



BAUMOL'S COST DISEASE IN THE LOCAL TRANSIT SECTOR - A comparative analysis of Germany and the USA

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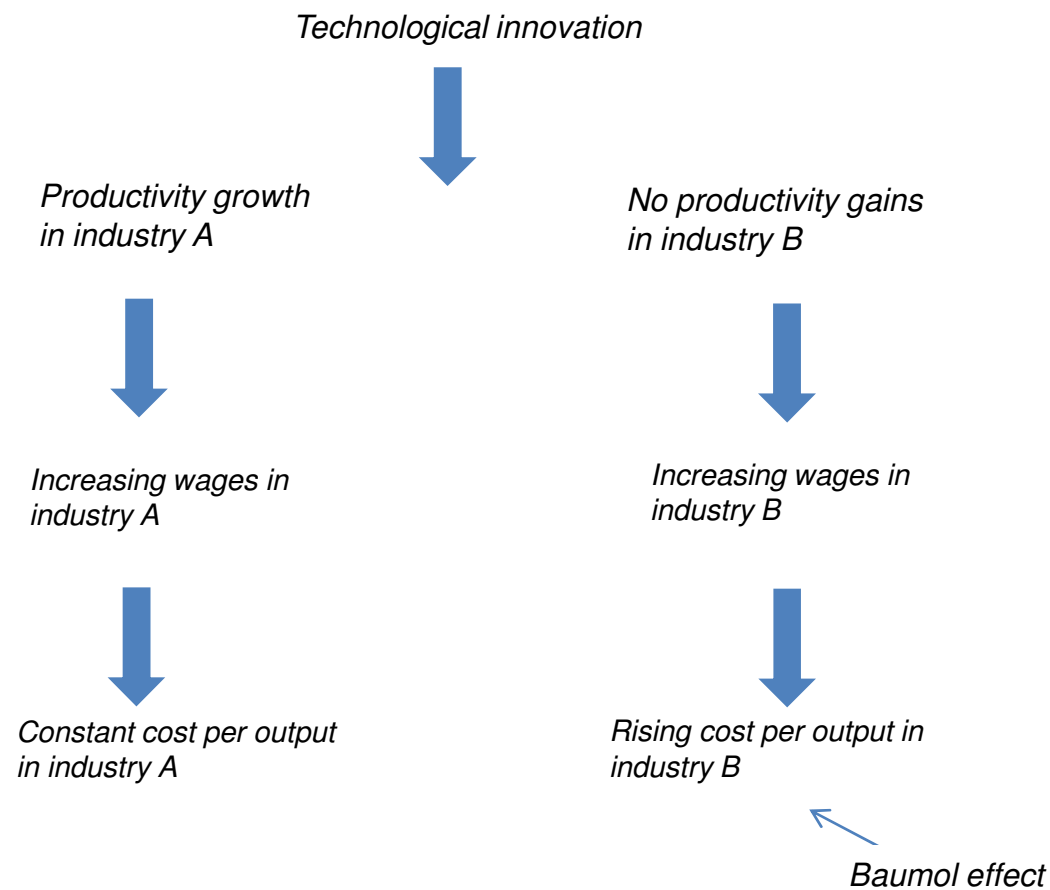
9th Conference on Applied Infrastructure
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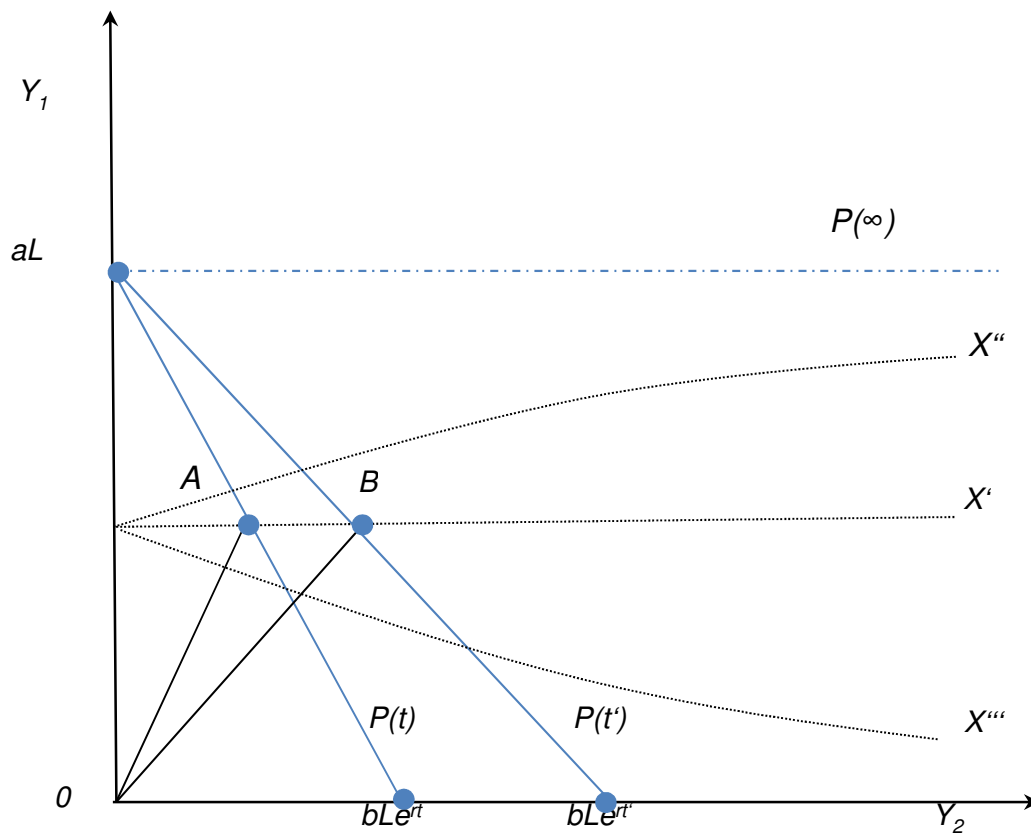
“Sustainable Infrastructure – Theoretical and
