# The Geography of Mortgage Lending in Times of FinTech

Discussion of: "A FinTech matching mortgage lenders with borrowers online and bank competition, diversification and automation opportunities"

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# **Summary**

## The paper:

- 1. Analyses how banks choose offer propensity and pricing in response to mortgage applications when an online platform allows those banks to make offers to clients from across the country
- 2. Uses a **unique database** on responses from different banks in different locations to each applicant → assesses **how the same bank responds to different customers** and how the **same costumer receives responses from different banks**
- 3. Exploits changes in local concentration caused by US subprime losses of two Switzerland's "big banks" (which do not participate in the platform) in order to identify the causal effect of each state's prior market concentration on banks' online responses.



# **Summary**

## Hypotheses being assessed

#### 1. Local Market Concentration

Hypothesis 1 (null): Banks are less likely to offer, and offer higher prices, the more concentrated the local mortgage market has been so far.

Hypothesis 1 (alternative): Given switching costs and future business, banks are more likely to offer, and offer lower prices, the more concentrated the local mortgage market has been so far.

## 2. Risk Management

Hypothesis 2: Banks are more likely to offer, and offer lower prices, when unemployment rates as proxies for default probabilities, or house prices as collateral values, have historically exhibited a lower correlation between the applicant's and the bank's canton.

# 3. Automation (vs discretion)

Hypothesis 3: More discretion is expected for responses (a) to riskier applications, (b) from smaller or less mortgage-focused banks, or (c) submitted when banks have so far less web experience.



# **Summary**

## Main findings

### 1. Local Market Concentration

Banks make more and cheaper offers to applicants from previously more concentrated markets (alternative hypothesis 1). Possible interpretation: offering lower prices to more concentrated markets allows banks to enter new, more profitable markets given customer switching costs.

## 2. Risk Management

Banks use the online channel to lend more to regions where past unemployment rates as drivers of default probabilities (and past house price changes as drivers of loss given default) have been less correlated with those in the bank's home canton.

# 3. Automation (vs discretion)

The authors find less discretion for safer applications, as well as by larger or more mortgage-focused banks. The authors also find discretion to decrease with the number of online responses a bank has already sent out, allowing to reduce operational costs and use the available hard information more efficiently.



#### **Comments**

- The authors mention some papers that focus on the relevance of soft information in the bank-costumer relationship (especially relevant for hypothesis 2, on risk management). What conclusions can be drawn from this paper on this issue?
- In a more **forward looking perspective**, but to some extent related to the previous question, what could be the **impact of the use of online platforms in terms of banks' capacity to monitor the loan and clients' ability to repay the debt? It would be very interesting to collect, if possible, information about loans that were granted through this platform and became, in the meantime, past due.**
- The three hypotheses are being assessed against the background of an online credit platform that facilitates banks to offer loans to clients in regions where they lack local expertise, branches and staff. Do you have any evidence regarding the hypotheses being assessed in the paper but applied to a situation where banks make offers to clients from across the country using their own platforms or their own branches? Would the main conclusions be the same?



#### **Comments**

## **Empirical Strategy**

- Borrowers' characteristics: have the authors considered the overall amount of each household's
  debt and overdue credit each household may have (in any bank), to complement other credit
  risk indicators being used?
- Banks' characteristics: taking into account the relevance of the issue in the aftermath of the GFC
  (and that may become even more relevant in the current context), have you considered the
  possibility to include a variable to capture the credit risk of the overall banks' balance sheet
  (e.g., NPL ratio)?

#### Results

• The results on the house price growth do not seen that "robust". Is this consistent with other studies that focus on loans directly granted by banks (i.e., with no online platform intermediation)? Have other drivers of LGD been considered (e.g., related with the efficiency of the judicial system in dealing with repossessions, if applicable)? Still related with the house price growth, has the potential correlation between this variable and LTV been taken into account?

#### **Comments**

 Table 3 (assessing the alternative for Hypothesis 1) considers a set of control variables based on the following rationale: "ceteris paribus a bank can expect more lucrative future business from younger households, new mortgage borrowers, foreigners new to the country, or borrowers of larger sums."

Could you please elaborate a bit more on the variables being considered to assess alternative for Hypothesis 1? Shouldn't the **interaction of these variables with other factors** (such as LTV, LTI and default episodes) and the **interaction between HHI and LTV** be considered as well?

 The authors conclude that "[o]verall our findings suggest potential improvements for borrowers as well as for financial stability that can be achieved through online platforms."
 What are the specific channels through which the use of these platforms may improve financial stability according to the results of the paper?

