LOCAL POLICY, AGGLOMERATION, AND INCOME CONVERGENCE

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AGGLOMERATION

MAJOR ECONOMIC TRANSFORMATION IN ALL COUNTRIES: URBANIZATION

CITIES GROW IN NUMBER AND SIZE, BASED ON MIGRATION

CITIES AS GROWTH MACHINES

AGGLOMERATION ECONOMIES RAISE PRODUCTIVITY AND INCOME LEVEL,

INCOME DIVERGENCE?
HOW DO POLICY AND POLITICS INTERACT WITH CITY GROWTH?

POLITICAL COMPETITION BETWEEN CITIES/ REGIONS, STIMULATING PRODUCTIVITY OR WASTE OF RESOURCES

COMPETITION DISCIPLINE OR URBAN RENTS FOR LEVIATHAN
CITY GROWTH

EQUILIBRIUM URBANIZATION, 60-80% IN URBAN AREAS

URBAN AREAS DEFINED BY DENSITY

URBAN PRIMACY, MAIN AGGLOMERATION IN COUNTRY, 30-50% OF URBAN POPULATION

REGULARITIES, ZIPF’S LAW, US EVIDENCE: NEW YORK IS 2 X LOS ANGELES, 3 X CHICAGO
EUROPE MORE COMPLICATED, CITIES:
LONDON 7.5 MILL IS 2 X BERLIN (3.4 MILL) AND MADRID (3.2 MILL) AND 3 X ROME (2.7 MILL) AND PARIS (2.3 MILL)

OR METROPOLITAN AREAS:
LONDON AND PARIS (12 MILL) ARE 2 X MADRID AND BERLIN (6 MILL) AND 3 X ROME (4 MILL)

MOST COUNTRIES DOMINATED BY THE CAPITAL
UNDERSTANDING

URBANIZATION IS PART OF INDUSTRIAL GROWTH PROCESS

CITY GROWTH DUE TO SCALE EFFECTS AND EXTERNALITIES – MARKET IMPERFECTIONS MAY DISTORT CITY STRUCTURE

CITY STRUCTURE CONDUCIVE TO GROWTH OR INEFFICIENT AND ECONOMIC LOSS?
MARSHALL AND AGGLOMERATION ECONOMIES:

- LABOR MARKET MATCHING

- INTERMEDIATES SPECIALIZATION

- KNOWLEDGE SPILLOVERS

AGGLOMERATION THEORY EXPECTS PRODUCTIVITY INCREASING WITH DENSITY

MICROFOUNDATION OF DYNAMICS – INNOVATION AND EXPERIMENTATION
NEW ECONOMIC GEOGRAPHY

IMPROVED UNDERSTANDING OF SPACE

ECONOMIES OF SCALE AND IMPERFECT COMPETITION

MARKET SIZE GENERATES CONCENTRATION

TRADE BARRIERS LEAD TO DECONCENTRATION
EQUILIBRIUM MECHANISMS (ROSEN-ROBACK MODEL)

INMIGRATION MOTIVATED BY INCOME AND AMENITIES, HELD BACK BY CONGESTION COSTS AND CAPITALIZATION

WAGES BALANCED BY HOUSING/ LAND PRICES IN CITIES

MIGRATION EQUILIBRIUM CONSTRAINS SPATIAL INCOME DIFFERENCES
NEOCLASSICAL CONVERGENCE IN THE BACKGROUND

ASSUMES DECLINING MARGINAL PRODUCTIVITIES OF LABOR AND CAPITAL

CAPITAL DOES NOT FLOW TO PERIPHERY

LABOR FLOWS TO CITIES, SUPPLY EFFECT HOLDS BACK WAGES
INCOME DIVERGENCE?

STYLIZED FACT:
HIGH NOMINAL INCOME (WAGE) LEVEL IN CITIES
INDICATION OF STRONG AGGLOMERATION EFFECTS

HIGH EDUCATION LEVEL IN CITIES, EDUCATION RATHER THAN AGGLOMERATION?

CITIES ARE BASED ON LOCAL RESOURCES, INCOME LEVEL REFLECTS THE INITIAL COMPARATIVE ADVANTAGE?
AGGLOMERATION EMPIRICS:

EMPIRICAL SUPPORT FOR POSITIVE AGGLOMERATION ECONOMIES, BUT EDUCATION MORE IMPORTANT

FRENCH STUDY (COMBES, DURANTON, GOBILLON ET AL.):
DOUBLING DENSITY GIVES 2% PRODUCTIVITY, ASSOCIATED SKILL ALSO 2%, ENDOGENOUS SKILL ANOTHER 1%, SUM UP TO 5%
WHAT ABOUT DYNAMICS?

