Summary

Bank competition reduces gender and racial gaps in entrepreneurship by improving banking services and reducing discrimination:

- I take advantage of the legislative history of bank deregulation from 1994 to 2021 to construct the bank deregulation index
- Stronger bank competition increases the quantity and quality of banking services provided to minority borrowers
- I develop a direct measure of bank discrimination based on the narrative information extracted from the complaints filed to the Consumer Financial Protection Bureau (CFPB) using textual analysis. Using this measure, I find that bank competition reduces complaints about discrimination
- Bank competition reduces the entrepreneurial gaps by loosening the financial constraints of female and minority entrepreneurs

1. Motivation

- It is important to reduce pronounced and persistent gender and racial gaps in entrepreneurship
- The lack of startup capital has long been recognized as the most important factor impeding the success of minority entrepreneurs
- Entrepreneurial firms rely heavily on bank financing but female and minority entrepreneurs are more likely to be credit rationed by banks because of discrimination or bias
- It is hard to identify discrimination. Current methods to identify discrimination rely on the racial gaps in the interest rate and rejection rate, which suffer from problems of omitted variables.
- Theoretical foundation: Becker (1957) argues that competition eliminates discrimination

Bank Competition and Entrepreneurial Gaps: Evidence from Bank Deregulation

Xiang Li (Boston College)

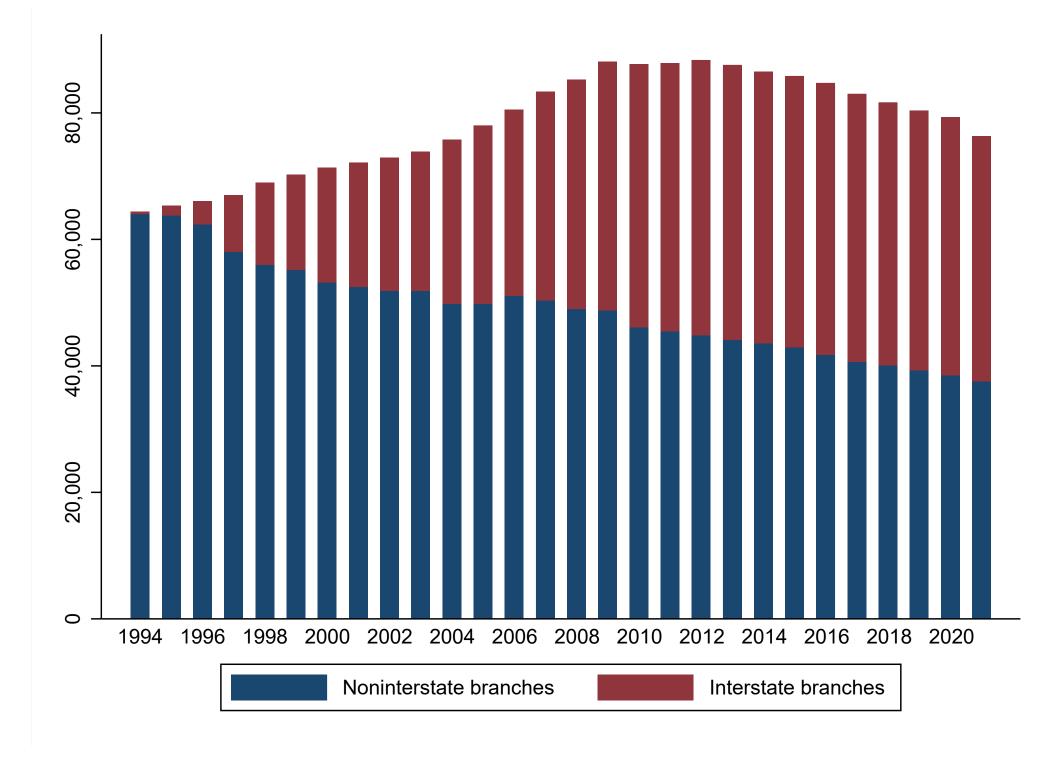
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2. Bank Deregulation Index

