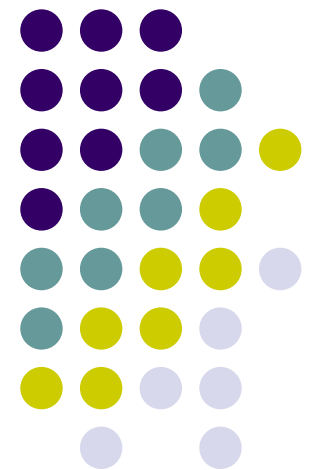


Spatial Dimensions of Growth and Urbanization: Facts, Theories and Policies for Development

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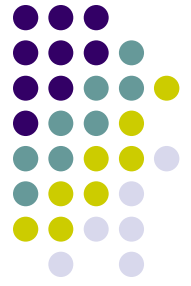
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Growth and Spatial Inequality

- Does growth cause spatial inequality?
 - Regional inequality?
 - Urban inequality?
 - How long does it persist?
- Is the relationship dependent on pace of growth?
 - Rapid growth, greater inequality?



Spatial Inequality and Public Policy

- Do spatial inequalities lead to public policy responses?
 - Is there pressure on governments to reduce inequality to preserve social cohesion?
 - Is there a trade-off between efficiency and equity?
- What government policies increase or decrease spatial inequality?
 - Industrial policies
 - Migration policies
 - Public infrastructure



Plan of Study

- Review data on regional and urban inequality
 - North America, South America, Europe, Asia, Africa, Australia
- Review data on policies which impact regional and urban inequality
 - National, Regional and Local
- Review current theories of regional and urban inequality
 - Which theories are consistent with the data?
- Review the effectiveness of current and past policy proposals
 - What policies foster spatial inequality? Spatial equality?



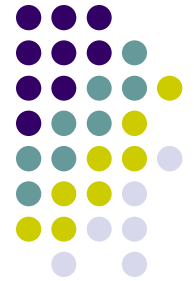
Regional Inequality

- Kuznets (1955), Williamson (1965)
- Inverted U Process of Growth and Development
 - Cross-sectional evidence
 - Williamson (1965) – 24 countries
 - Longitudinal evidence
 - Williamson (1965) – 10 countries, some with limited number of years



Urban Inequality

- Wheaton and Shishido (1981), Henderson (2005)
- Urban Primacy – Inverted U in the share of population in largest city
 - Cross-sectional evidence
 - Wheaton and Shishido (1981) – 38 developed and developing countries
 - Concentration rises till \$2000 and then falls
 - Longitudinal evidence
 - Fujita et. Al (2004) - Japan



Theory: Regional Inverted U Pattern of Development

- Williamson (1965)
 - Factor mobility, increasing returns, Hirschman (1958)
- Kim (1995)
 - Goods versus factor mobility
- North (1990), Engerman and Sokoloff (1997), Acemoglu et. al (2001, 2002)
 - Institutions
- Krugman and Venables (1995), Venables (2005)
 - Trade costs: prohibitive to intermediate, intermediate to zero



Theory: Urban Inverted U Pattern of Development

- Wheaton and Shishido (1981)
 - Theory of market areas (Losch)
 - Tradeoff between production and transportation costs
 - scale economies, low transport costs leads to concentration
- Ades and Glaeser (1995), Davis and Henderson (2003)
 - Primacy due to government policy and institutions
 - Hinterland investment, democratization, fiscal decentralization contribute to dispersion
- Fujita et. al (2004)
 - Agglomeration economies, rising land prices