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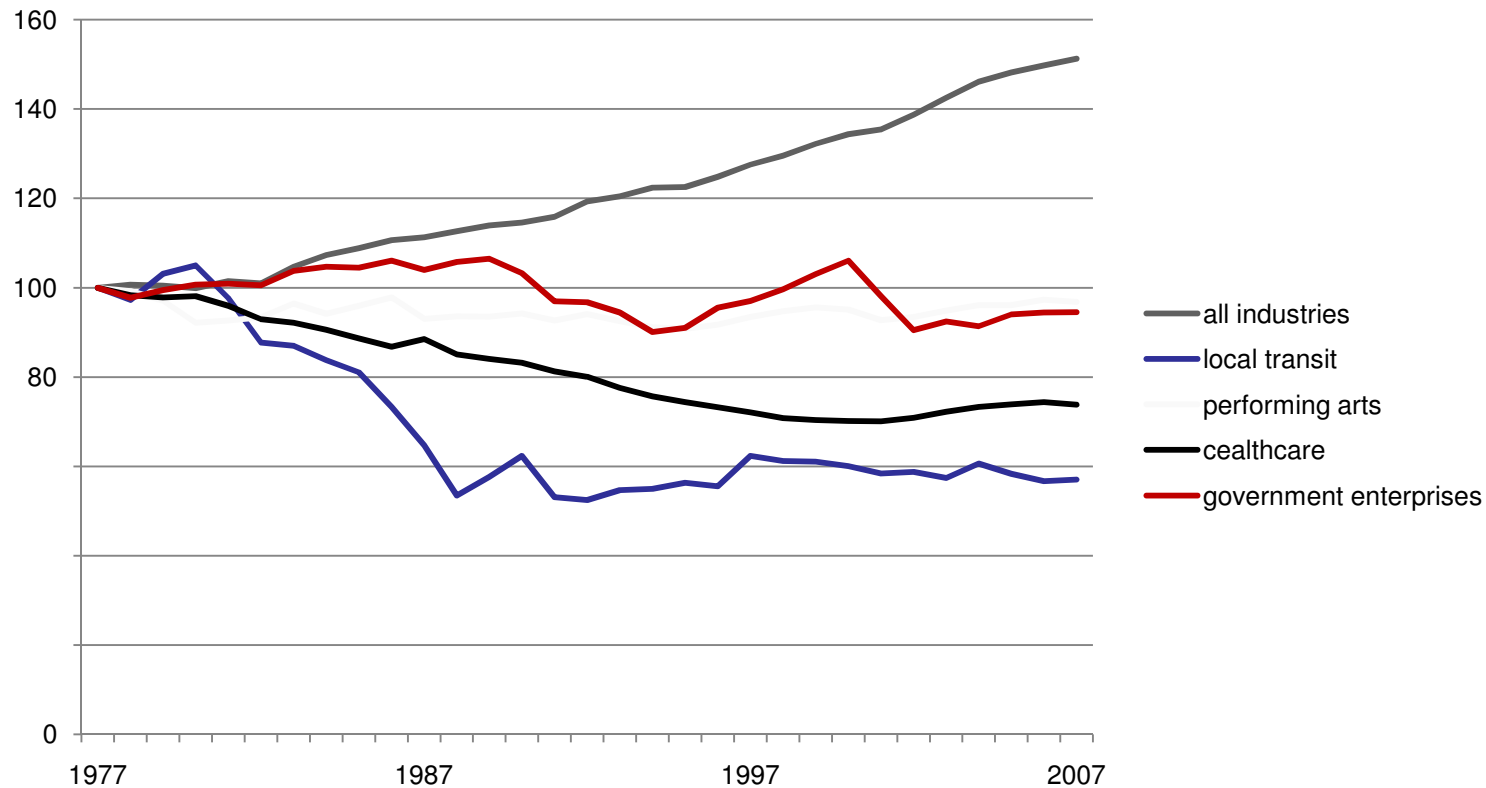
- The Nature of Baumol's Cost Disease
- Application for Public Transit
 - Comparative Treatment of Germany and the USA
 - Partial Productivity Measures
 - TFP
 - Cost Development
- Affordability
 - Development of Demand
- Multisector Analysis
- Policy Implications







