



Boxed In

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Columbia University

boxed In

How Intermodalism Enabled
Destructive Interport Competition

1. Methods

2. Theory

3. Pressures

4. Competition

5. Job creation

6. Monopolies

7. Policy

Methods

Spatial regression

County Business Patterns, FHA, NHGIS, Book of States

GIS mapping

NHGIS, Containerisation International Yearbook, World Port Source

Archival

Cargo Handling, Waterfront Worker, NAPA minutes

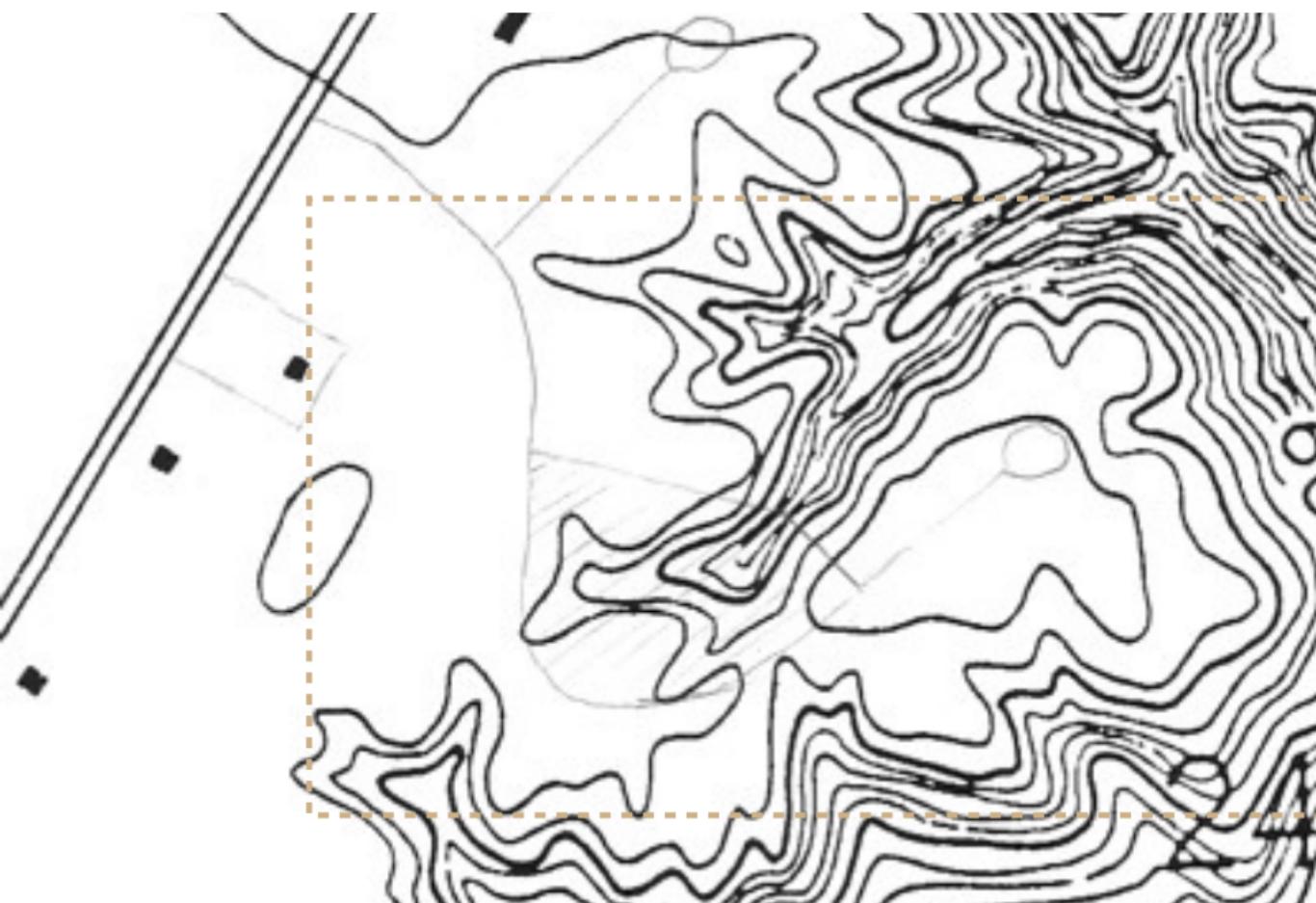
Case study

Interviews, industry journals, newspapers

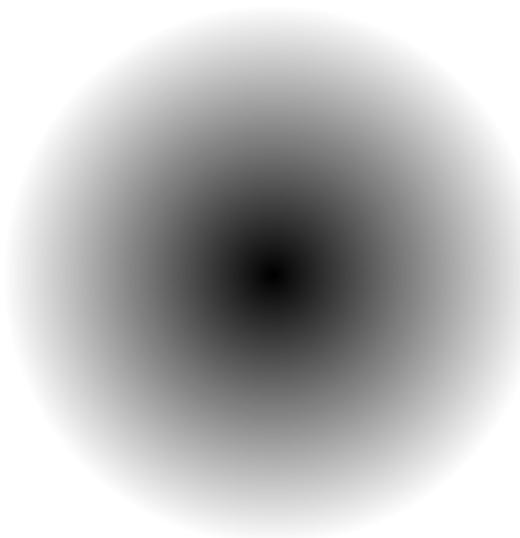
A large, stylized number '2' is positioned on the left side of the image. The '2' is composed of a white circle at the top and a brown shape below it. The brown shape is a curve that starts at the bottom left, goes up and to the right, then down and to the right, creating a loop-like effect. The background of the image is a solid brown color.

Theory

Territory and terrain

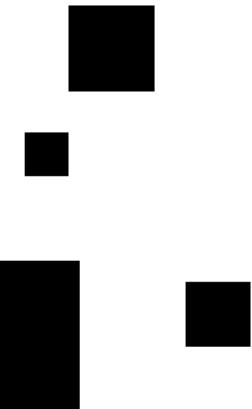


Area of effective production
= geographic space of possible production



Diffuse

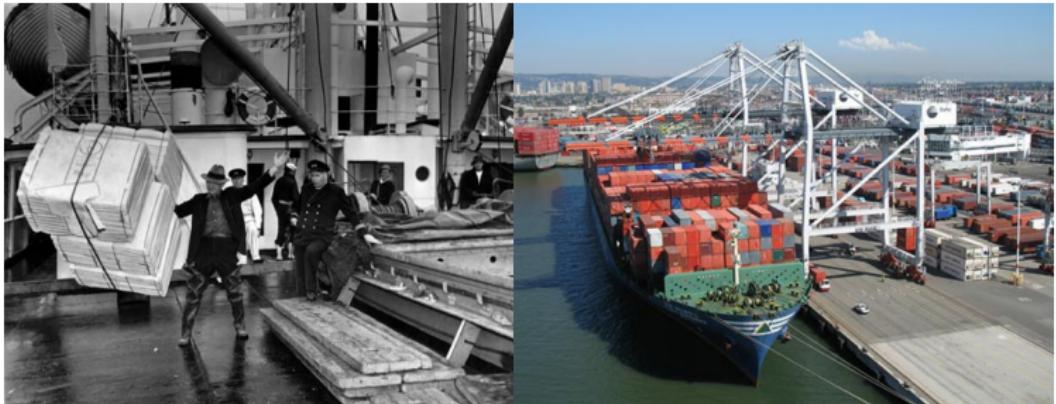
Fragmented



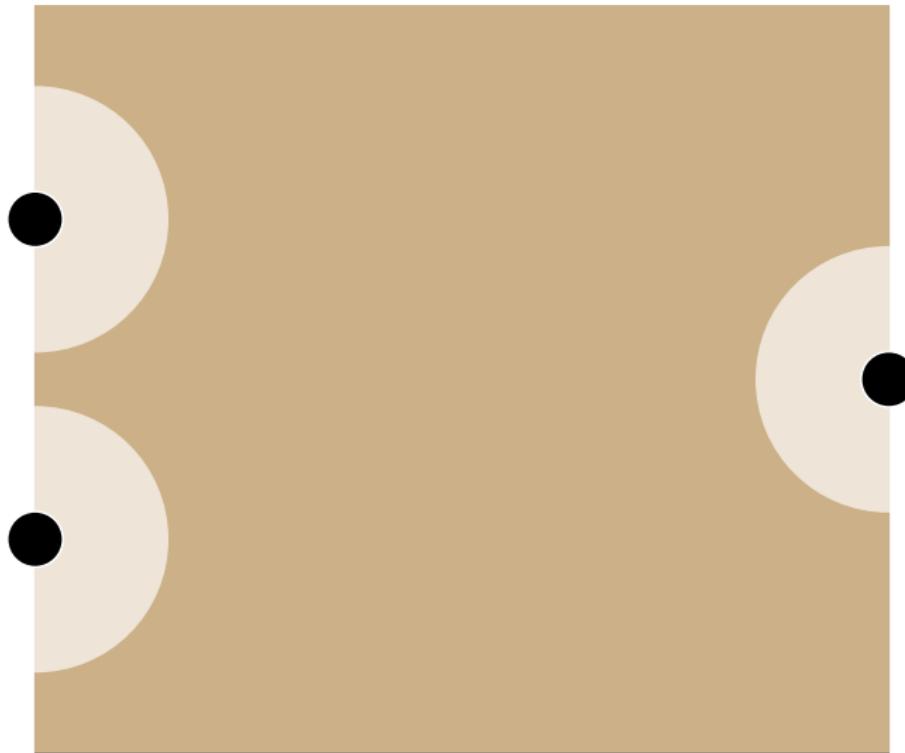
A large, stylized number '3' is positioned on the left side of the image. The '3' is composed of three main circular segments: a top segment at the top, a middle segment on the right, and a bottom segment on the left. The segments are filled with a light beige color, while the spaces between them and the outline are white.

