

Creative Class and Regional Growth – Empirical Evidence from Seven European countries

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Structure of lecture

- theory of Richard Florida
- size of the creative class
- spatial pattern of the creative class
- what attracts the creative class?
- impact of the creative class on regional growth

Data collection

- Data on creative class and regional characteristics in eight European countries for NUTS 3 regions or labor market areas (503 regions): Denmark, Finland, Germany, Netherlands, Norway, Sweden and England/Wales
- Data collected in project “Technology, Talent and Tolerance in European Cities: A Comparative Analysis” (supervised by prof. Bjorn Asheim and prof. Meric Gertler)
- Dutch team: Irina van Aalst, Oedzge Atzema, Ron Boschma, Fleur Heinz and Frank van Oort

Creative class, urban climate and regional growth

- Not every region well endowed with creative class
- Urban climate of tolerance and openness: “ the openness, inclusiveness and diversity to all ethnicities, races and walks of life” (Florida, 2002)
- People’s climate (not business climate) retains and attracts creative class
- Creative class driver of urban and regional growth: employment growth, high tech and start-up rates
- Jobs will follow people, instead of people following jobs
- Glaeser’s critique: human capital, not creative capital
- No role for local knowledge spillovers: regions with a high share of creative class do not make the creative class more productive and innovative

Definitions (1)

- Based on professions, not sectors (high-tech or creative industries)
- Drawbacks: problematic to define who is creative (and who is not), bias towards highly educated, measurement problems
- Creative core: occupations in Research & Development and higher education
- Creative professionals: occupations in education, management, health care
- Creative class A: creative core + creative professionals
- Bohemians: cultural and artistic occupations
- Creative class B: creative class A + bohemians

Definitions (2)

- definition of creative class according to Florida (2002, p. 328)

1. Super creative core

- Computer and mathematical occupations
- Architecture and engineering occupations
- Life, physical and social occupations
- Education, training, and library occupations
- Arts, designs, entertainment, sports and media occupations (occupations in arts, design and for a part in entertainment are the so-called bohemians, which are described below)

2. Bohemians

- Decorators and comm. designers
- Musicians, sculptors, singers, photographers
- Actors, authors and other writers, choreographer
- Painters and figurative artists, dancers, conductors, directors, composers

3. Creative professionals

- Management occupations
- Business and financial operations occupations
- Legal occupations
- Healthcare practitioners and technical occupations
- High-end sales and sales management

Definitions (2)

- ISCO categories: use of national sources to measure selected professions at the NUTS 3 level
- creative class (B): 26,065,907 workers (38 per cent of total work force) in 7 European countries