- Real GDP per Employee (USA)





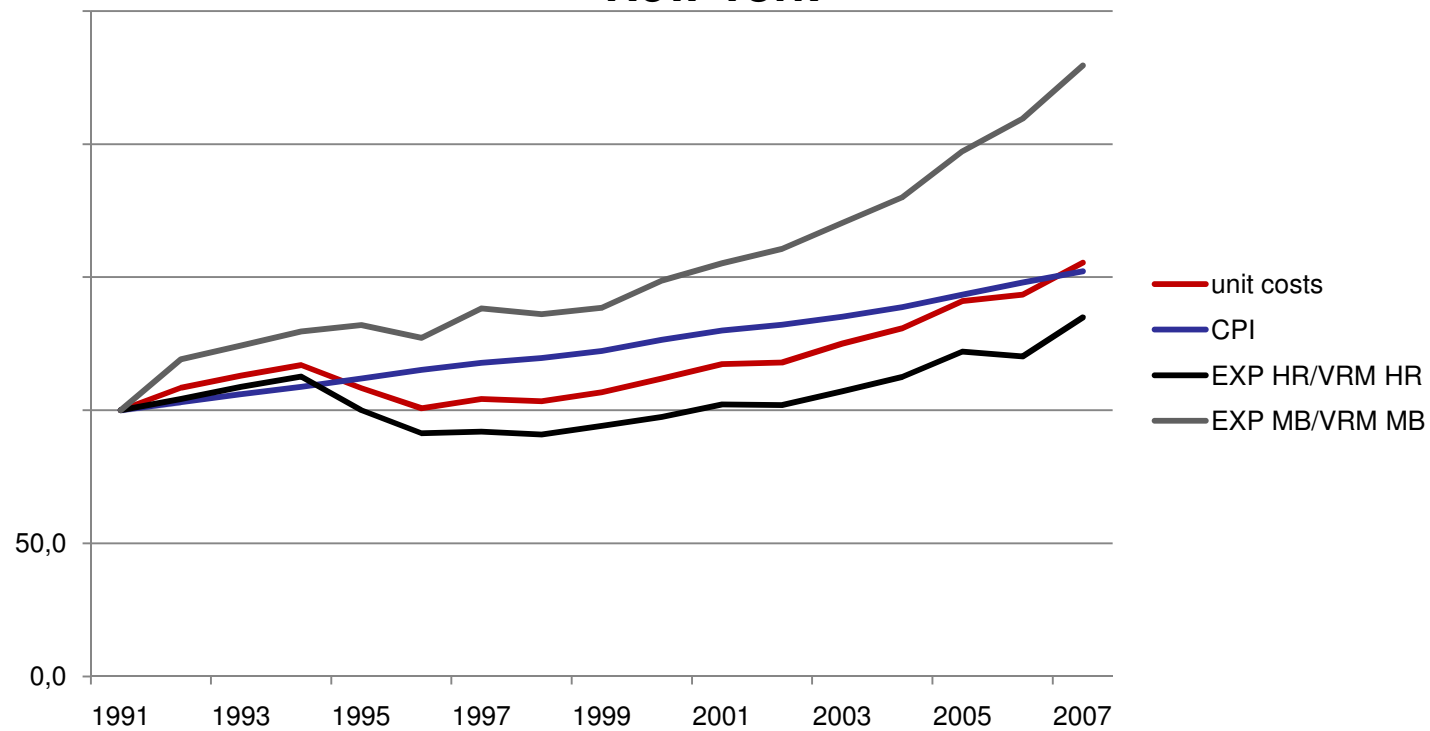
- Labor Productivity - Annual Growth Rate