Pressures

1. Technological change



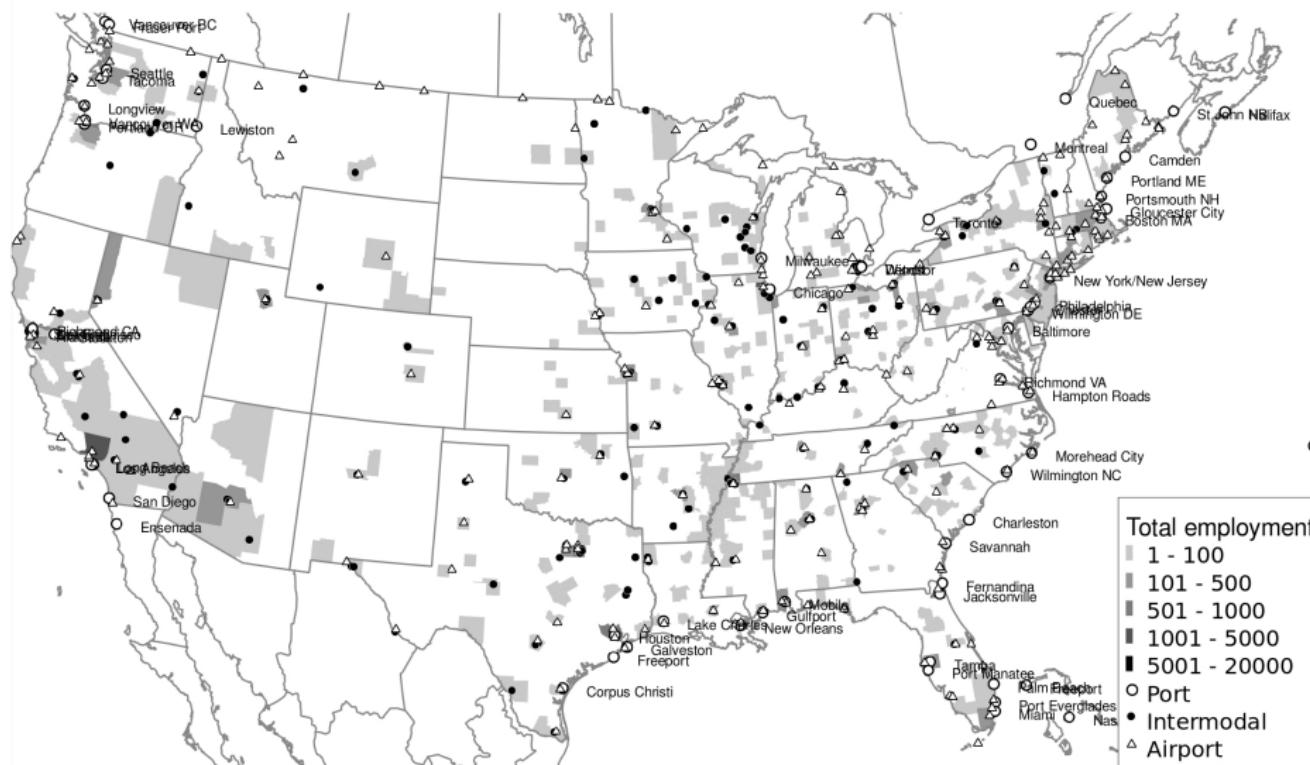
Ports and hinterlands



Overlapping hinterlands

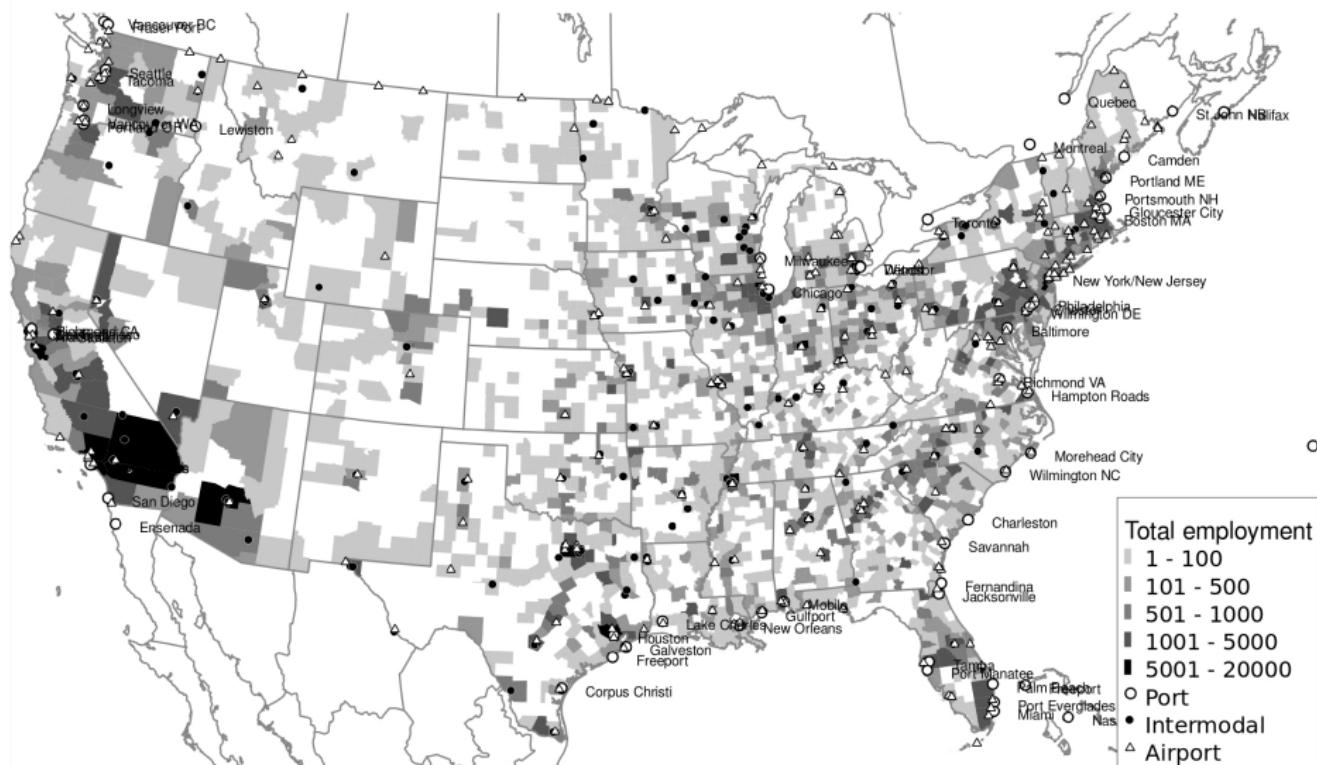


Total employment in general warehousing (SIC 4225) in 1974 by county



Source: NHGIS and County Business Patterns

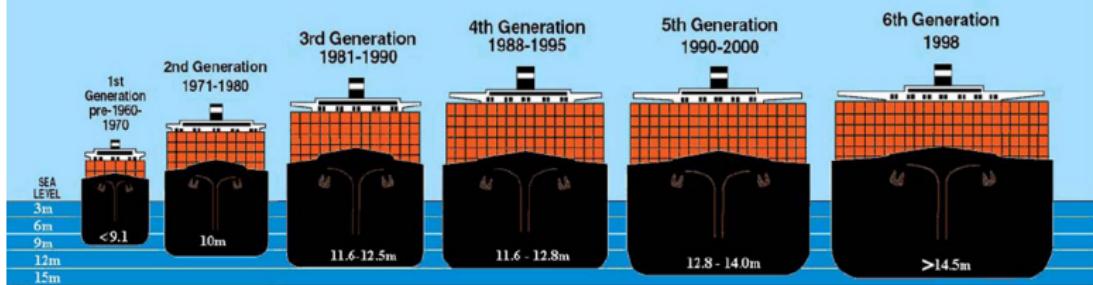
Total employment in general warehousing (NAICS 493111 and 531130) in 2007 by county



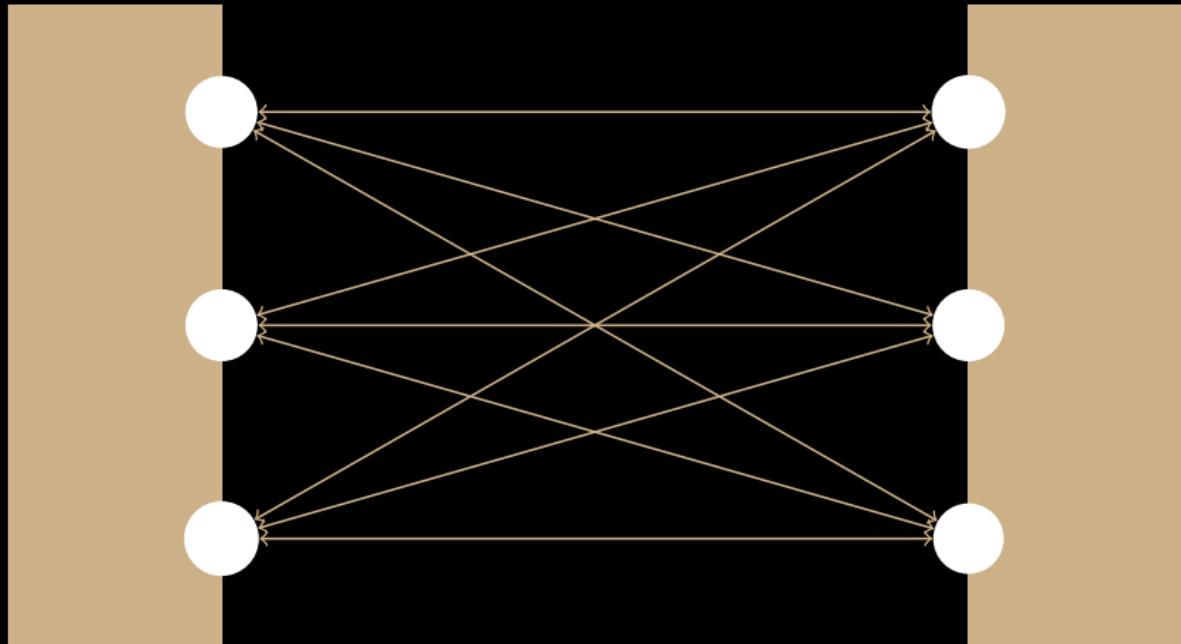
Source: NCHGIS and County Business Patterns

2. Perverse incentives

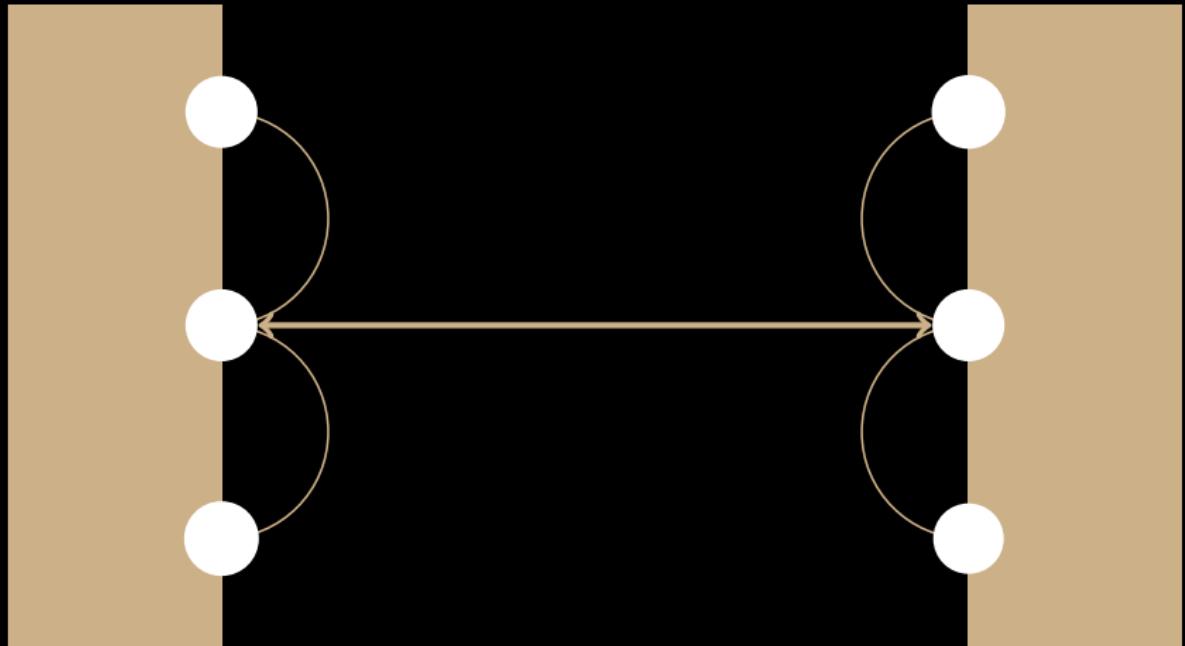
Evolution of Container Ships



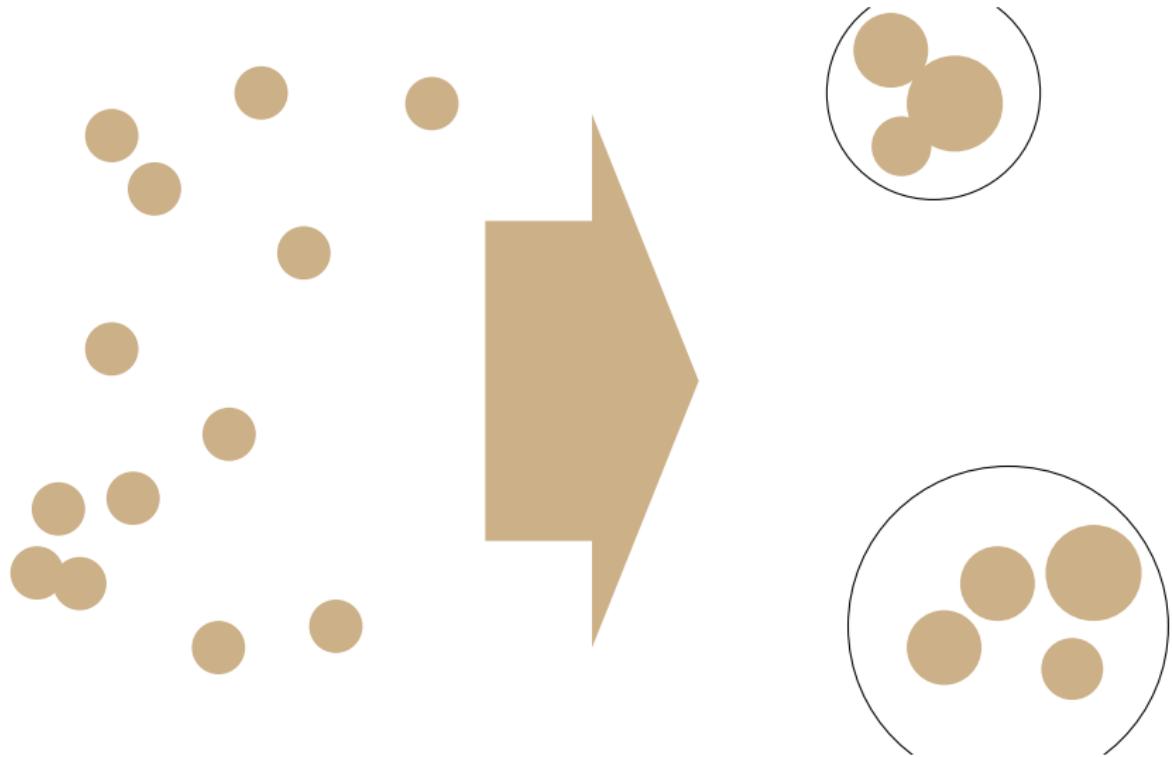
Pre-container shipping routes



Load center hub-and-spoke network



3. Deregulation and concentration





The background of the image features abstract geometric shapes. On the left, a large white triangle is positioned above a white rectangle. To the right of the rectangle is a smaller white square. The entire composition is set against a solid brown background.