Policies for Regional and Urban Inequality

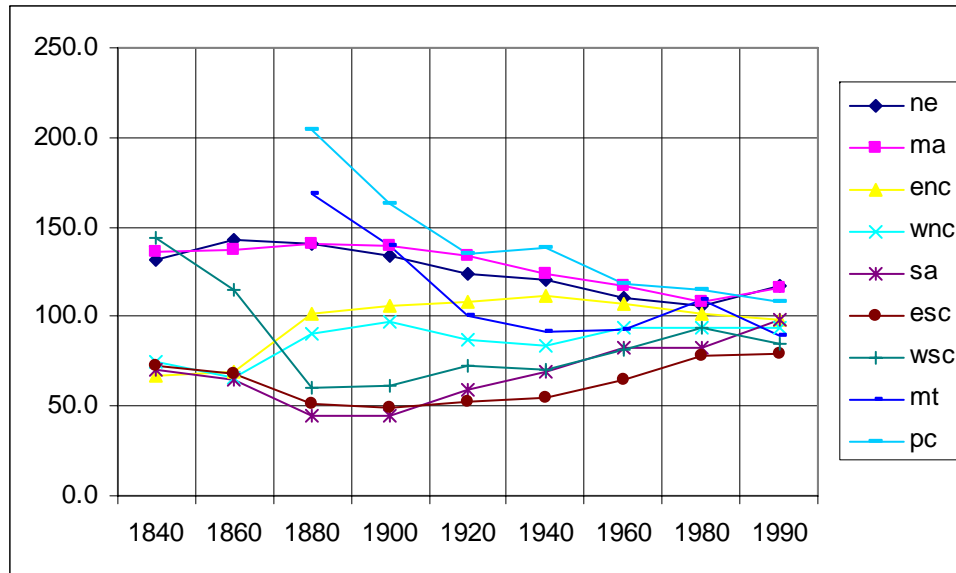
- 1. Does urbanization cause growth? Or, is urbanization a consequence of growth?
 - Urbanization does not cause growth
 - Henderson (2003), Fay and Opal (2000)
- 2. Solow-convergence versus multiple equilibria
 - Identify policies which leads to convergence
 - Increase investments
 - Identify policies which shifts economy from one equilibrium to another
 - Solve coordination failure



Case 1: United States

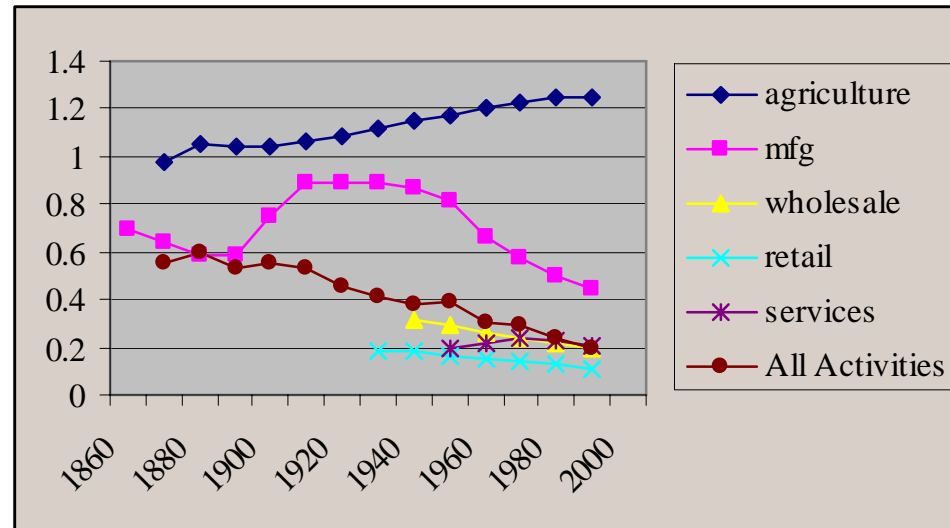
- Regions
 - Divergence: 1820-1940
 - Convergence: 1940-2000
 - Regional income per capita
 - Easterlin (1965), Barro and Sala-i-Martin (1995)
 - Regional industrial structures
 - Kim (1995)
- Cities
 - Divergence: 1820-1940
 - Convergence: 1940-2000

