

Paving the Way to Modern Growth: Evidence from Bourbon roads in Spain

by Miquel-Angel Garcia-López, Alfonso Herranz-Loncan, Filippo Tassinari and Elisabet Viladecans-Marsal

Discussion by **Marta Santamaria (University of Warwick)**

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- Studies how the construction of a national paved road network between 1747 and 1855 in Spain affected population growth and population redistribution.
 - New: Long-term impact of transport network in the pre-railway era.
- Fascinating paper with very disaggregated historical data.
- **Main results:**
 1. Access to road lead to 47% higher average long-term population growth
 2. Population decline in municipalities close to roads but with no access
 3. Effects seem to come from early investments and small municipalities

1. Empirical strategy
2. Mechanisms: why did migration increase?
3. Results in historical context
4. Minor comments

1. Empirical strategy

Paper proposes two transport-improvement measures:

- Access to new road (0/1 dummy)
- Market Access (Donaldson and Hornbeck, 2016): access to large markets weighted by inverse of distance

Improvement of Market Access measure:

1. Can be calculated using the network of old vs new roads
2. Focus on relative changes: $MA_{1,m} - MA_{0,m} = \Delta MA_m$
3. Rather than distance, use travel time

Benefits of MA measure:

- Captures spillovers due to the network structure

What were the new roads good for?

1. Transport of people became much faster and cheaper thanks to new roads (Madrazo, 1991)
2. Do we have similar evidence about cost of moving goods?

What were the main components of transport costs?

- Distance-costs important if “fuel” prices and wages are high
- Time-costs important if delays are to be avoided
- Fixed-costs are high if transport is risky

Could you tell us more about how roads affected cost of moving people vs. goods?

2. Mechanisms: why did migration increase?

Comment # 3: Why did population/migration increase?

3 main mechanisms:

1. Local non-tradable sector: hospitality services (related to boom in transport)
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2. Home market effect: Connected municipalities become more central ([Krugman, 1991](#))
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3. Industrialization: ↑ specialization and productivity ([Smith, 1776](#))
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Can we test for these alternative mechanisms?

Comment # 3: Why did population/migration increase?

3 main mechanisms:

1. Local non-tradable sector: hospitality services (related to boom in transport)
 - Are results stronger along routes with new/increased stagecoach services
2. Home market effect: Connected municipalities become more central (Krugman, 1991)
 - How important were tradables as a share of income vs. home production?
3. Industrialization: ↑ specialization and productivity (Smith, 1776)
 - Are results stronger in agricultural municipalities or industrial municipalities (before new roads)?

The less interconnected economy of the early XIX century could help us unpack the gains from infrastructure construction

3. Results in historical context

Main results: consistent with previous literature

However, important historical changes between 1757 -1855 (Maluquer de Motes, 2014)

- End of Absolutism with the War of Succession (1833-1840)
- Elimination of all domestic tariffs (1829)
- Large Import restrictions and international tariffs from 1820, specially grains
- Modernization of local institutions in 1830s

Did new roads amplify these changes?

- Elimination of domestic tariffs maybe increased gains from better roads?
- Import restrictions could have benefited rural, small municipalities vs cities?

THANK YOU!