Competition

Port authority fragmentation



Port authority fragmentation



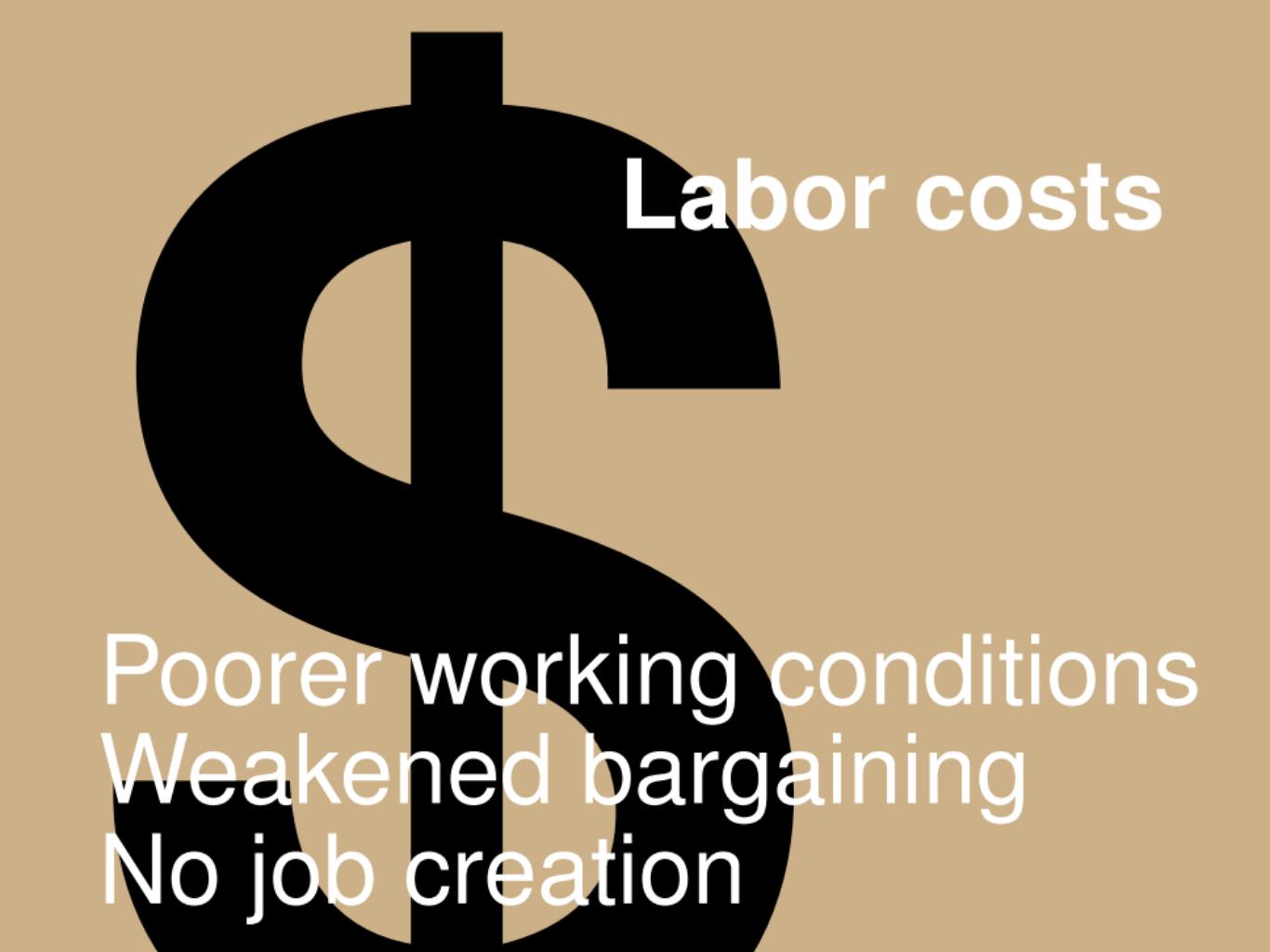


Port costs

\$700m subsidy
Other bidders
Lower bargaining



Labor fragmentation



Labor costs

Poorer working conditions
Weakened bargaining
No job creation

A large, stylized number '6' is positioned on the left side of the image. The '6' is composed of several overlapping geometric shapes: a large white circle at the bottom, a large brown circle in the middle, and a white rectangle at the top. The '6' is partially cut off on the left edge.

Job creation

Three justifications for subsidy competition

Direct employment

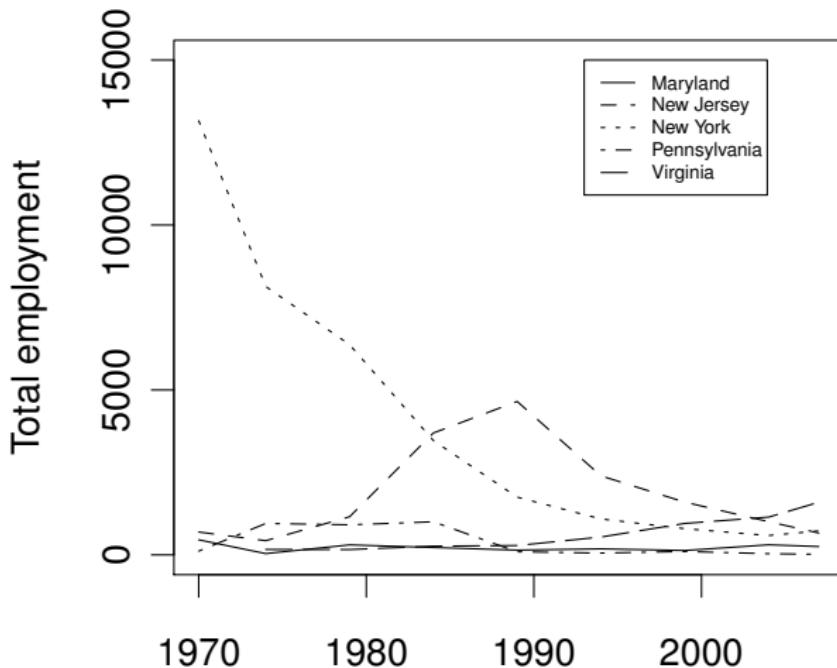
Related employment

Indirect employment

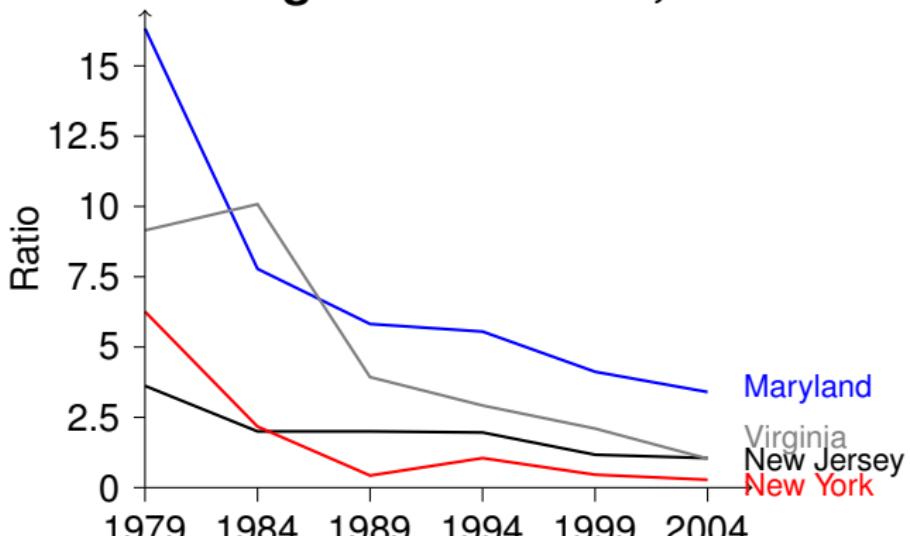
Three justifications for subsidy competition

Direct employment

Direct employment: Marine cargo handling



Ratio of longshoremen to 1,000 TEUs

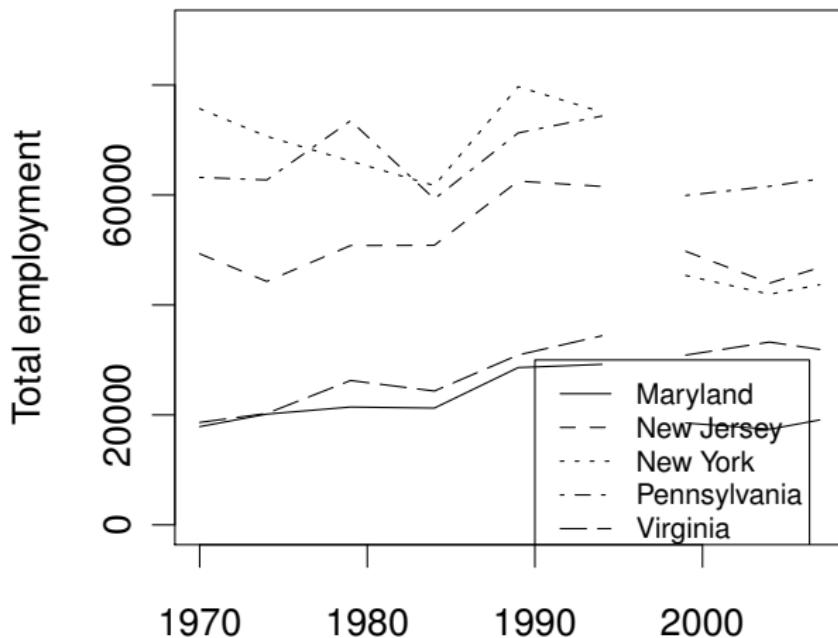


Source: Country Business Patterns

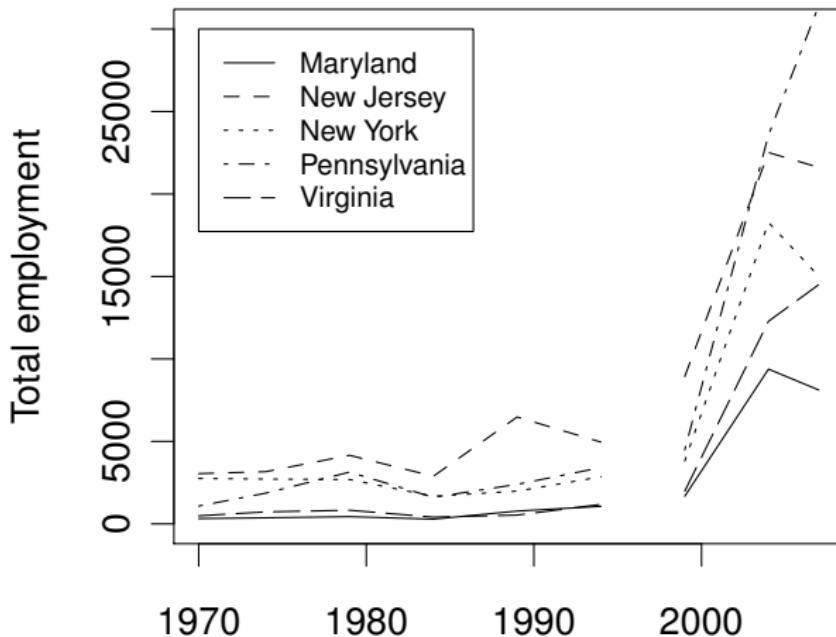
Three justifications for subsidy competition