NORWAY 1972-2008, 400 LOC GOVS, 89 LABOR MARKET REGIONS, NOMINAL INCOME BASED ON TAX DATA (RESEARCH WITH H.E. STOKKE)

PERIOD OF URBANIZATION AND CONCENTRATION OF ECONOMIC ACTIVITY

EXPECT MIGRATION GENERATED INCOME DIVERGENCE
BUT DATA SAY INCOME CONVERGENCE

Kernel density estimates, 1972 vs. 2008

Density of municipalities

Income per capita relative to the average across municipalities

- 1972
- 2008
METHODOLOGICAL CHALLENGE: LONG TERM ENDOGENOUS INTERACTION OF POPULATION AND INCOME

DISTRIBUTION ANALYSIS MARKOV CHAINS
- ARE PATTERNS OF DATA CONSISTENT WITH LARGE AGGLOMERATION EFFECTS?

MUST OBSERVE INCOME GROWTH IN GROWING CITIES
SEPARATE REGIONS INTO INCOME GROUPS, LOOK AT TRANSITIONS BETWEEN INCOME GROUPS, ARE TRANSITIONS RELATED TO MIGRATION?

NO RELATIONSHIP BETWEEN INMIGRATION RATES AND UPWARD INCOME GROUP TRANSITIONS

CHECKING FOR EDUCATION, NO RELATIONSHIP BETWEEN INCREASED EDUCATION AND UPWARD INCOME GROUP TRANSITIONS
WHY?

‘LOW’ URBAN INCOME GROWTH
CONSUMPTION SERVICES HAVE EXPANDED, LIMITED AGGLOMERATION EFFECTS

‘HIGH’ RURAL INCOME GROWTH

- RESOURCE BASED (OIL, WATERFALL, SALMON FARMING, MARINE)

- PUBLIC SECTOR EXPANSION WITH NATION WIDE WAGE LEVEL
EUROPEAN REGIONS

STRONG URBANIZATION, PERSISTENCE OF INCOME DISPARITIES

NO STRONG INCOME CONVERGENCE/ DIVERGENCE

INCOME CONVERGENCE ACROSS EUROPEAN COUNTRIES
HETEROGENEITY:
WHAT TYPE OF CITY?

PRODUCER CITIES -
DRIVEN BY FIRM LOCATION
AND EXPANSION

SMART CITIES, KNOWLEDGE
INTENSIVE SERVICES
- HELSINKI, DUBLIN,
TOULOUSE

BUT ALSO CITY STAGNATION
WITH DECLINING
MANUFACTURING INDUSTRIES
- TORINO, GLASGOW, SEVILLE
CONSUMER CITIES - DRIVEN BY HOUSEHOLD CONSUMER ATTRACTIONS, CULTURE, AMENITIES, EDUCATION

OFTEN YOUNG PEOPLE AND INSTITUTIONS OF HIGHER LEARNING, ALSO ARCHITECHTURAL BEAUTY AND GEOGRAPHIC LOCATION

IN PRACTICE COMBINATION OF PRODUCER AND CONSUMER CITIES SUCH AS RENNES?
POLICY

LOCAL PLACE-MAKING POLICY OR NOT?
GLAESER-ROMER-DEBATE (BPEA, 2008)

GLAESER – HARD TO PICK LOCATIONS

ROMER – MISSING MARKETS, GOVERNMENT MUST ARRANGE INFRASTRUCTURE AND REGULATION
STRONG INCENTIVES FOR LOCAL POLICY/ GOVERNMENT

GOOD EQUILIBRIUM: SUCCESSFUL URBANIZATION, HIGH INCOME
BAD EQUILIBRIUM: LOST URBANIZATION, LOW PRODUCTIVITY

POLICY IMPORTANT WITH MULTIPLE EQUILIBRIA, ‘SMALL’ POLICY CAN GIVE SHIFT TO GOOD EQUILIBRIUM
LOCATION BASED POLICIES ARE BIG

POLICIES TO SHIFT RESOURCES IN SPACE, US NUMBERS (THOMAS, 2000)

STATE-LOCAL GOV 30-40 BILL $ FEDERAL GOV 8-12 BILL $

US BIDDING FOR FIRMS, 100,000 $ PER JOB IN AUTO INDUSTRY
POLICY COMPETITION

COUNTRIES COMPETING FOR FDI, REGIONS COMPETING FOR FIRMS

GOOD POLICY COMPETITION – BUILD INFRASTRUCTURE, PUBLIC SERVICES, VALUE CREATION

BAD POLICY COMPETITION – LOCAL SUBSIDIES AND FAVORITISM, ZERO SUM GAME
MARKET-PRESERVING FEDERALISM (WEINGAST)

ASSUMING CENTRAL GOVERNMENT ‘POLICE THE COMMON MARKET’ TO AVOID BAD POLICY COMPETITION

EU REGULATES TO AVOID PROTECTIONISM AND MARKET DOMINANCE

CENTRAL GOVERNMENT REGULATION OF LOCAL POLICY COMPETITION
ALTERNATIVE APPROACH:

WHAT ARE THE CONDITIONS FOR MARKET-PRESERVING POLICY COMPETITION?