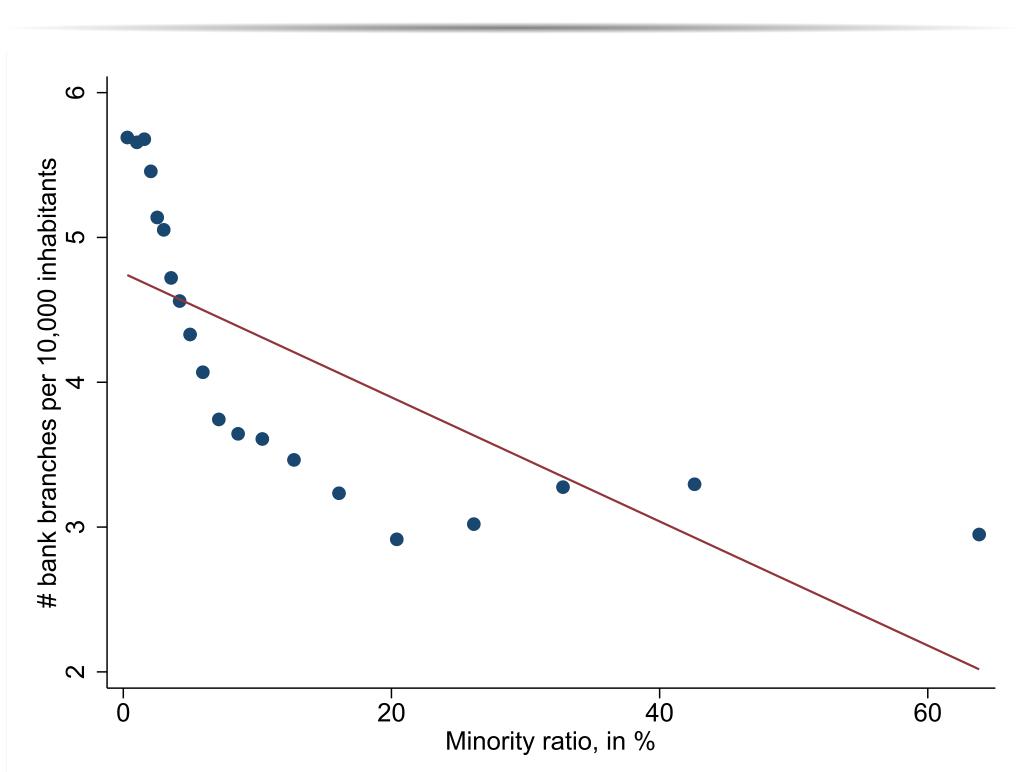
The Riegle-Neal Interstate Banking and Branching Efficiency Act (IBBEA) allows the following four restrictions:

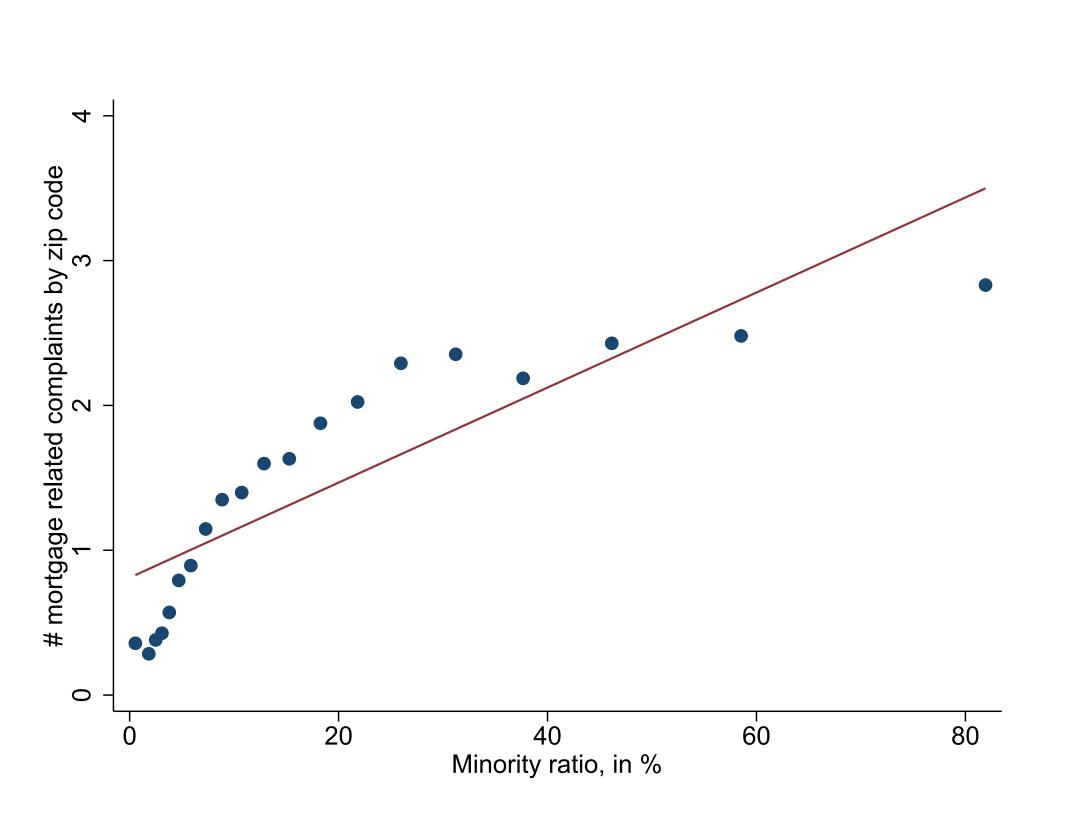
- The minimum age requirement on target banks of interstate acquisition
- De novo interstate branching
- Acquisition of branches
- The deposit cap
- The Dodd-Frank Act:
- Removes de novo interstate branching restriction