Related employment

Related employment: General freight trucking



Related employment: General warehousing and storage



Three justifications for subsidy competition

Indirect employment

Indirect employment

Marshall: Decoupling

Transportation costs unimportant

Labor pooling

Spillover effects

Cooley: Coupling

Transportation and social organization shape each other

Mechanical breaks drive location

Marshall versus Cooley

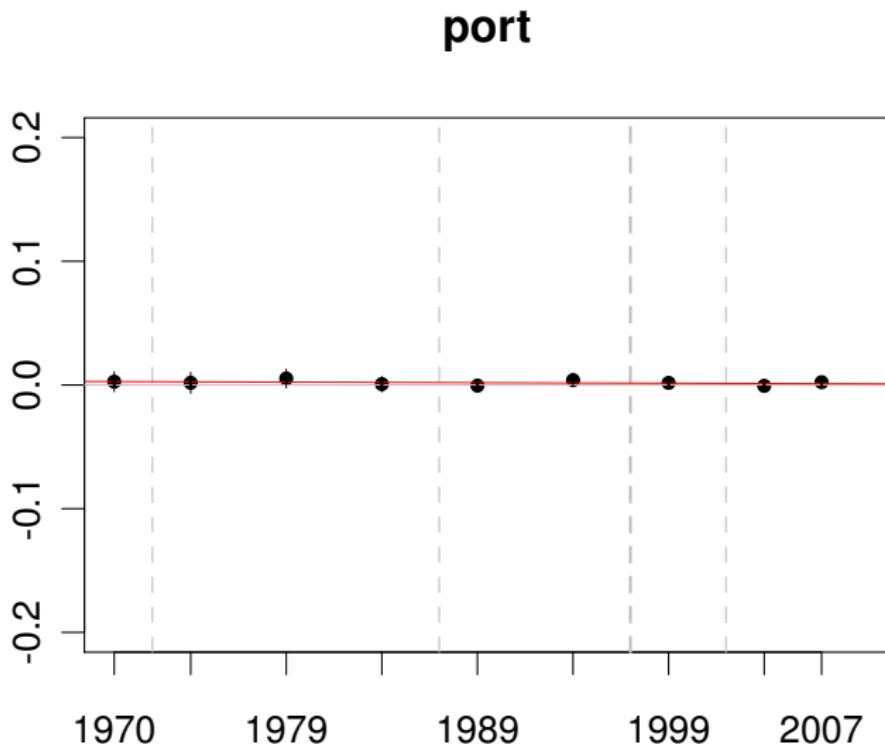
	Marshall	Cooley
Natural resources	Decoupled	Decoupled
Heavy industry	Decoupled	Decoupled (?)
Manufacturing	Decoupled	Coupled
Retail	Decoupled	Coupled
Creative	Decoupled	Decoupled

Variable definitions

Table: Variables

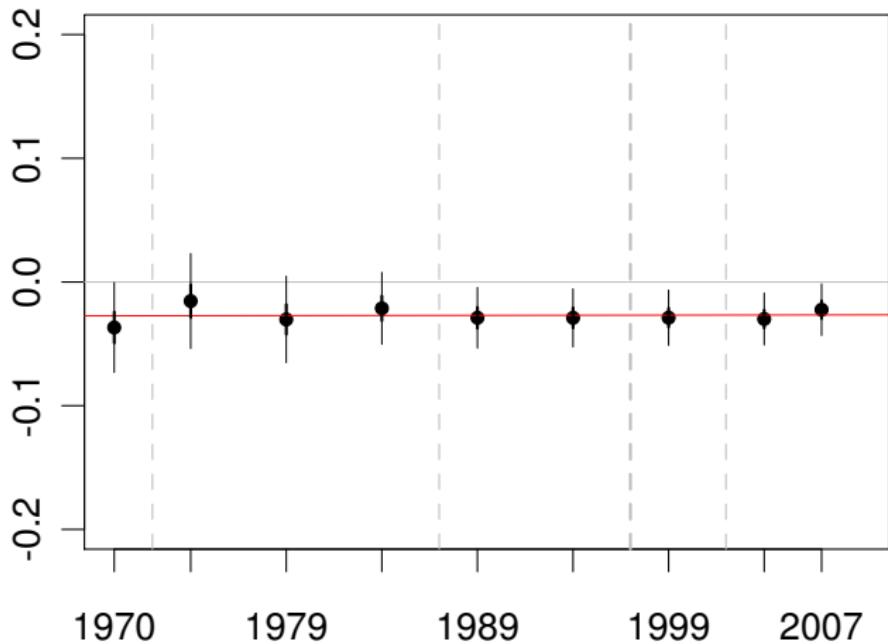
Variables	Descriptions
emp_log	Log of total employment in selected industry classification
pop_density_log	Log of population density, which reflects the relative urbanization of the county
inc_per_cap_log	Log of per capita income, which reflects wage levels and purchasing power
taxrate	Tax rate from previous period (except 1970 and 1974, which use rate from 1974) in percent
ba	Percent of population with bachelor's degrees or higher
hs	Percent of population with a high school diploma
nonwhite	Percent of nonwhite population
foreign	Percent of foreign population
port	100km from county centroid to closest port
airport	100km from county centroid to closest international airport
intermodal	100km from county centroid to closest intermodal terminal (as recorded in 2000) that is greater than 80km from a port