1977-2007	average annual growth rate in %
local transport	-1.631
entire economy	1.394
government enterprises	-0.139
performing arts	-0.089
healthcare	-0.896
education	-0.838

- Separation between Firms with “pure” Bus Operations and Firms with Mixed Operations
- Output: Vehicle Kilometres
- Inputs: Number of Employees, Number of Vehicles, Population Density
- Sample:
 - USA: 250 – 21
 - Germany: 75 – 49
- Period of Analysis:
 - 1998 – 2007 (USA)
 - 1994 – 2007 (Germany)

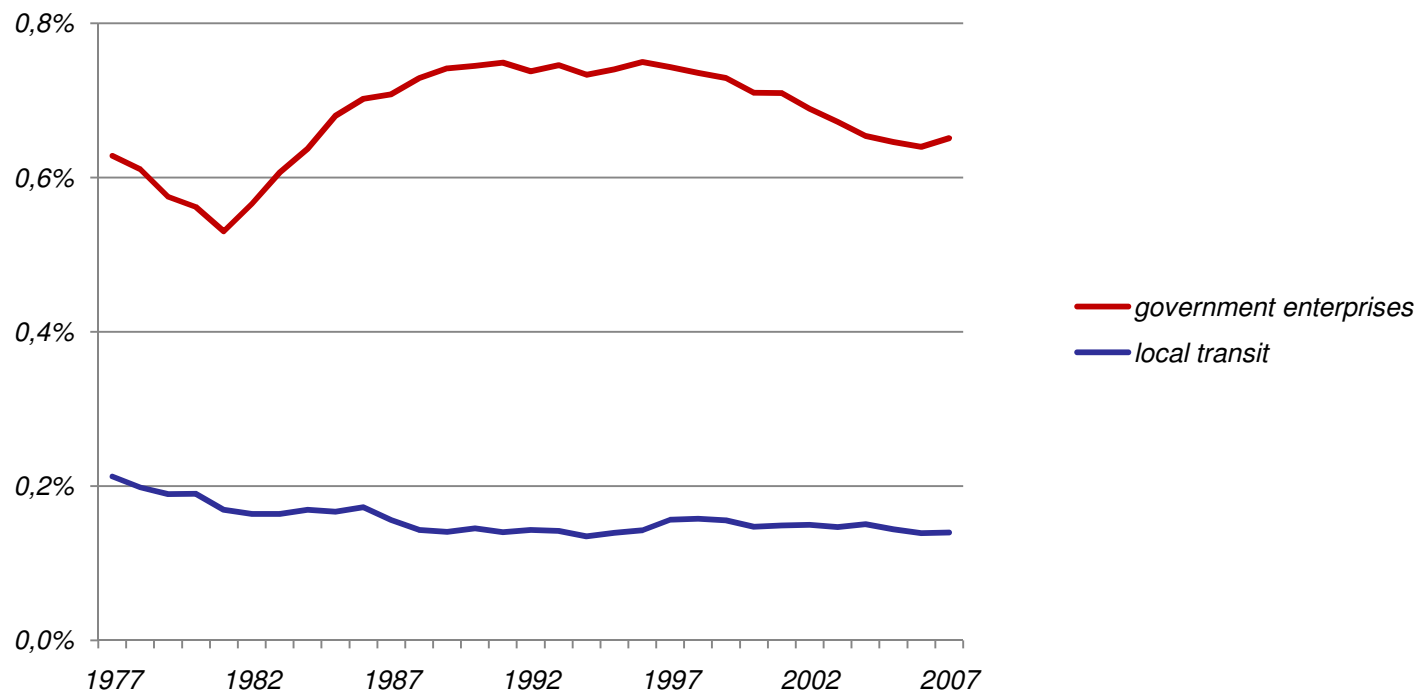
country	sample	average TFP in %
Germany	bus (75)	0.5
	mixed operations (49)	1.9
	lightrail and bus (31)	0.9
USA	bus (250)	0.5
	mixed operation (21)	0.9
	only rail operation (31)	1.6

