

History versus Highways

“Ampitheatres, Cathedrals, & Operas” by Garcia-López, Pasidis, Viladecans-Marsal

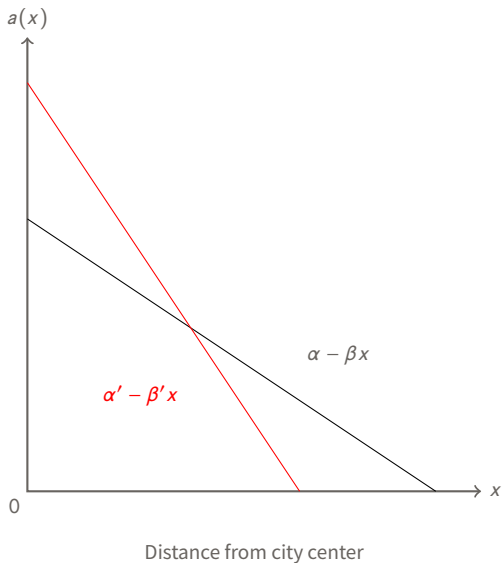
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The main idea

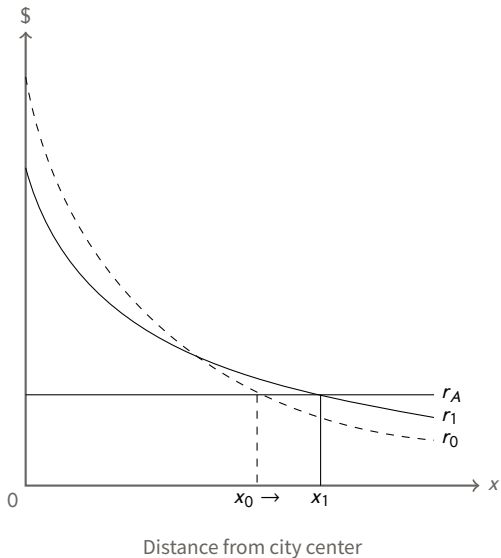
Some cities have centralized amenities.



Standard intuition when t declines

City expands as commuters bid up housing prices in suburbs.

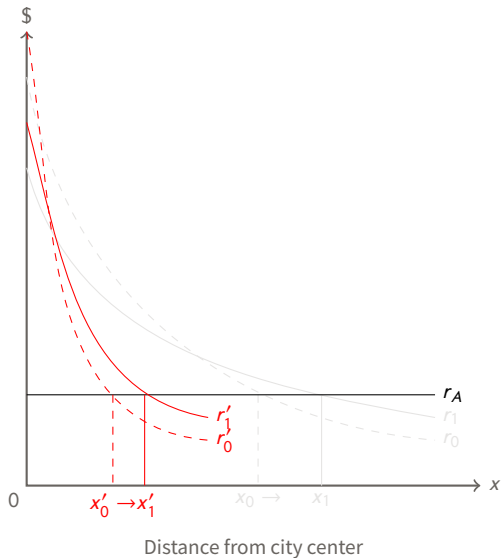
Price gradient compensates for increased commuting.



When amenities are centralized

Price gradient must compensate for increased commuting **and inferior amenities**.

Prediction: City extent is less responsive to declines in t when amenities are centralized.



Taking it to the data

Centralized amenities

Declines in t



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Historic buildings (Greek, Roman, Medieval, Renaissance).

Declines in t



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Highway construction (number of rays).



The identification problem

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What determines highways?

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Natural or endogenous amenities.

Natural or endogenous productivity or income.

Other factors — capitals, religious institutions.

Luck — avoiding natural and man-made disasters.

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Lee & Lin 18

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Cities with historic buildings are special

Is it because of historic buildings, or one or more of these other factors?

Other factors may also affect suburbanization.

(Historic buildings are likely a small share of consumption and utility.)

What do cities with historic buildings have in common?

London, Paris, Vienna, Budapest,
Rome, Barcelona, Lisbon ...

More centralized productivity.

Less penetration of historical and
highway rays.

Can we rule out other factors?



Are historic buildings centralized?

Number of buildings	Central cities	Total Europe	Share
Roman amphitheaters	45	238	0.189
Roman theaters	26	158	0.165
Roman circuses	13	63	0.206
Roman temples, arches, aqueducts	59	116	0.509
Medieval Castles	70	549	0.128
Romanesque	106	473	0.224
Gothic	240	434	0.553
Renaissance	66	111	0.595
Baroque	93	235	0.396
16th-19th c. operas, theaters	133	273	0.487
Total	851	2,650	0.321

Summary

Key insight

Centralized amenities can dampen the decentralization response to transportation infrastructure improvements.

Contribution

Extends literature on suburbanization of income.

e.g., Bruecker, Thisse & Zenou 99 and Lee & Lin 18

Creative empirical work with intuitive and plausible results.