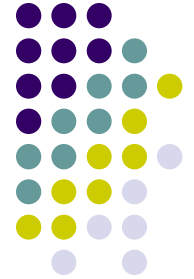
U.S. Regional Incomes





U.S. Regional Economic Structure





Case 2: Japan

- Regions
 - Convergence: 1950-2000
 - Barro and Sala-i-Martin (1992), Fujita et. Al (2004)
- Cities
 - Divergence: 1950-2000
 - Fujita et. al (2004)

Japanese cities

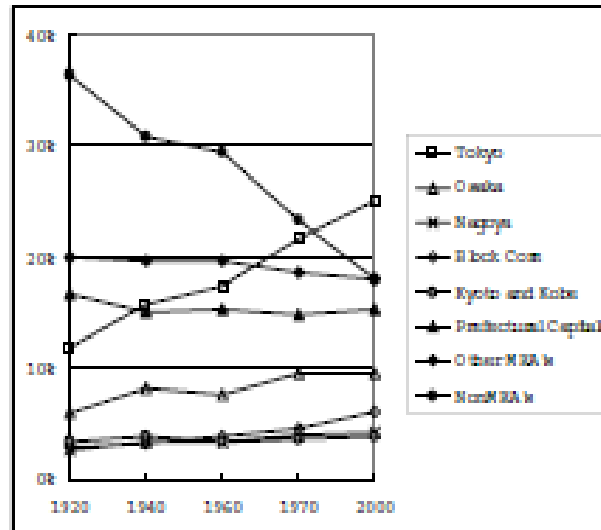


Figure 2.1.2 Long-term trends in Japanese metropolitan areas



Case 3: European Union

- EU Countries
 - Convergence: 1970-1980
 - Divergence: 1980-1998
 - Midelfart-Knarvik (2000)
 - However, divergence is accounted for by rising inequalities within countries as inequalities between countries are falling
 - Puga (2002), Duro (2001)
- EU Cities
 - ??