New York

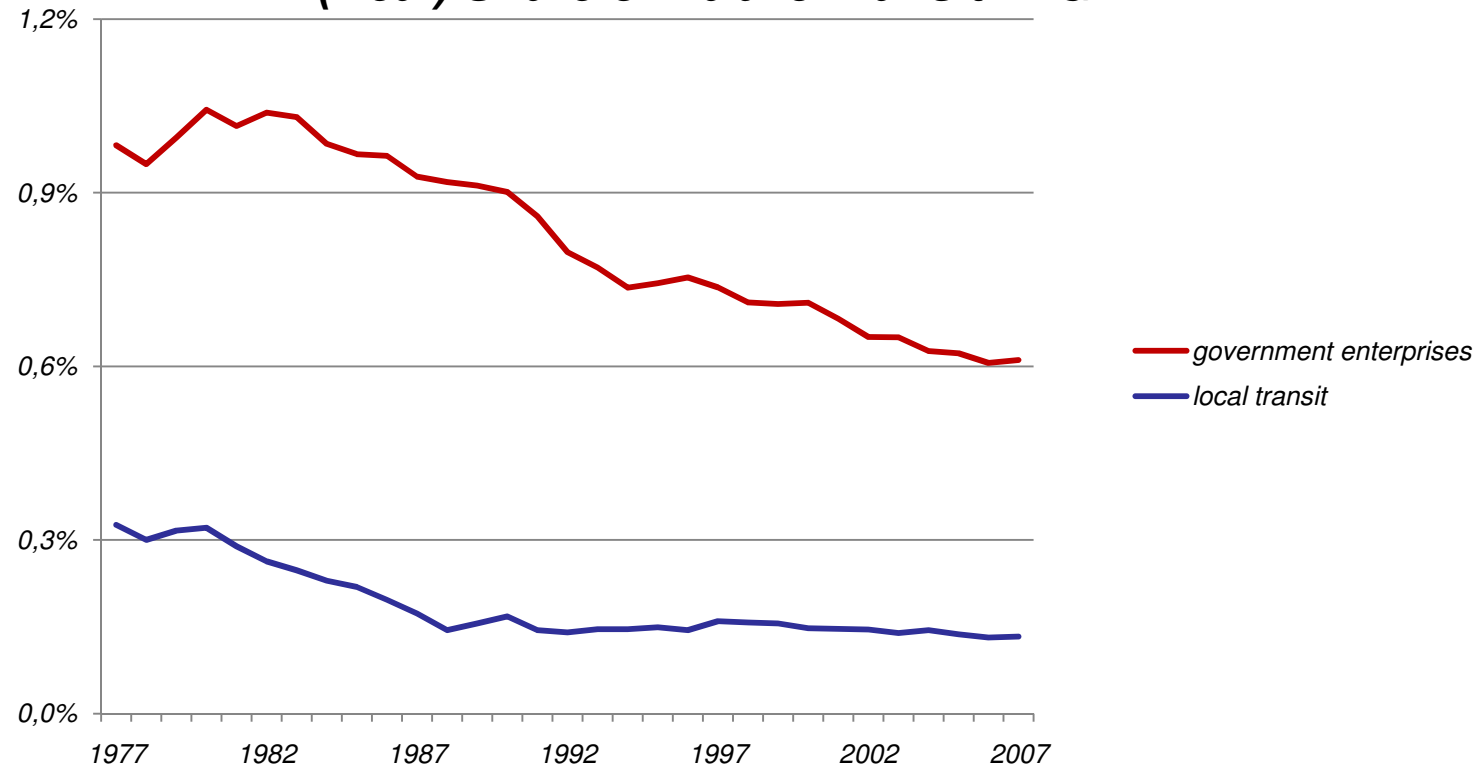


1991-2007	average growth rate in %	
	Chicago	New York
unit costs	3.544	2.897
unit cost bus	4.333	5.447
unit cost rail	2.331	2.047
CPI	2.649	2.663

