

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 CONDUCTIVE
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%**

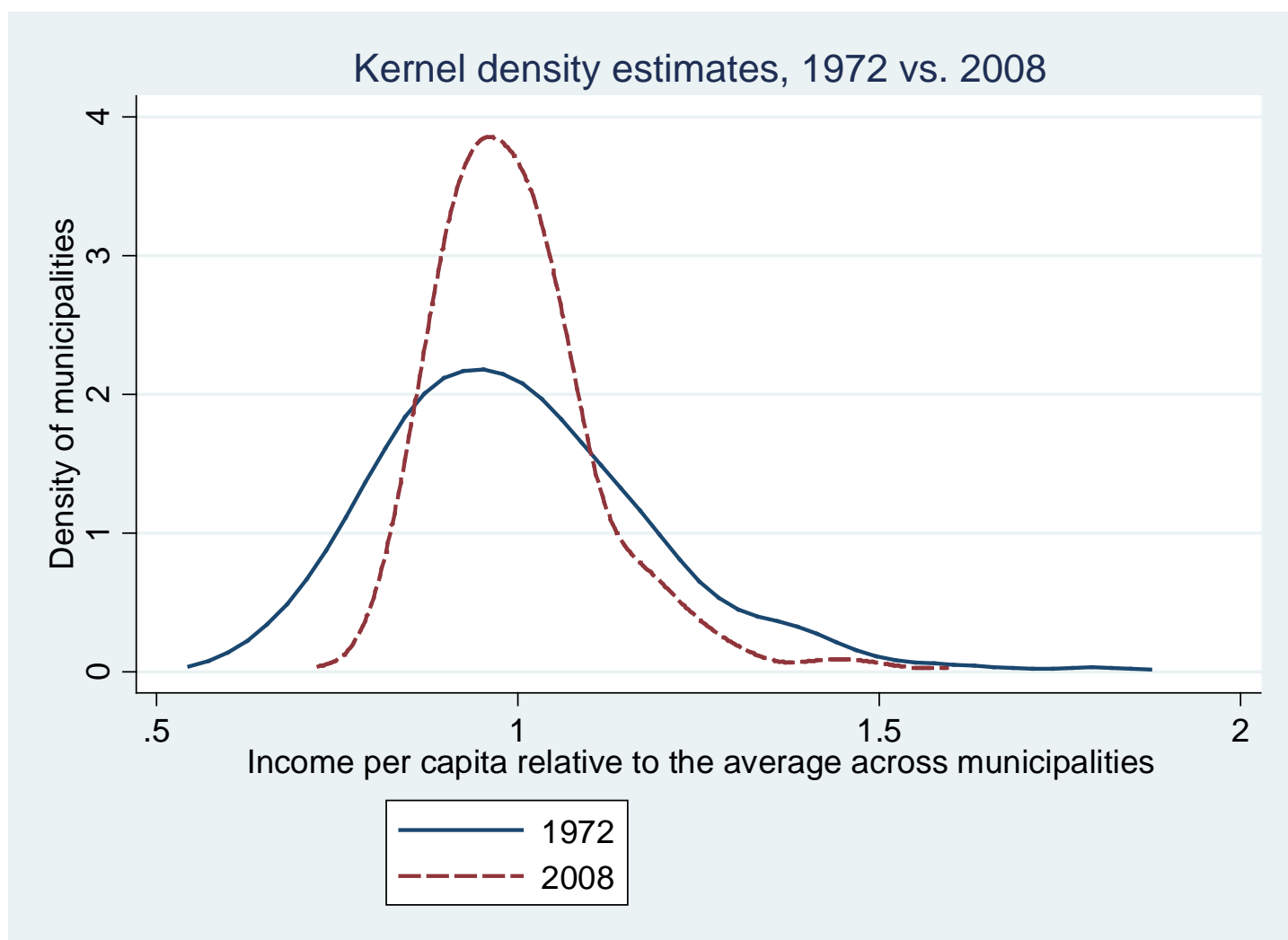
WHAT ABOUT DYNAMICS?

**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



**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
ARCHITECTURAL 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**

**ATTRACTIVE 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

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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.