Boxed In
Cuz Potter
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
1

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
Area of effective production
= geographic space of possible production

Diffuse

Fragmented
3 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: NHGIS and County Business Patterns
2. Perverse incentives
Pre-container shipping routes
Load center hub-and-spoke network
3. Deregulation and concentration
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
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

Figure: Total employment in deep sea freight transportion (SIC 4410 and NAICS 483111) by state.
Three justifications for subsidy competition

Related employment
Related employment:
General freight trucking

![Graph showing total employment in general freight trucking (SIC 4210 and NAICS 4841) by state. The break in the lines indicates this transition.](graph.png)
Related employment:
General warehousing and storage

Figure: Total employment in general warehousing and storage (SIC 4225 and NAICS 493110) by state. Note that only 68% of workers in SIC 4225 are included in NAICS 493110. The break in the lines indicates this transition.
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
<table>
<thead>
<tr>
<th>Category</th>
<th>Marshall</th>
<th>Cooley</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural resources</td>
<td>Decoupled</td>
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<tr>
<td>Heavy industry</td>
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Variable definitions

Table: Variables

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<th>Variables</th>
<th>Descriptions</th>
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<td>port</td>
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<td>100km from county centroid to closest international airport</td>
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<tr>
<td>intermodal</td>
<td>100km from county centroid to closest intermodal terminal (as recorded in 2000) that is greater than 80km from a port</td>
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Natural resources: Mining, Iron Ore

Port

Natural resources: Mining, Iron Ore

airport

![Graph showing airport data with years 1970, 1979, 1989, 1999, 2007 and values ranging from -0.2 to 0.2.]
Natural resources: Mining, Iron Ore

intermodal
Heavy industry: Ready-Mix Concrete

port

Heavy industry: Ready-Mix Concrete

airport

![Graph showing airport heavy industry trends from 1970 to 2007]
Retail: Bookstores

airport

![Graph showing retail bookstores trend over years from 1970 to 2007]
Retail: Bookstores

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

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

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

intermodal

![Graph showing intermodal data with years 1970 to 2007 on the x-axis and values ranging from -0.2 to 0.2 on the y-axis.](image-url)
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

<table>
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<td>Decoupled</td>
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Conclusions

Ports $\neq$ engines of regional growth

Coupled activity $\rightarrow$ intermodal terminals and airports
Destructive competition

Unnecessary

Local costs, nat’l benefits

Transfers wealth

Lowers working conditions
Alternatives
Big Strike
SF, 1934
7

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
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General warehousing and storage

port
Transportation and warehousing:
General freight trucking

port
Manufacturing:
Adhesive manufacturing

port
intermodal
Manufacturing:
Machine Tool Manufacturing, Metal Forming Types
airport
intermodal
Manufacturing:
Automatic Environmental Control Manufacturing for Residential, Commercial, and Appliance Use
intermodal
Creative:
Periodical publishers

port

![Graph showing data points and a trend line from 1970 to 2007.]