Natural resources: Mining, Iron Ore



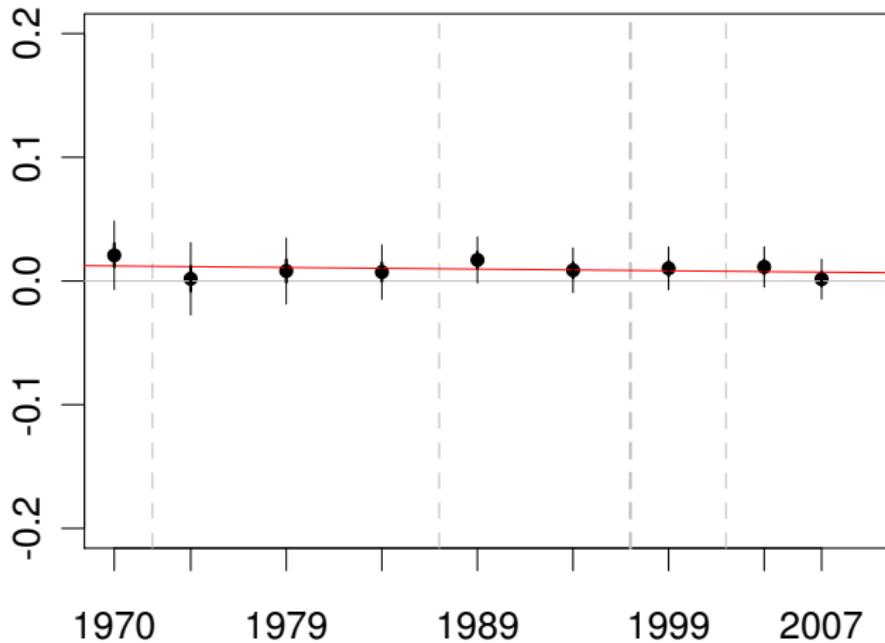
Natural resources: Mining, Iron Ore

airport



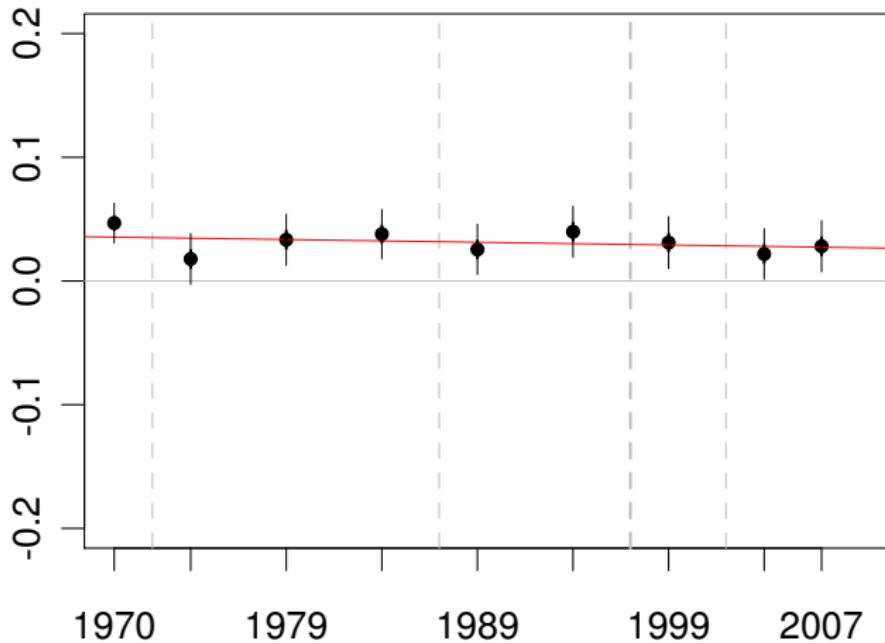
Natural resources: Mining, Iron Ore

intermodal



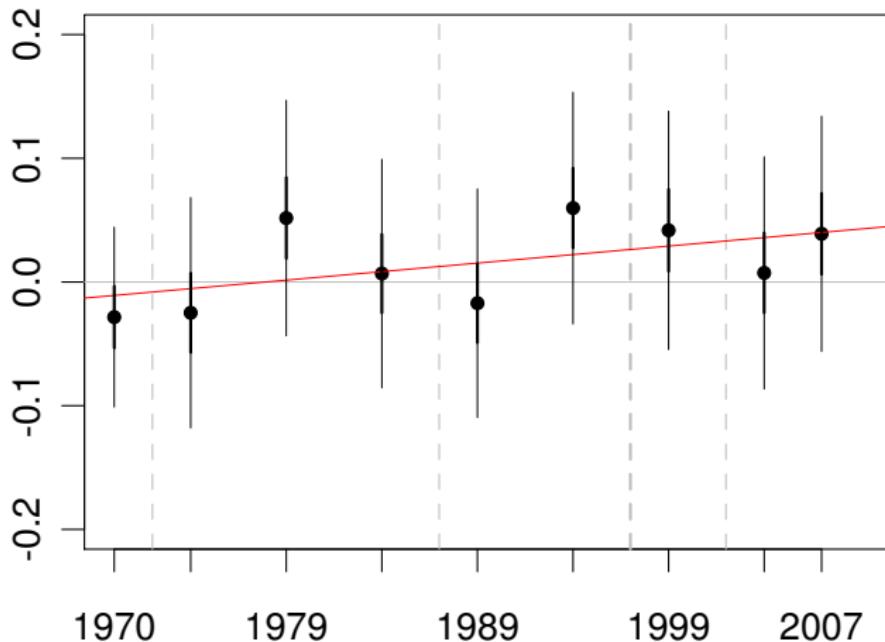
Heavy industry: Ready-Mix Concrete

port



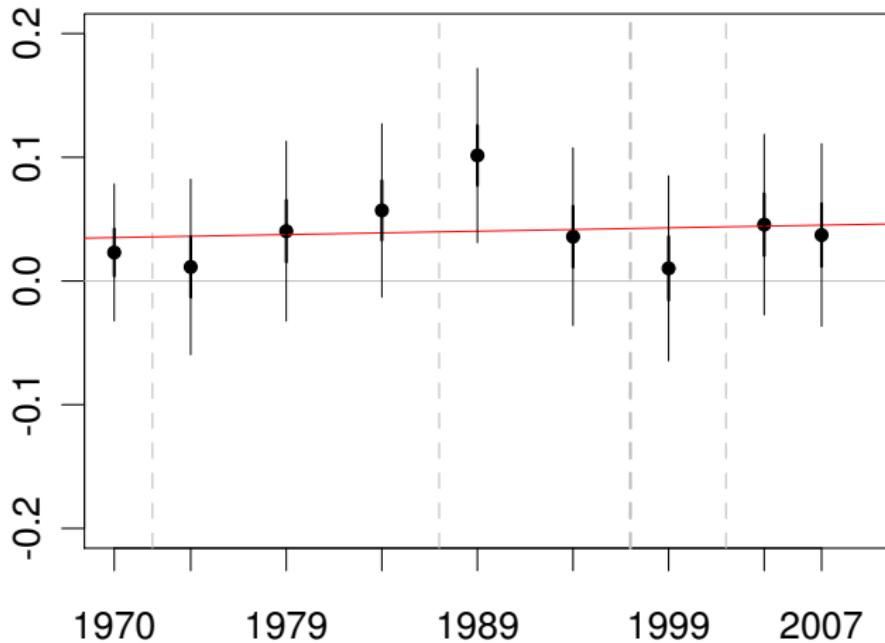
Heavy industry: Ready-Mix Concrete

airport



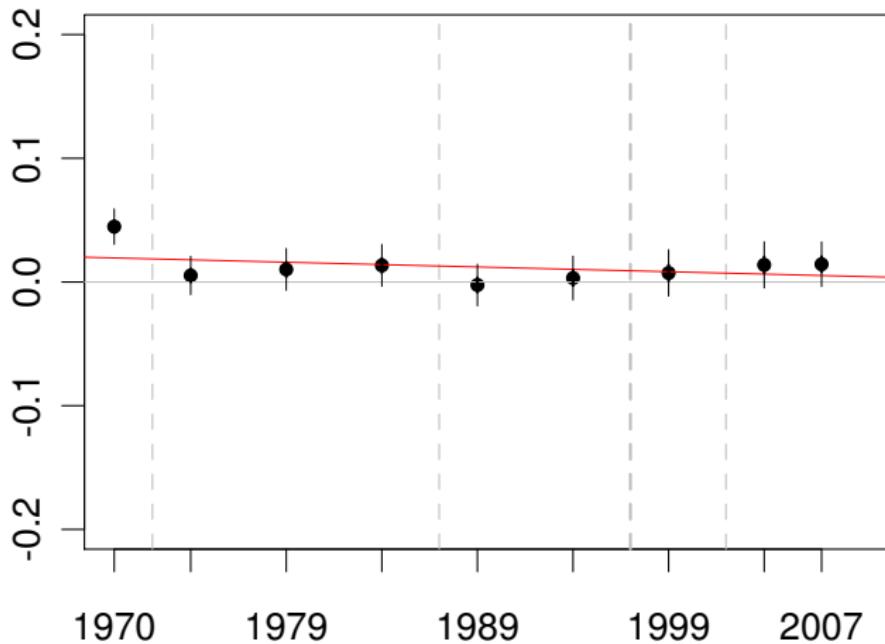
Heavy industry: Ready-Mix Concrete

intermodal



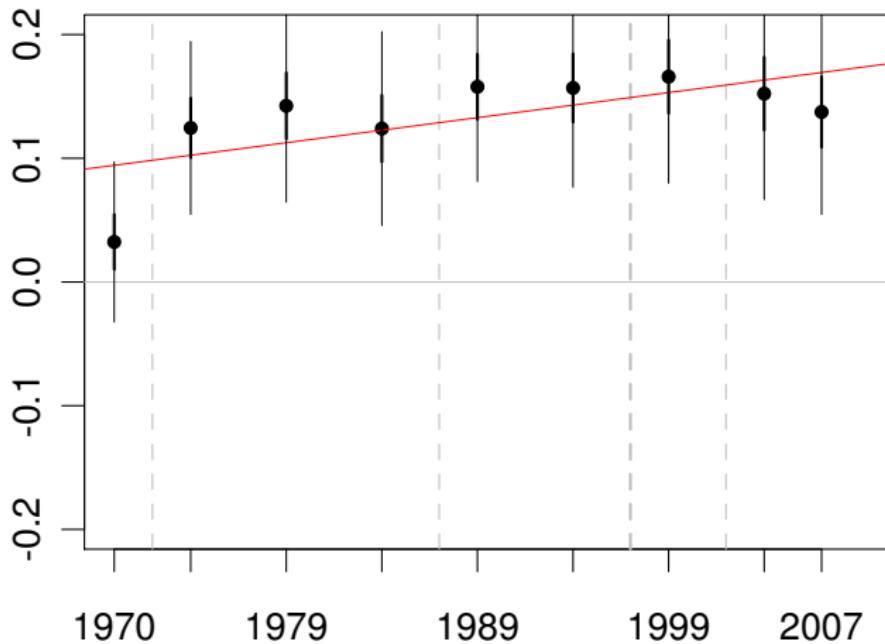
Retail: Bookstores

port



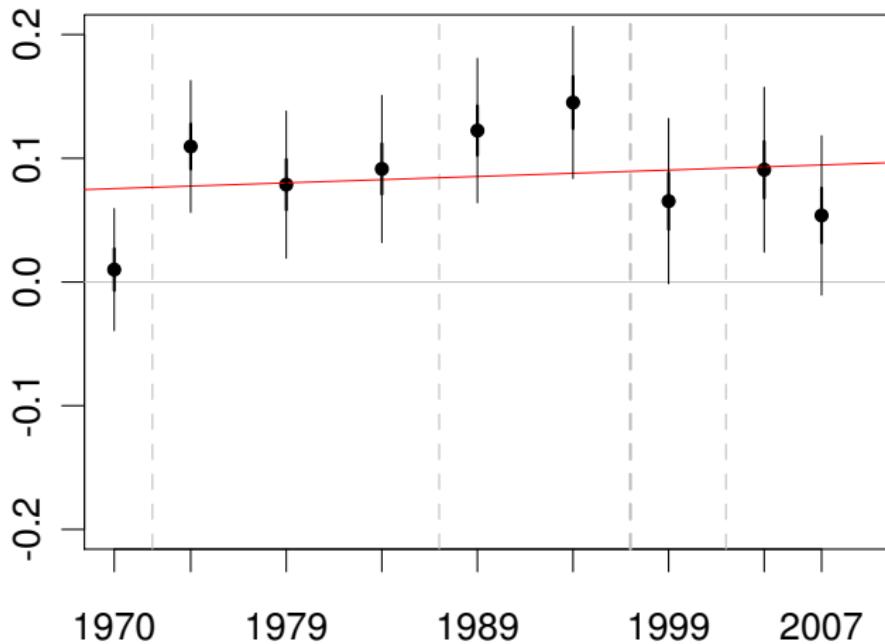
Retail: Bookstores

airport

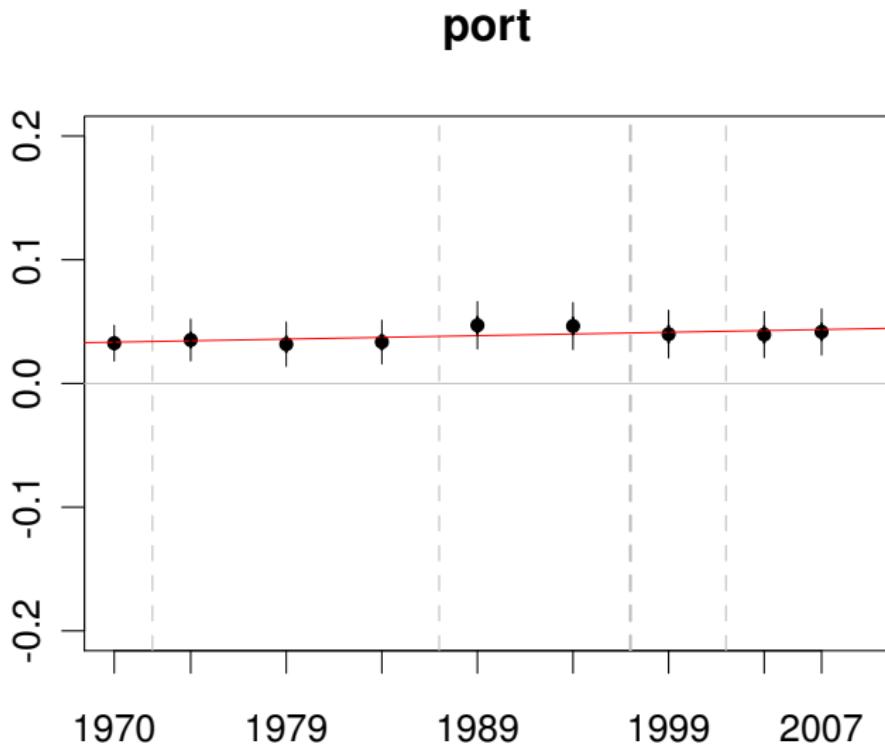


Retail: Bookstores

intermodal

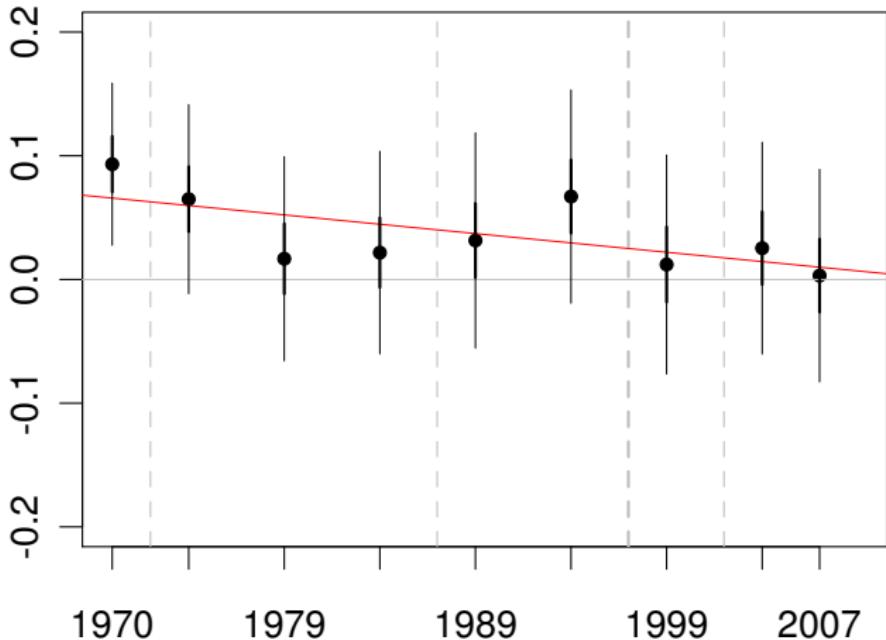


Manu: Electroplating, plating, polishing, anodizing, & coloring



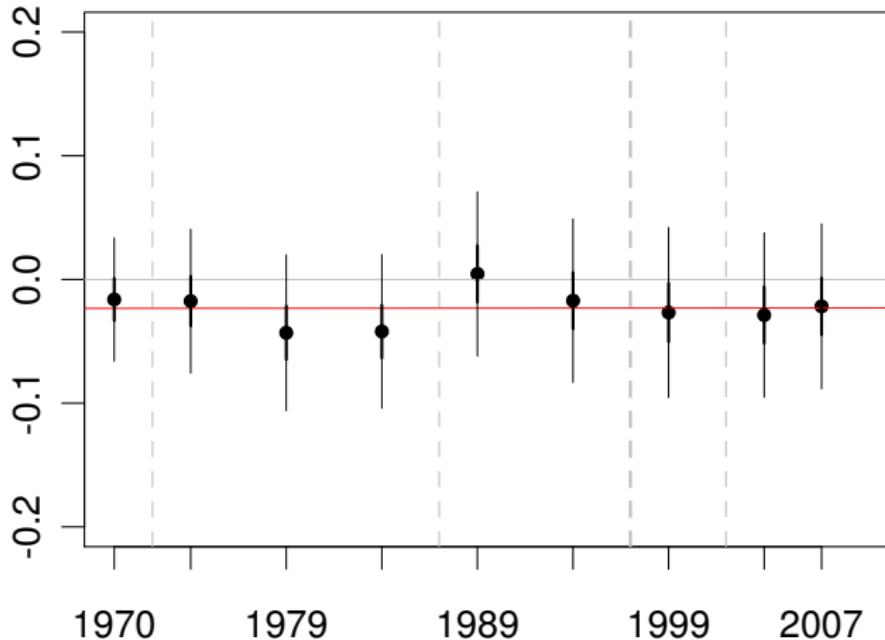
Manu: Electroplating, plating, polishing, anodizing, & coloring

airport



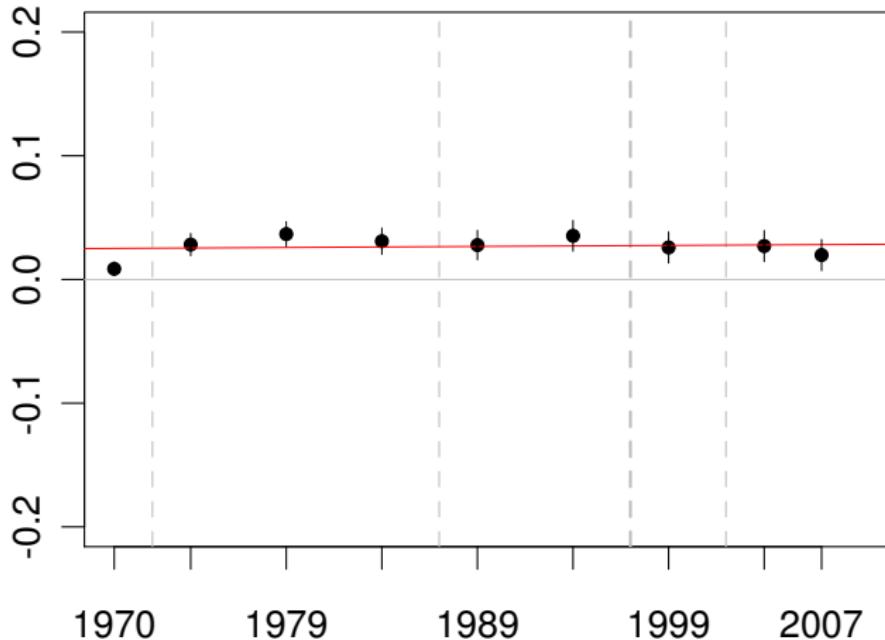
Manu: Electroplating, plating, polishing, anodizing, & coloring