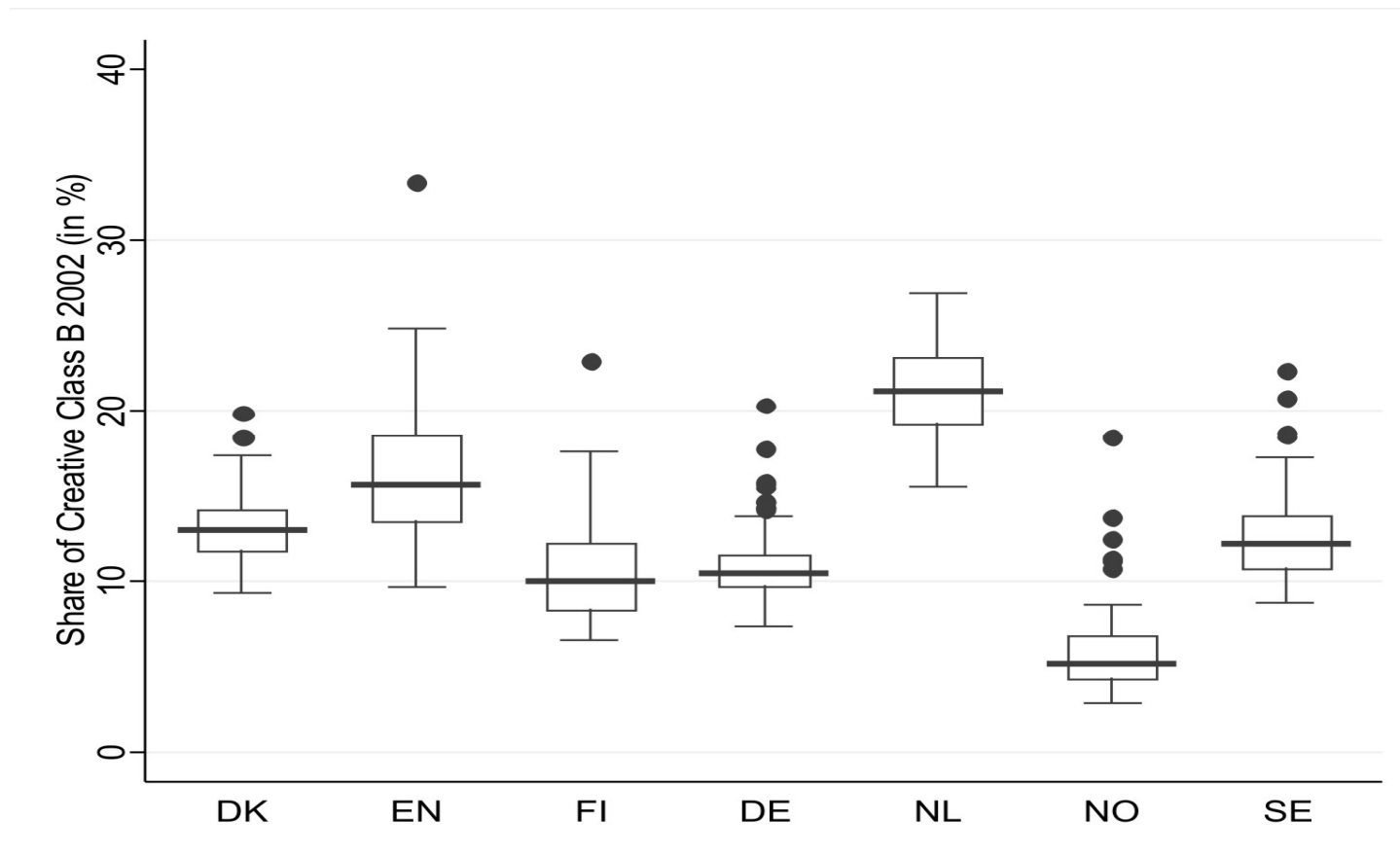
of which:

- creative core (26.0%)
- creative professionals (69.7%)
- bohemians (4.2%)

Gini coefficients of spatial concentration of population and employment 2002

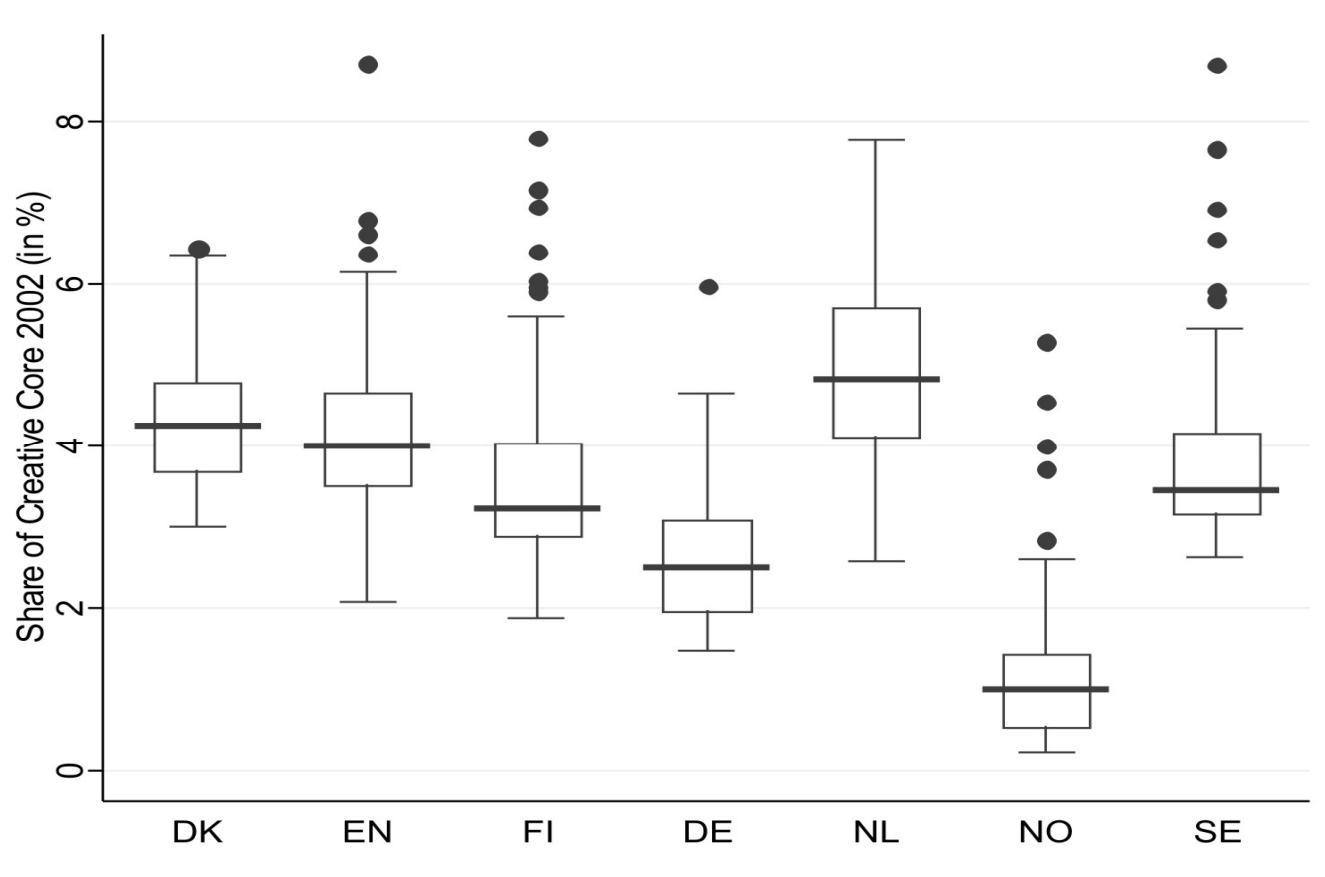
Population	0.5904
Private sector employment	0.5919
Creative core	0.6328
Creative professionals	0.6250
Creative class A	0.6257
Bohemians	0.7179
Creative class B	0.6291
Employees with bachelor or masters degree	0.6872
Employees in high-tech industries	0.6913

