

UB School of Economics Young Research Meeting

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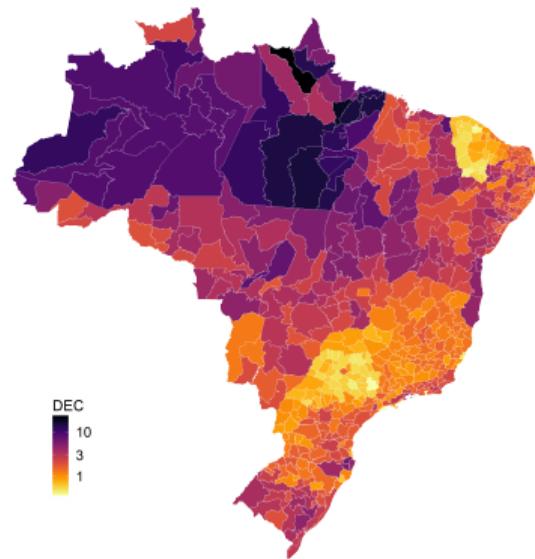
Background

- PhD Economics, 2021. *University of Alicante*
- **Department:** Economics
- **Section:** Economic Theory
- **Research fields:** Economic Growth, International Trade, Macroeconomics
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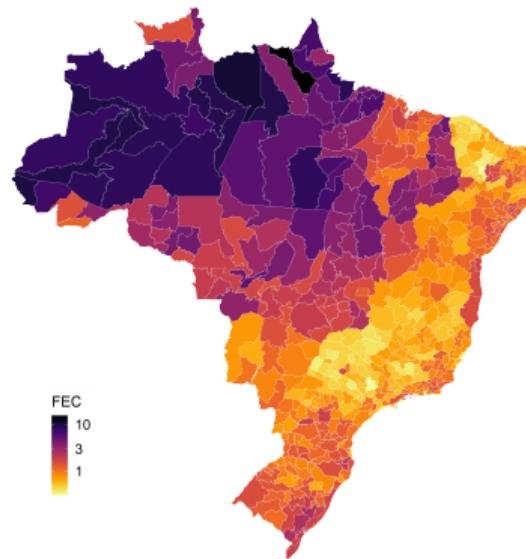
Spatial Complementarities in Public Infrastructure and Structural Transformation in Brazil

— Joint with Fidel Pérez-Sebastián (University of Alicante)
and Jevgenijs Steinbuks (The World Bank)

Introduction



(a) Duration



(b) Frequency

Figure 1: Duration and Frequency of Power Outages

Complementarities in Electricity and Roads

Figure 2: Brazil Timelapse: 1960 - 2010

The Paper in a Nutshell

What we ask:

- Are there complementarities between quality of roads and electricity?
- How does it depend on structural change?

What we do:

- Build an economic geography model with endogenous infrastructure.
- Government chooses quality of roads and electricity.
- People react to investments.

Results

- We find evidence of complementarities.
- Welfare increases 5 – 16%.
- Most gains from choosing **both infrastructures** optimally.
- Complementarities useful to ↓ agricultural employment.
- *Some* evidence for political alignment.

Punchline

Public infrastructures **interact** with each other. Governments should look for these interactions and exploit them for maximum welfare increases.