intermodal



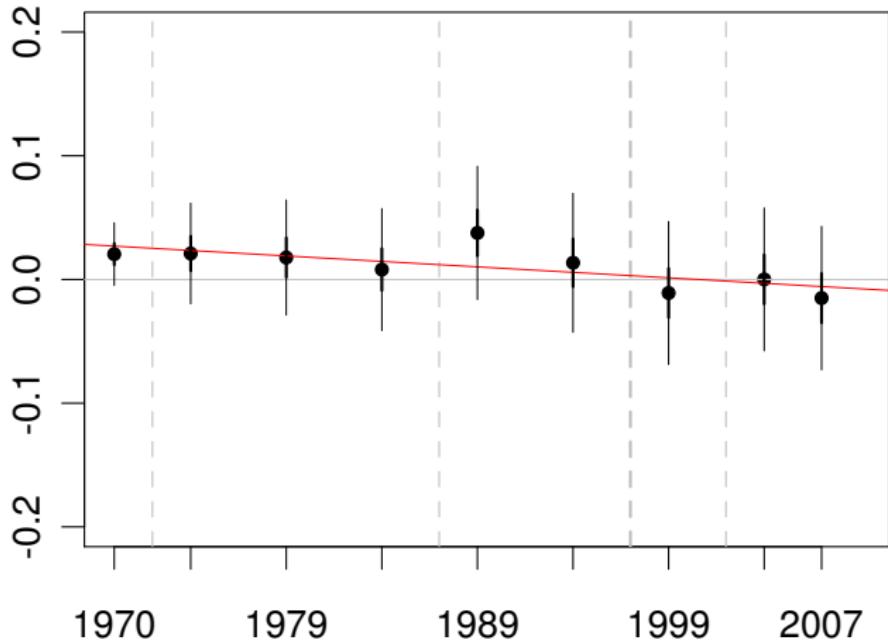
Creative: Motion picture and video production

port



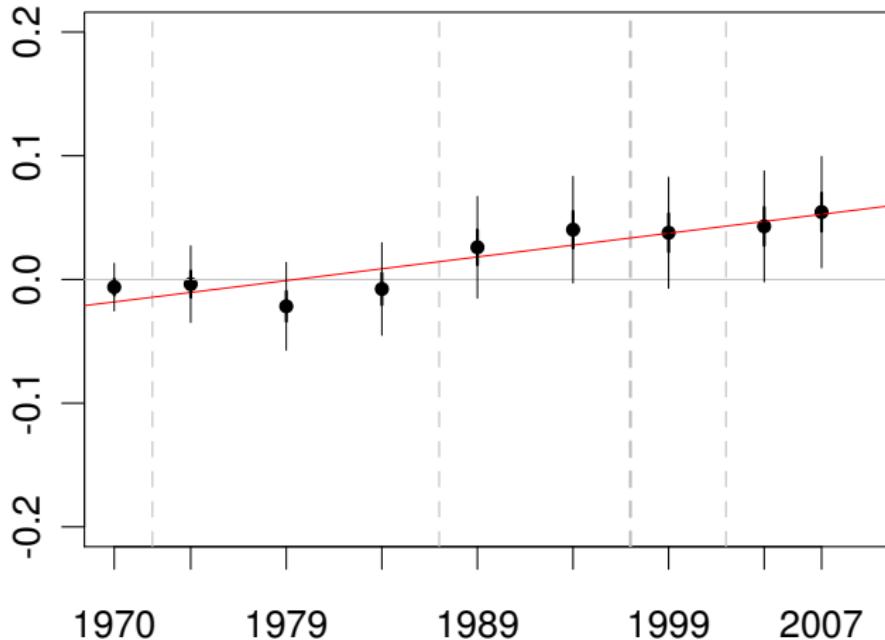
Creative: Motion picture and video production

airport



Creative: Motion picture and video production

intermodal



Marshall versus Cooley: Revisited

	Marshall	Cooley	Findings
Natural resources	Decoupled	Decoupled	Decoupled
Heavy industry	Decoupled	Decoupled (?)	Decoupled
Manufacturing	Decoupled	Coupled	Decoupled
Retail	Decoupled	Coupled	Decoupled
Creative	Decoupled	Decoupled	Uncertain

Conclusions

Ports \neq engines of regional growth

Coupled activity \rightarrow intermodal terminals and airports

Aerial satellite image of a city, likely New York City, showing the Hudson River, the Bronx, and Manhattan. The image is partially obscured by a large, semi-transparent white graphic element that features the text.

Destructive competition

Unnecessary
Local costs, nat'l benefits
Transfers wealth
Lowers working conditions

A large, stylized number '6' is positioned on the left side of the image. The '6' is composed of three overlapping circles: a large white circle at the top, a medium brown circle in the middle, and a smaller brown circle at the bottom. The background of the image is a solid light brown color.

Alternatives



Big Strike SF, 1934

The background of the image features a white square in the top left corner and two overlapping curved bands in the center. The top band is a light beige color, and the bottom band is a darker tan color. Both bands curve from the bottom left towards the top right.

Policy

Port consolidation

Protect labor gains

Stop transfer of wealth to global companies

End of local costs for national benefits

Port pricing in national interest



Thank you.

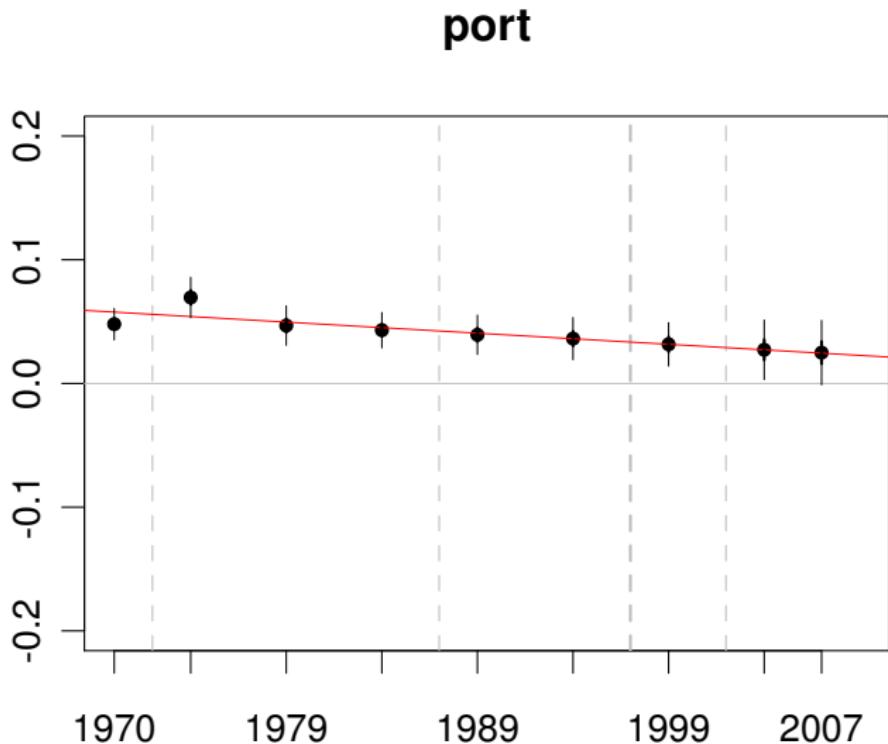
Appendix

Variable definitions

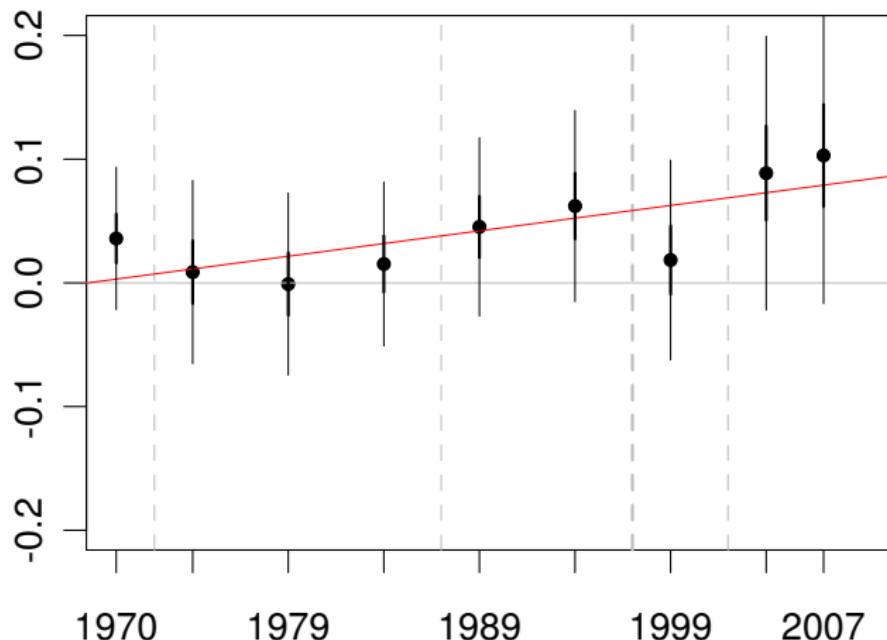
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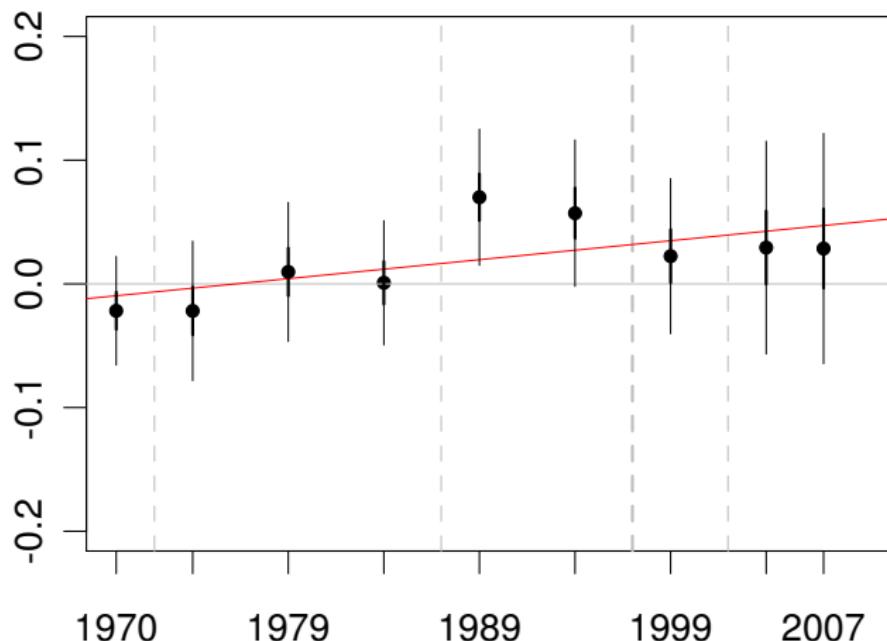
Transportation and warehousing: General warehousing and storage



