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### The impact of credit unions on the local development of Brazilian small towns

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# The impact of credit unions on the local development of Brazilian small towns

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## Introduction

- The **objective** of this paper is to measure the impact of credit unions on the local development of Brazilian municipalities, from 2016 to 2019.
- We used the "Índice Sebrae de Desenvolvimento Econômico Local" (Sebrae Local Economic Development Index) – ISDEL as a measure of local development (SEBRAE, 2023).
  - ISDEL ranges from 0 (worst local development) to (greatest local development).

# Methods

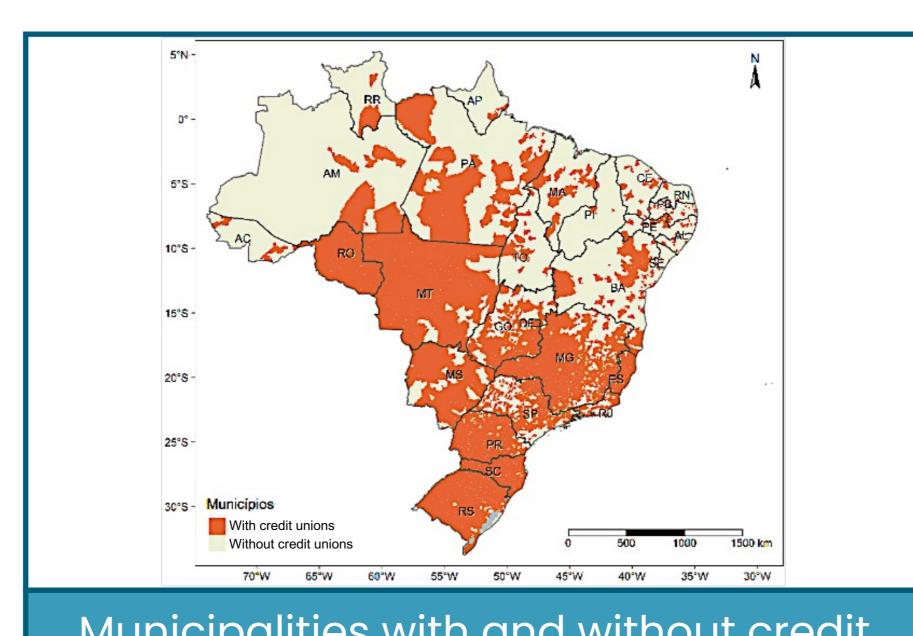
- **Treatment**: presence of a credit union in the city. For the execution of the **PSM**, we only considered small towns (with up to 50,000 inhabitants).
- Only in municipalities of this size was possible to locate territories to constitute the **control group** (without financial institutions).
- We account for several control variables: municipality wage bills, number of workers, number of bank accounts, distances from the municipality to the state capital and regional centers, population and municipal Gini, and spatial controls.