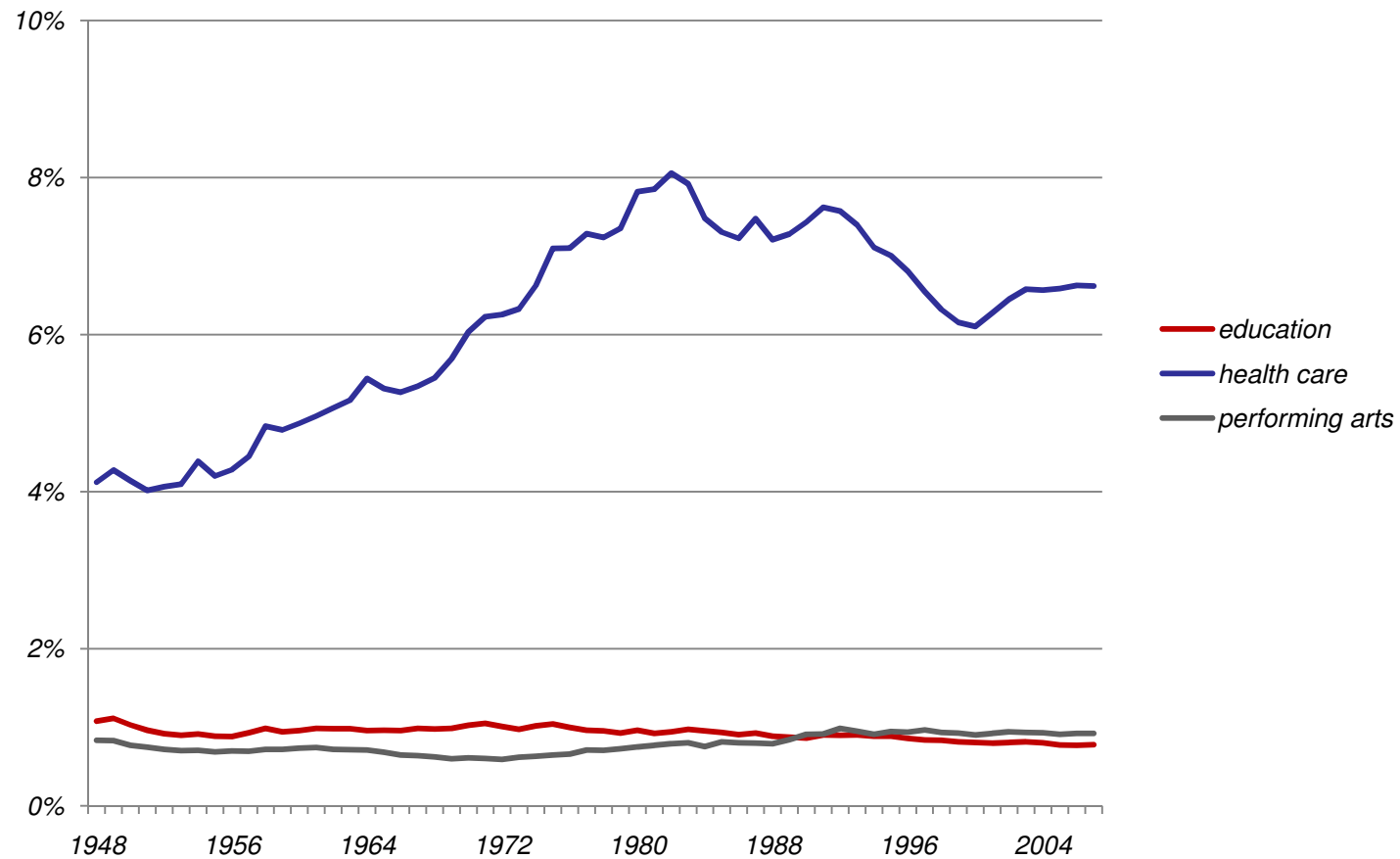
(Nominal) Share of Public Transit in GDP