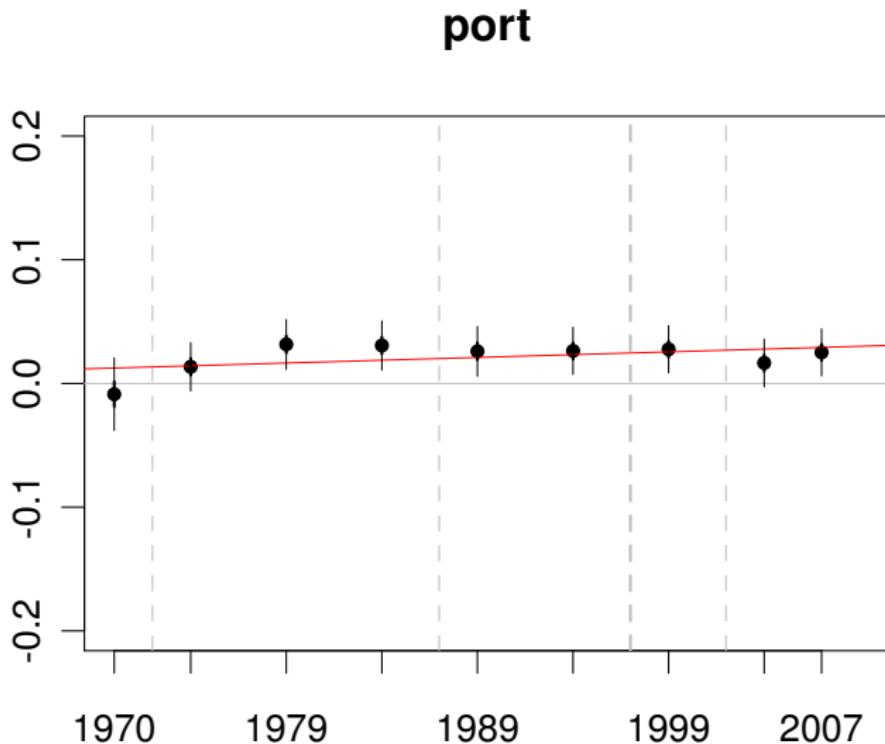
airport



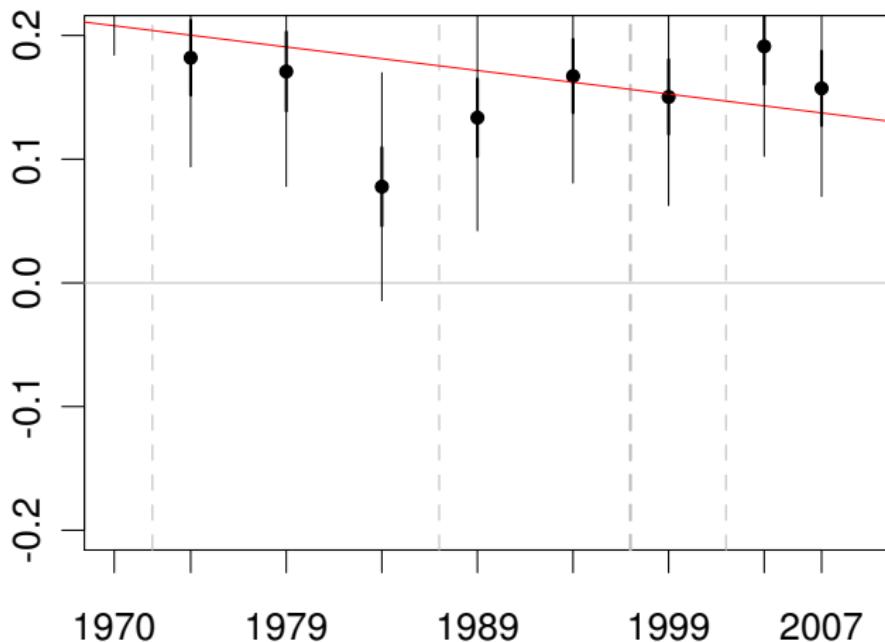
intermodal



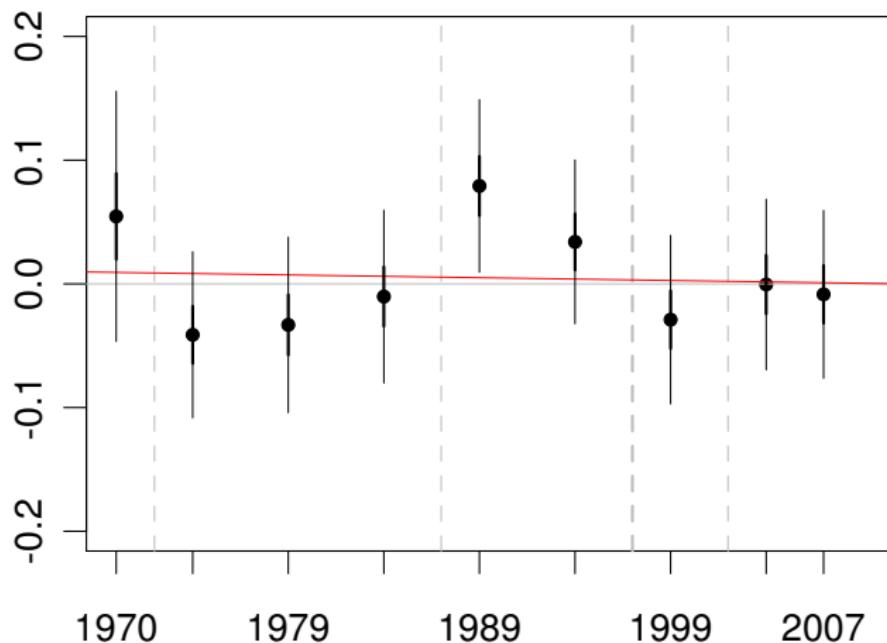
Transportation and warehousing: General freight trucking