# Results & Discussion

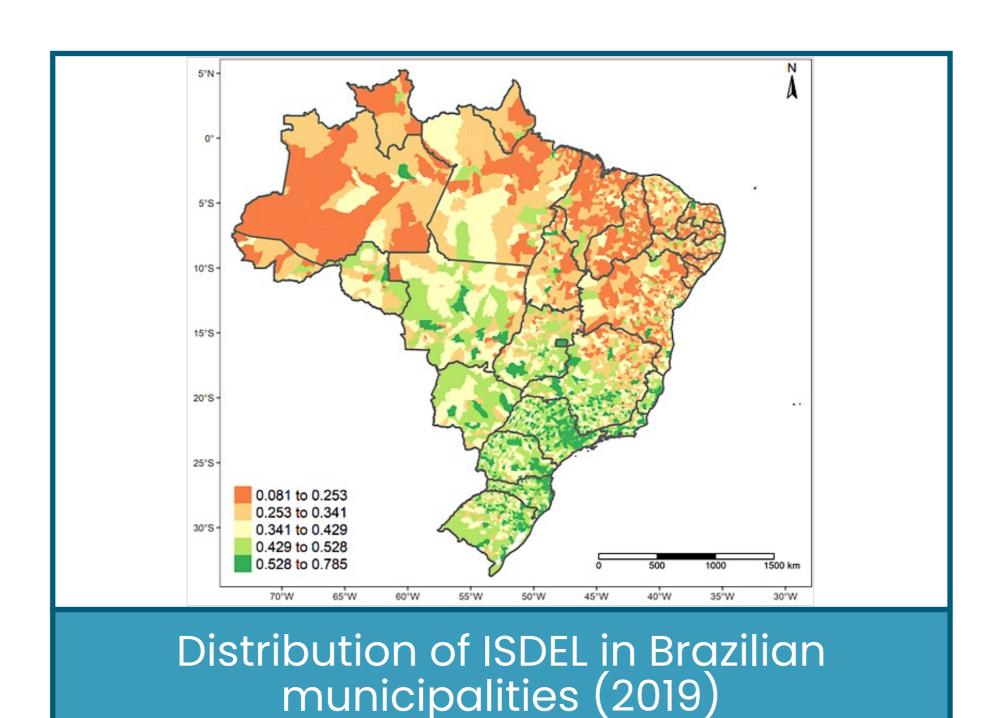
- Territories with credit unions shown ISDEL around 1
  percentage point higher than the control group in
  2017.
- In 2019, the ISDEL was almost **2.5 percentage points higher** for municipalities with credit unions.
- Credit unions can provide citizens access to the financial system and increase local development through financial inclusion.

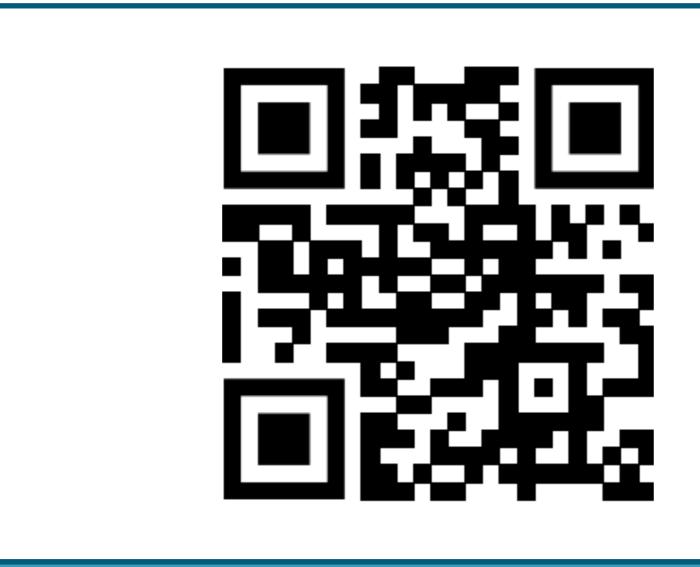
## References

Serviço Brasileiro de Apoio às Micro e Pequenas Empresas – SEBRAE (2023). *Índice Sebrae de Desenvolvimento Econômico Local – ISDEL.* Available online <a href="https://www.isdel-sebrae.com">https://www.isdel-sebrae.com</a> (Accessed in Jan. 2023).



Municipalities with and without credit unions in Brazil (2019)





"Sebrae Local Economic Development Index" website

### Acknowledgmens













By enabling access to financial services for their members, credit unions act as local development agents for Brazilian small towns.

**Table 1** Average treatment effect (credit unions) on treated. PSM – Brazil

Year	2016	2017	2018	2019
ATT	0,523	0,905	1,796	2,501
T-stat	1,034	2,038	3,196	3,142
Significance	ns	**	***	***
# Treated	580	648	701	694
# Control	1368	1442	1497	1490
AIC	1633	1737	1789	1745
BIC	1711	1816	1868	1824
Sensibility	64,830	64,350	67,330	68,440
Especificity	87,720	87,450	86,840	87,180
Corrected				
Prob.	80,900	80,290	80,620	81,230
LROC	0,865	0,871	0,879	0,884

Note: \*\*\* p<0,01; \*\* p<0,05; \* p<0,10; ns non-significant.
Source: Own elaboration.

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