Deregulation index=4-number of restrictions









4. The Effect of Competition on **Bank Services**

• Competition increases the quantity of services

| Log(branch density per capita) | (1) | (2) |
|--------------------------------|----------|----------|
| Index \times Minority | 0.030*** | 0.029*** |
| | (0.011) | (0.011) |
| Controls | No | Yes |
| State \times Year FE | Yes | Yes |
| County FE | Yes | Yes |

• Competition reduces the racial gap in accounts

| Holds a bank account | (1) | (2) | In |
|---|-----------|--------------|----|
| Minority | -0.133*** | -0.055*** | |
| | | (0.011) | St |
| $Index \times Minority$ | 0.019*** | 0.011^{**} | M |
| | (0.005) | (0.004) | So |
| State \times Year \times Income decile FE | No | Yes | |
| Sociodemographics | No | Yes | |

• Competition improves the quality of bank services

| Log(complaints) | (1) | (2) |
|-------------------------|----------|-----------|
| $Index \times Minority$ | -0.055** | -0.054*** |
| | (0.024) | (0.019) |
| Control | Yes | Yes |
| Zip code FE | Yes | Yes |
| State \times Year FE | No | Yes |
| $MSA \times Year FE$ | No | Yes |

Index

Contro Zip co State MSA

Discrimination: the narrative including the words "discrimination", "unfair", "inequity", "prejudice", "injustice" or other related words

Index

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Bank competition reduces the gaps in:

• raised funding • business performance and business equity

• access to the Paycheck Protection Program (PPP) loans

These effects are stronger in areas with high discrimination

5. The Effect of Competition on Discrimination

| | Log(discrimination) |) 1 (discrimination) |
|---------------------------|---------------------|-----------------------------|
| | (1) | (2) |
| x×Minority | -0.028*** | -0.040*** |
| | (0.007) | (0.008) |
| rol | Yes | Yes |
| eode FE | Yes | Yes |
| $e \times \text{Year FE}$ | Yes | Yes |
| \times Year FE | Yes | Yes |
| rimination | a: the narrative | including the |

6. The Effect of Competition on **Entrepreneurial Gaps**

| epreneur | (1) | (2) |
|---|-----------|-----------|
| ale | -0.022*** | -0.030*** |
| | (0.002) | (0.001) |
| ority | -0.014*** | -0.022*** |
| | (0.002) | (0.002) |
| $x \times Female$ | | 0.003*** |
| | | (0.001) |
| $x \times Minority$ | | 0.003** |
| | | (0.001) |
| $e \times Year \times Income decile FE$ | No | Yes |
| \times Year \times Income decile FE | No | Yes |
| odemographics | No | Yes |
| | | |

7. Additional Results