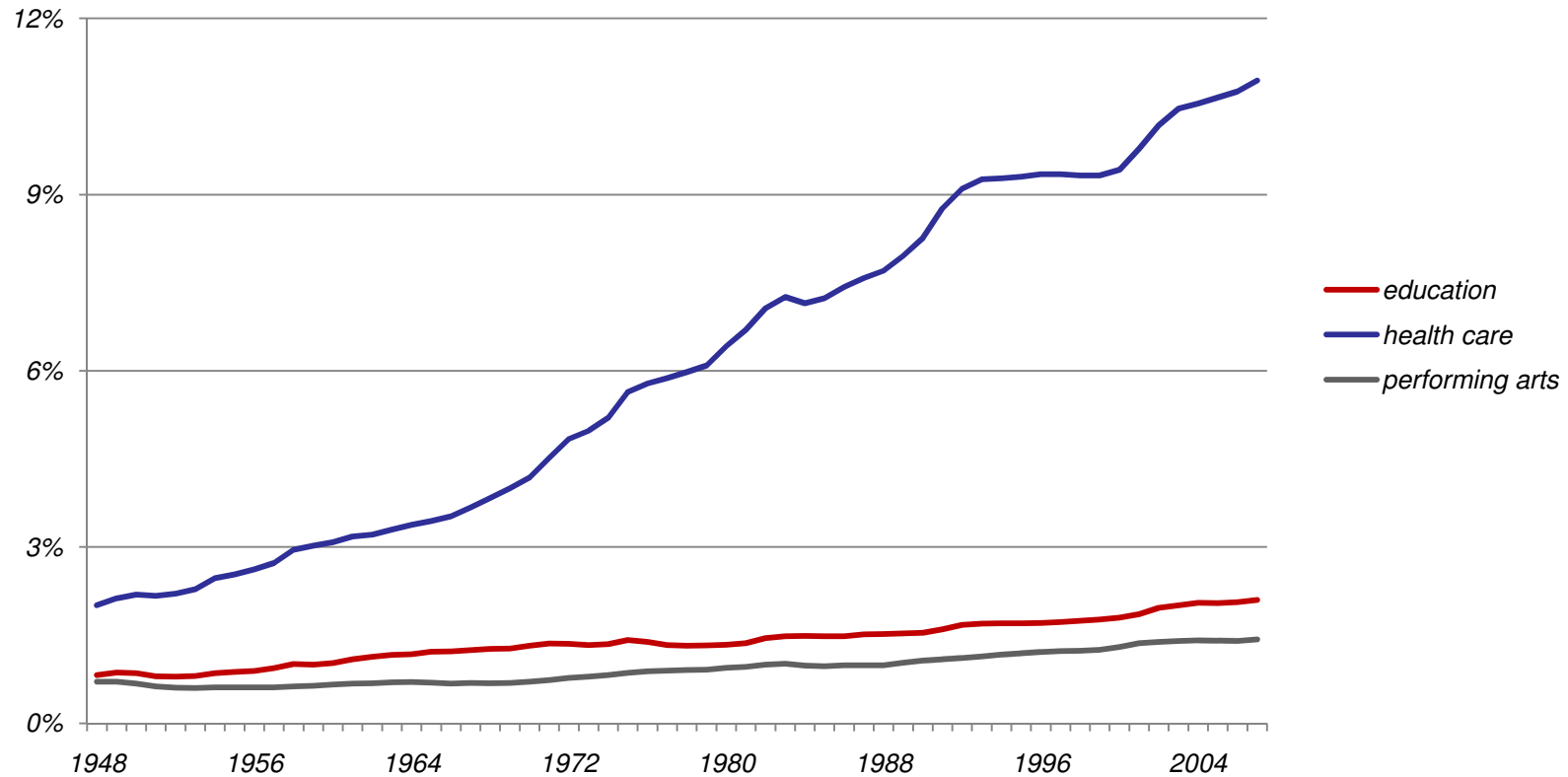
(Real) Share of Public Transit in GDP



Real Share in GDP



Share of Labour



- Existence of the Cost Disease for Local Transit Services
- But Long-Run Affordability
- However:
 - Cost Disease of other Stagnant Sectors (non-fundable)
 - Priorisation of tax financed Sectors still a feasible Possibility
 - Decreasing Subsidies: How about Public Transport?
- Possible Solutions:
 - Subsidy-Decoupling: Pricing Reforms
 - Long-Run Cut of Services
 - City-Planning Instruments



THANK YOU FOR YOUR ATTENTION!

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