Spatial distribution of the creative class (creative class B) as share in total population by country in 2002



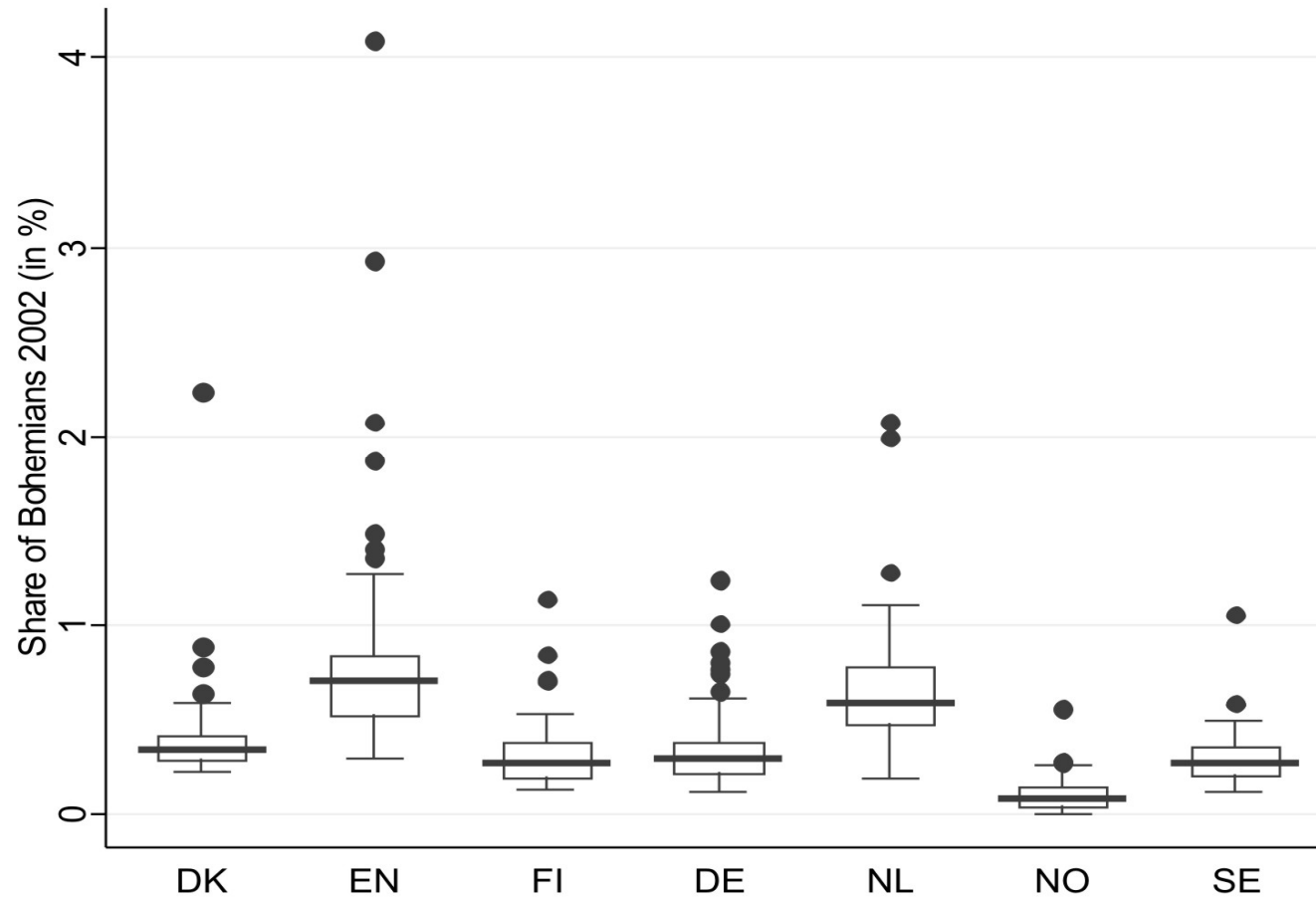
DK: Denmark, EN: England and Wales, FI: Finland, DE: Germany,
NL: The Netherlands, NO: Norway, SE: Sweden

