? Economic interpretation**

✓ **In(efficiency) is easier to interpret in bank-level applications**

✓ For instance:

- Frontier → Total loans = f(size, cost of funding,...)
- In(efficiency) → f(technology, other factors...).
- At bank-level, drivers of efficiency are easier to understand, to measure...
- **...at loan-level, the idea of efficiency is more challenging**

- **#3.1. Did BBM succeed?**

- ✓ **Mixed results: lower frontier** in some segments (lower risk?), **but more credit utilization** (higher risk?)

- ✓ Role of the “**bank credit reallocation channel**” (Acharya et al., 2019)

- ✓ Is the lending frontier an estimate of the **costs of macroprudential action?**

THANKS FOR YOU ATTENTION