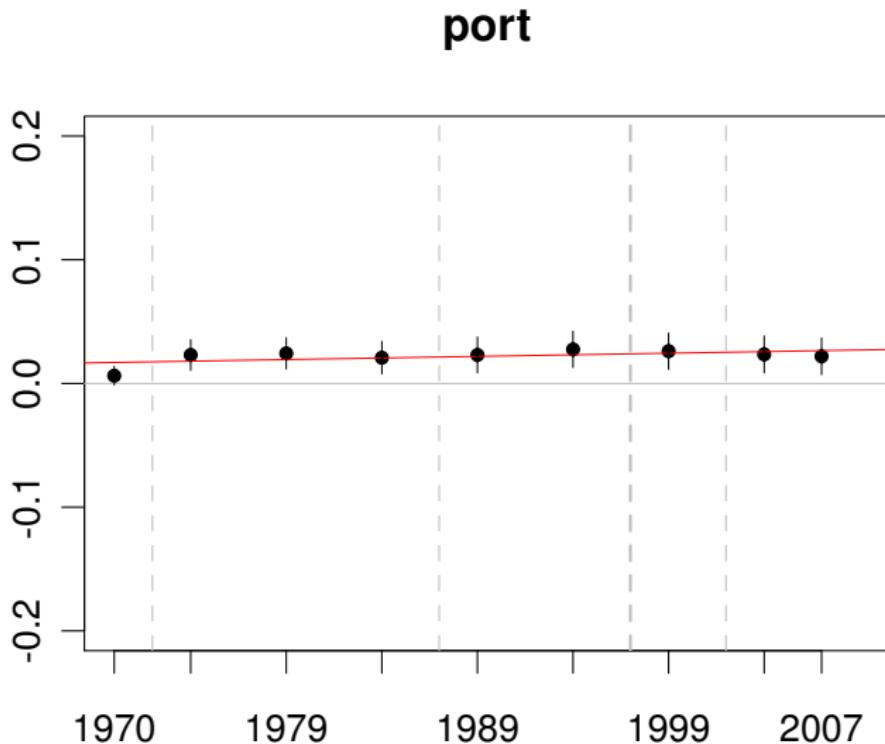
airport



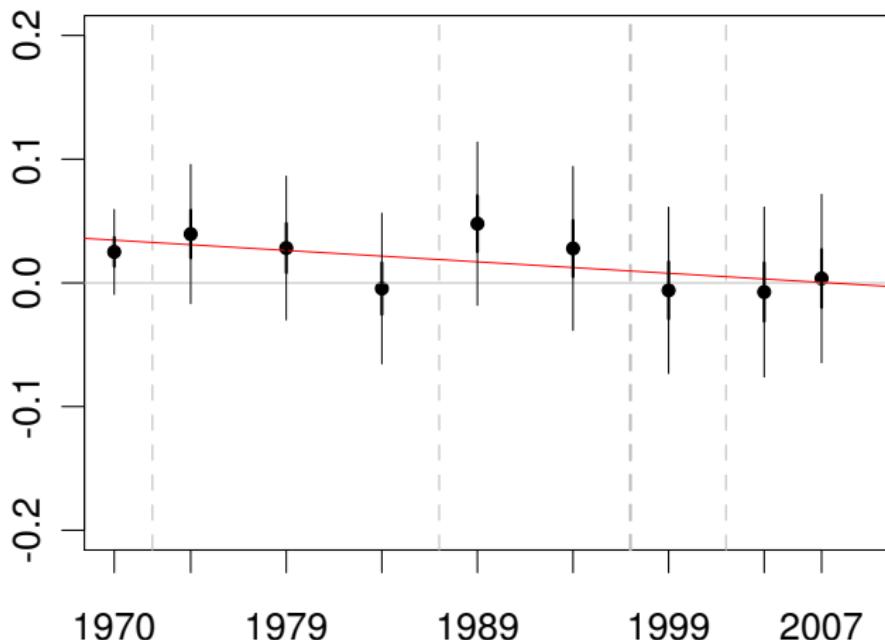
intermodal



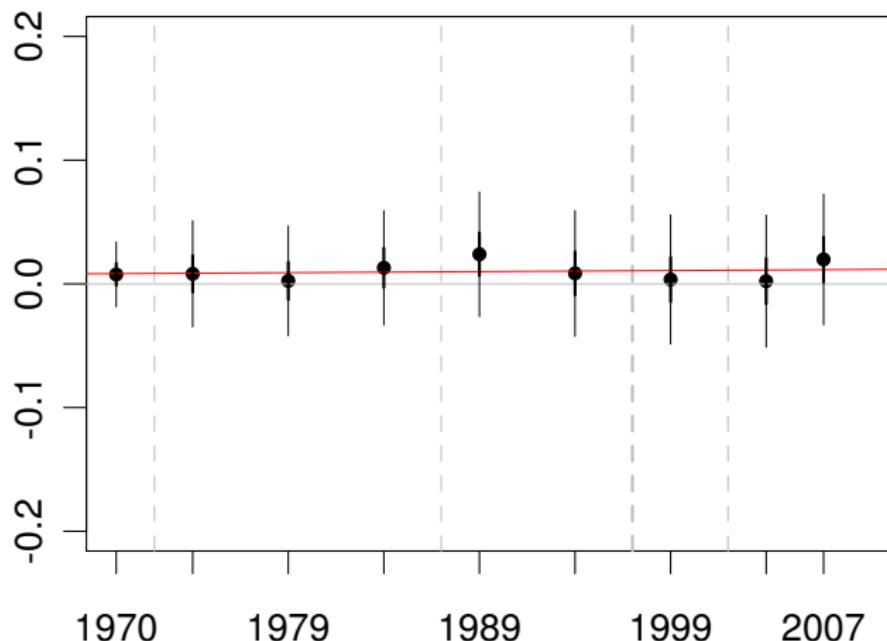
Manufacturing: Adhesive manufacturing



airport

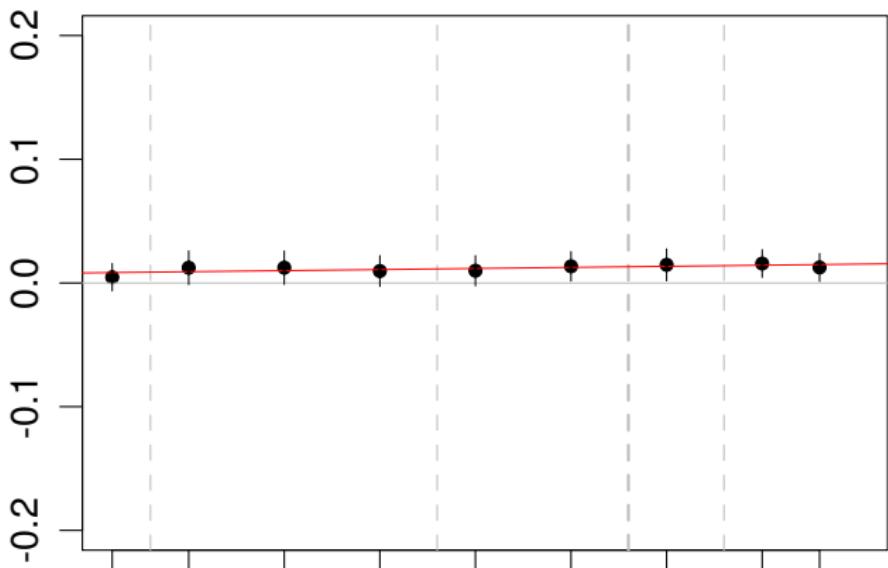


intermodal

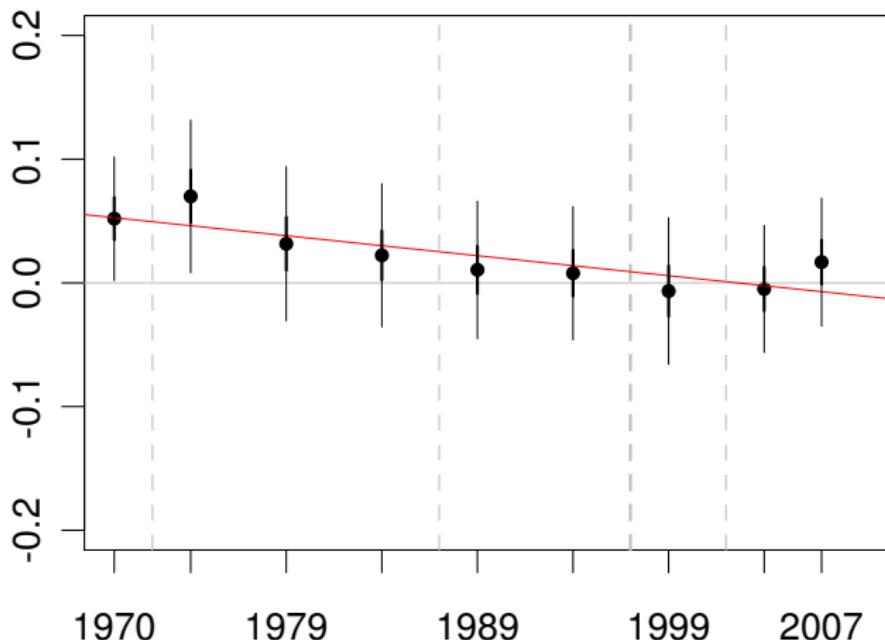


Manufacturing: Machine Tool Manufacturing, Metal Forming Types

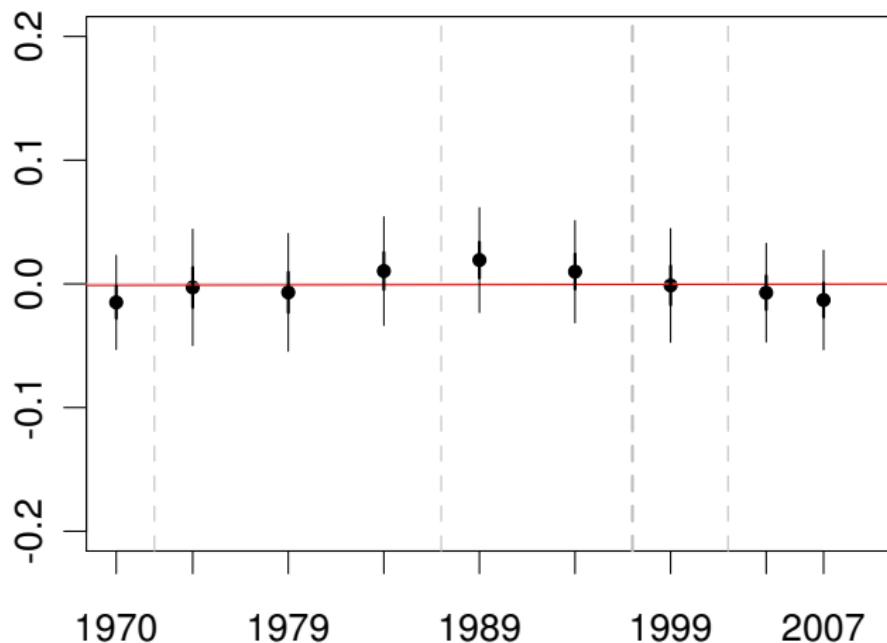
port



airport

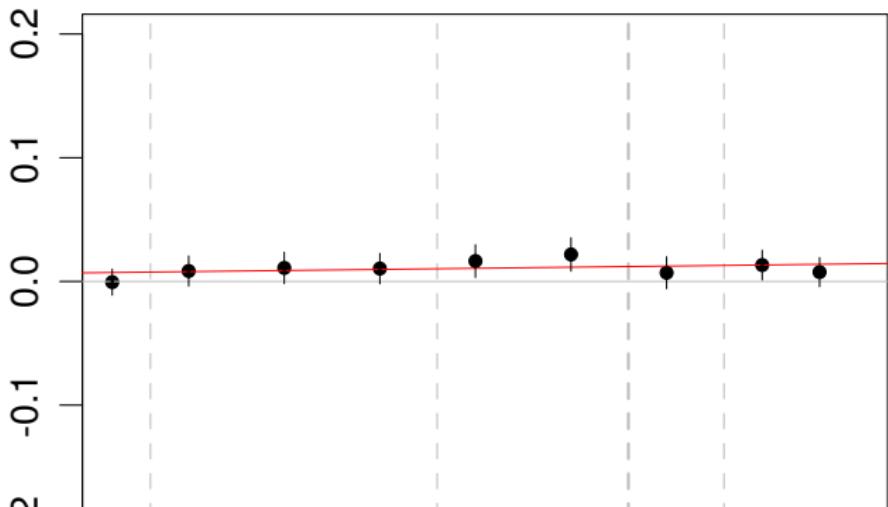


intermodal

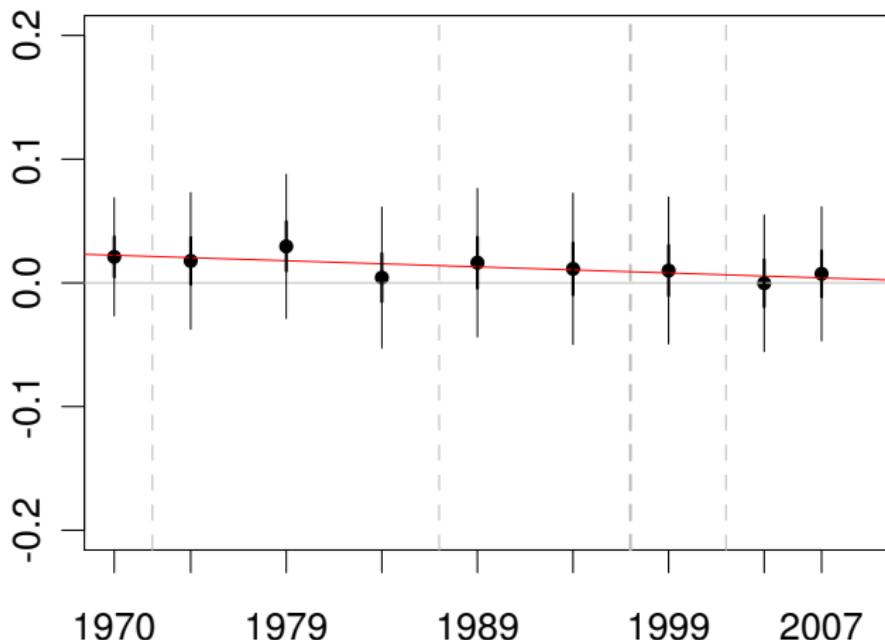


Manufacturing: Automatic Environmental Control Manufacturing for Residential, Commercial, and Appliance Use

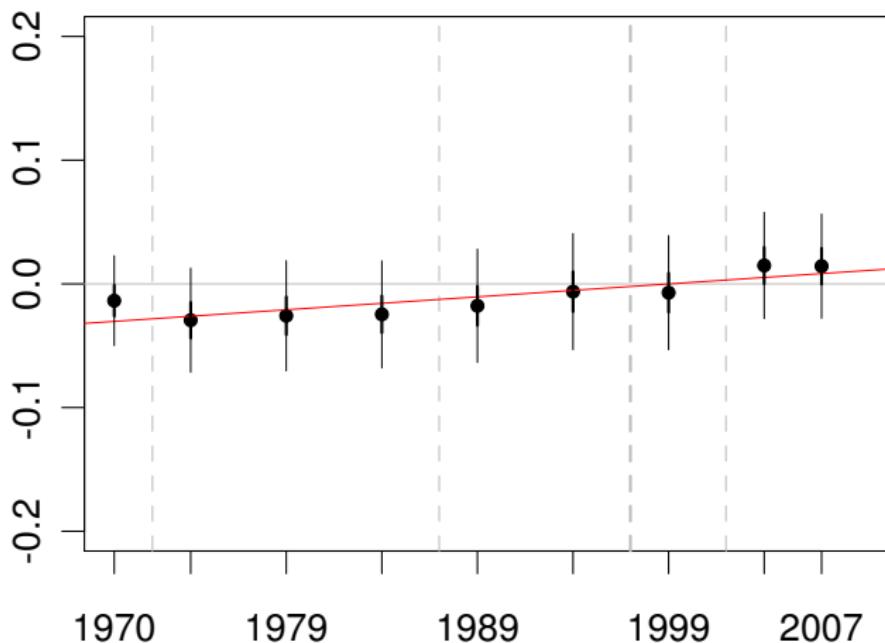
port



airport

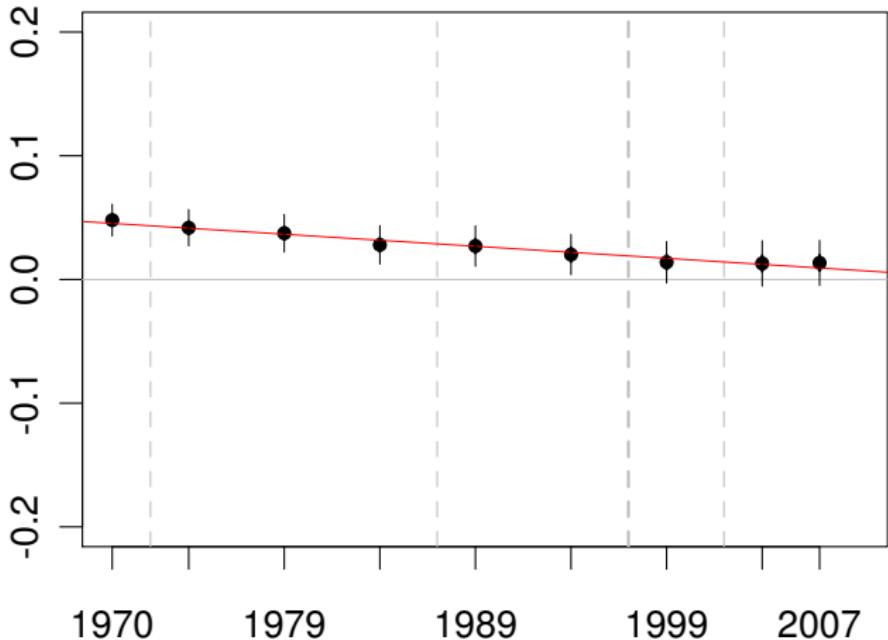


intermodal

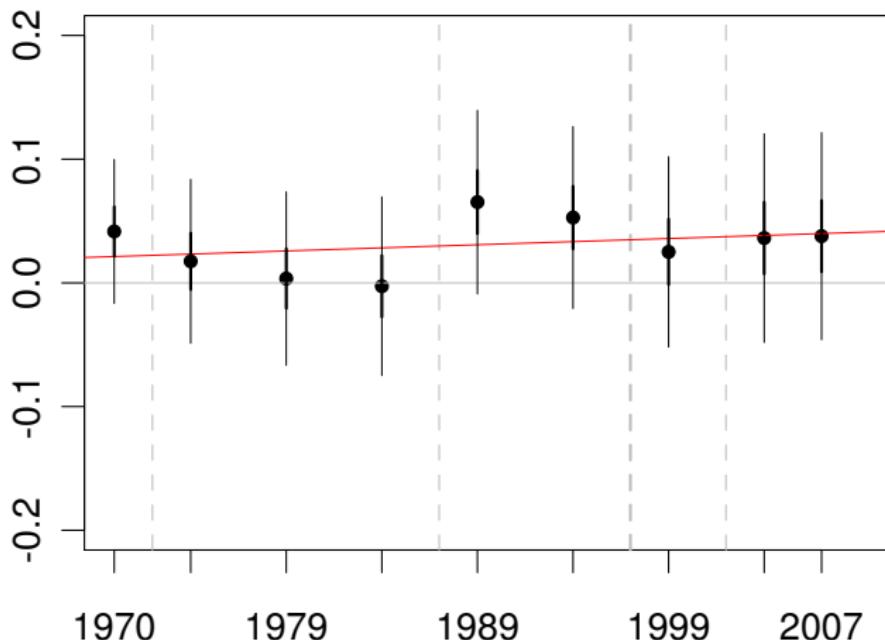


Creative: Periodical publishers

port



airport



intermodal