EU Industrial Structure

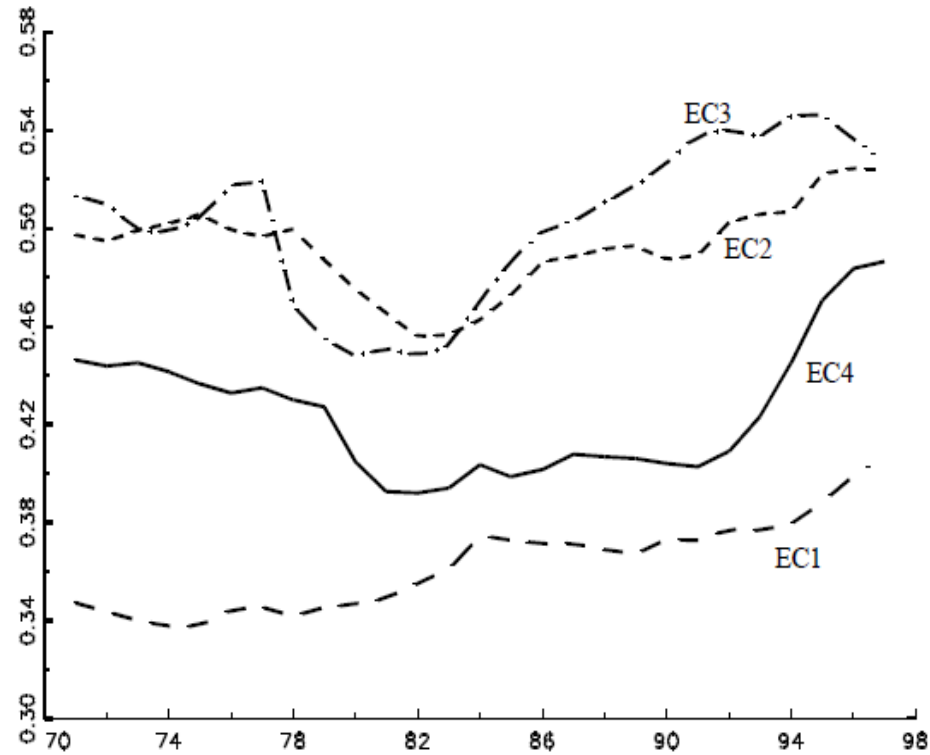
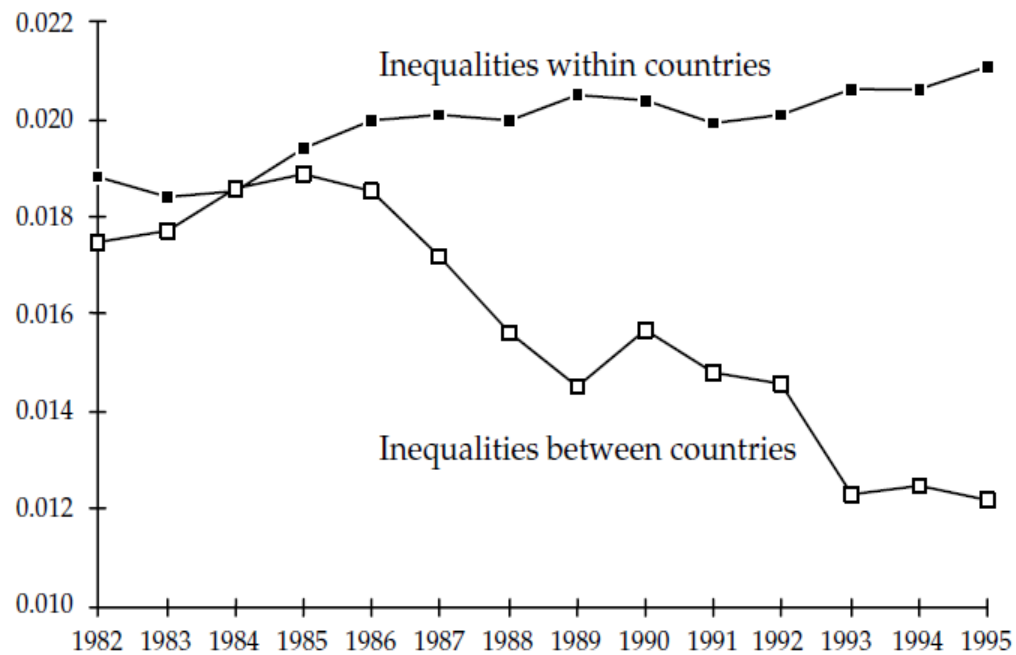


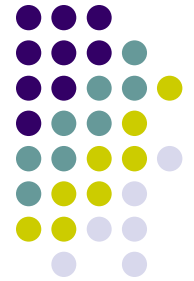
Figure 2.1: Krugman specialization indices: Countries grouped by EC entry date. (2 yr moving average, unweighted).

EU Inequality



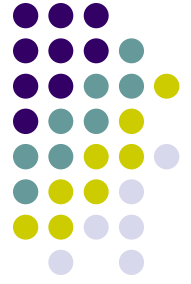
Figure 2. Dispersion of regional income In Europe





Case 4: Developing Countries

- **Spatial Disparities in Human Development:**
World Institute for Development Economics of the United Nations University
 - Series of conferences resulting in 6 volumes in various forms
 - 58 developing and transition economies
 - Longitudinal evidence for 26 countries
- **Evidence**
 - Spatial inequality is high and rising
- **Africa**
 - Urbanization without growth
 - Fay and Opal (2000)



Preliminary Conclusion

- There seems to be considerable cross-sectional heterogeneity
 - Is it due to differences in level of development?
 - Geography?
 - Institutions?
 - Policies?
- Interesting puzzles
 - Is there an inverted U pattern of development? If so, is there a link between the regional and urban patterns?
 - Is there a relationship between growth rates and inequality?
- Stay tuned