Spatial distribution of the creative class (creative core) as share in total population by country in 2002



DK: Denmark, EN: England and Wales, FI: Finland, DE: Germany,
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Spatial distribution of the creative class (bohemians) as share in total population by country in 2002



DK: Denmark, EN: England and Wales, FI: Finland, DE: Germany,
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What „explains“ creative population ?

– Estimation approach and variables

- Cross section regressions on the level of NUTS-3 regions or labor market areas (503 regions) for creativity indices in year 2002
- We calculated regressions for each country separately, to account for country-specific effects (different definitions, data generating procedures)
- Independent variables:
 - a. *Urbanization economies*: population density (+)
 - b. *Regional culture*:
 - Bohemian index: share of bohemians in population (+)
 - Openness index: share of foreign born population (+)
 - c. *Regional facilities*:
 - Public provision index: share of population working in public health care and public education (0)
 - Cultural opportunity index: share of population working in cultural and recreational industries (+)
 - d. *Job opportunities*: employment growth rate previous ten years (+)

The impact of creativity on regional growth

– Estimation approach and variables

- Cross section regressions on the level of NUTS-3 regions for two countries: Germany and the Netherlands (133 regions)
- Dependent variable:
 - regional employment growth rate [%] 1996-2002
- Independent variables:
 - *Creativity*: creative class indices 1996
 - *Talent*: share of population with bachelor degree or higher [%] 1996
 - *Urbanisation*: population density 1996

The impact of creativity on regional growth 1996-2002

– Regressions for Germany and the Netherlands

Talent 1996 (ln)	6.961**	–	1.532	1.366	4.393*	3.546
Creative class A 1996 (ln)	–	19.553**	17.138**	–	–	–
Creative core 1996 (ln)	–	–	–	9.277**	–	–
Creative Professionals 1996 (ln)	–	–	–	–	10.900*	–
Bohemians 1996 (ln)	–	–	–	–	–	4.696**
Population density 1996 (ln)	-2.138**	-1.527*	-1.743*	-2.484**	-1.704*	-3.147**
R ²	0.835	0.8459	0.845	0.843	0.840	0.853
F value	167.93**	182.08**	145.02**	142.96**	139.18**	154.25**

Additional analyses

- effect of talent and creative class on new business formation: the case of Germany, Norway and Sweden (240 regions)
 - significant positive correlation between talent, creative class and start-up rates (especially in high-tech industries) at the regional level in the 3 European countries in 2002: creative class effect and talent effect equally strong
- effect of talent and creative class on innovation (patent activity): the case of Germany
 - significant positive correlation between talent, creative class and patent intensity at the regional level in Germany: talent effect stronger than creative class effect (and lacking for Bohemians)

Summary and conclusion

- The average share of creative population is quite similar in the European countries of the sample
- Regional differences *within* the countries are considerably more pronounced than differences *between* the countries. Highest degree of spatial dispersion is found for bohemians.
- Highest impact on share of creative class: regional climate of tolerance/openness and regional employment opportunities (and not public facilities)
- There is a pronounced positive relationship between high share of creative population and employment growth and new firm formation at the regional level
- Being creative matters more than being educated

Thank you for your attention!