DESIGN / CONSTITUTION OF DECENTRALIZED GOVERNMENT TO AVOID MARKET-PERVERTING COMPETITION

KEY ISSUES:
POLICY ACCOUNTABILITY
FINANCIAL RESPONSIBILITY
ECONOMIC IMPLICATIONS

HOW DOES THE POLITICAL COMPETITION AFFECT CITY STRUCTURE?

IS CITY STRUCTURE IMPORTANT FOR OVERALL ECONOMIC GROWTH?
(PARIS PRIMACY TO THE ADVANTAGE OF FRANCE?)

HAS THE COMPETITION IMPORTANT EFFECTS FOR RESOURCE ALLOCATION?
POLITICS

POLICY COMPETITION MEANS POLITICS OF GEOGRAPHY

REGION AGAINST REGION, COMPETITION FOR RESOURCES

REGIONS AGAINST NATIONAL GOVERNMENT, GEOGRAPHIC REDISTRIBUTION

HOW DO REGIONS PLAY OUT AT NATIONAL LEVEL?

ALLIANCES, UNIVERSALISM
LOCAL POLITICS IS FORMED BY COMPETITION

CITY GROWTH GENERATES CLUSTER RENTS TO CAPTURE, MAY STRENGTHEN LEVIATHAN

ATTRACTION LOCATIONS ALLOW FOR PUBLIC SECTOR RENT EXTRACTION

HIGHER PUBLIC WAGES IN GOOD CLIMATE LOCATIONS IN US (BRUECKNER AND NEUMARK)
DISTRIBUTIONAL EFFECTS

WHO ARE THE WINNERS OF CITY GROWTH:
CAPITALIZATION INTO LAND/HOUSING PRICES

REGIONAL DEVELOPMENT POLICY MAY HAVE LIMITED EFFECT FOR THE POOR, BUT IS IMPORTANT FOR LAND OWNERSHIP
BIG PICTURE

LONG PERIOD OF STRONG URBANIZATION (AND INCREASED EDUCATION) IN EUROPE

OPTIMISTIC THEORY PREDICTS STRONG GROWTH EFFECTS OF URBANIZATION (AND EDUCATION)

WHILE PRODUCTIVITY AND INCOME GROWTH HAVE BEEN STAGNATING
POSSIBLE EXPLANATIONS:
LIMITED AGGLOMERATION
(AND EDUCATION) EFFECTS

INEFFICIENT URBANIZATION
DUE TO

- MARKET FORCES DON’T
  EXPLOIT EXTERNALITIES

- MARKET-PERVERTING
  (LOCAL) POLICY

TOO MUCH POLICY,
TOO LITTLE EFFECT?
A few favorite references

Introductions/ overviews/ mechanisms


E. Glaeser (2008), Cities, Agglomeration, and Spatial Equilibrium, Oxford University Press


Urban growth


Empirical


Rattsø, J. and H. Stokke (2011a), Migration and dynamic agglomeration economies: Regional growth in Norway, mimeo, Department of Economics, Norwegian University of Science and Technology.

Policy


Combes, P-P. (2010), The empirics of economic geography: How to draw policy implications, Document de Travail no 2010-41, GREQAM.


Appendix for friends of Germany

(after discussion at the conference)

In 1800 the population of Berlin was 172,000, Hamburg 117,000. At this time London was dominating in Europe with 861,000, ahead of Paris 547,000. (Source: Brian Berry, Urbanization, in B.L. Turner et al. (eds), The Earth as Transformed by Human Action, Cambridge University Press, 1990; based on the ‘Chandler-data’.)

According to the recent OECD data I presented for metropolitan areas Berlin has 6 mill, Hamburg 4,6 mill, and Munich 6,1 mill. Polycentric metropolitan areas include Rhein Nord (Dusseldorf-Neuss), Rhein Sud (Cologne-Bonn) and Ruhr Area (Essen-Bochum-Dortmund) all have about 13,4 mill. (Source: OECD Cities in the Global Economy, OECD Territorial Reviews, 2006, Table 1.1.)

The different history and city structure of Germany, France and Italy (and others) certainly is worth further contemplation.