



Measurement Approaches of the Competitiveness of City Regions

Sarolta Noémi Horváth
Ph.D. student

University of Szeged
Faculty of Economics and Business Administration
Doctoral School of Economics
HUNGARY



National Development Agency
www.ujszechenyierv.gov.hu
06 40 638 638



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Justification of the topic

Keywords: “city-region”, urban development, competitiveness, measurement approaches

Globalization → transforming social-economic procedures → **localization level:**



Relative importance of national economy decreases, **regions** and **cities** have **growing economic roles**.

Differences in the economical development →

Elaboration of analysing methods →

Comparing and measuring of the competitiveness of city-regions →

Elaboration of strategical steps based on their competitive advantages

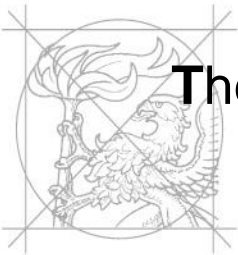


Definition of city-region

According to OECD and European Commission, a city-region is:

- **It** consists of one or more municipalities.
- **At** least half of the city residents live in an urban centre.
- **An** urban centre has at least 50,000 inhabitants.
- **If** 15% of employed people living in one city work in another city, these cities are handled as a single city.
- **All** municipalities with at least 15% of their employed residents working in a city are identified.
- **Municipalities** sharing at least 50% of their border with the functional area are included.

The Larger Urban Zone consists of the city and its commuting zone.



Measurement of the competitiveness of city-regions

- **M**any definitions of the term
- **P**arkinson (2003):



Urban competitiveness is the ability of an economy to attract and maintain firms with stable or rising market shares in an activity, while maintaining stable or increasing standards of living for those who participate in it. The competitiveness of cities is not just about the income of firms but also about how that income goes to residents. And competitiveness is different from competition. Competition can be a zero-sum game, in which if one city wins another loses. By contrast cities can all increase their competitiveness at the same time, so that all cities and the national economy can simultaneously grow and benefit.

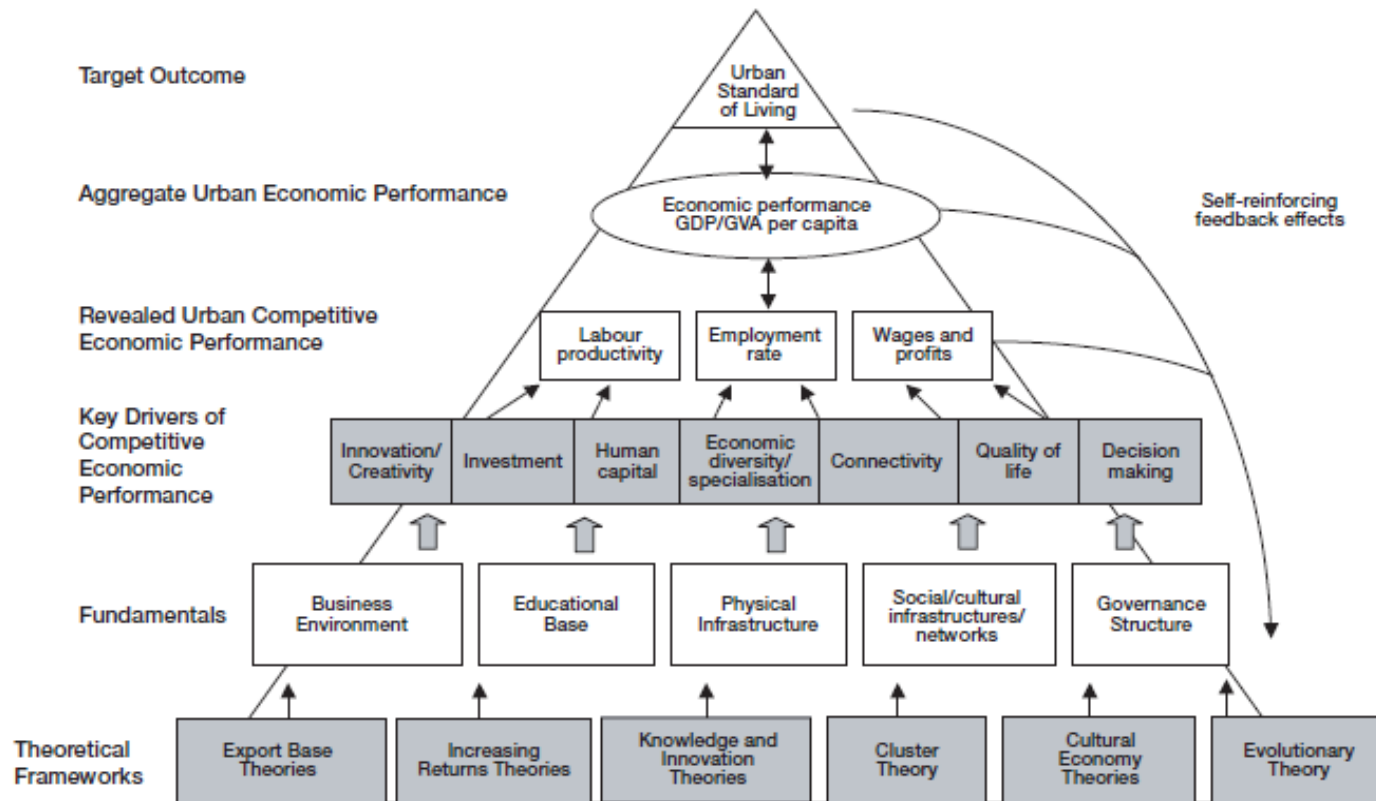


Measurement methods

Lengyel's pyramid model about succesful regions

➤ **Based on this logic Parkinson's model:**

Conceptualising Urban Competitive Performance



- **BHI: Beacon Hill Institute** / since 2001, every year /
50 states of the United States and 48 metropolitan regions
(order of rank)
- **OECD: Organisation for Economic Co-operation and Development**
/2006/
Report studies the 78 largest metro-regions (1,5 million inhabitants)
- **GUCR: Global Urban Competitiveness Report** / since 2004, every
year /
Empirical studies → competitiveness of 500 cities
- **Simmie-Carpenter** /2008/
Evolutionary economic and endogenous growth theory →
explain competitiveness
- **Parkinson** /2003/ (previous slide)
- **Urban Audit** /1998/
EU urban areas



Index Denomination	BHI (2011)	OECD (2006)	GUCR (2010)	Simmie – Carpenter (2008)	Parkinson (2003)	Urban audit (2004)
<i>Governmental and Fiscal Indices</i>						
GDP (total, per capita, per km ²)	+	+	+	+	+	+
Increase of productivity	+	+	+	+	+	+
<i>Safety</i>						
Number of crimes per 100.000 inhabitants	+	+	+			+
<i>Infrastructure</i>						
Number of air passengers per inhabitants	+		+		+	+
Transport, connections, average commuting time, tourism	+				+	+
Households, average rental of a flat/office	+		+			+
<i>Human Resource</i>						
Rate of population growth, gender balance	+	+	+			+
Proportion of ISCED 5-6 degree in the population above 25 years old (%)	+		+	+	+	+
Unemployment rate (%)	+	+	+	+	+	+
Number of students in higher education per 1000 inhabitants	+				+	+
Postnatal mortality per 1000 births, life expectancy	+		+			+
<i>Technology</i>						
Innovation, number of patents per 100.000 inhabitants	+	+	+	+	+	
<i>Business Incubation</i>						
Number of firm establishment per 100.000 inhabitants, bankrupts	+	+			+	+
<i>Openness</i>						
Per capita domestic/foreign direct investment (R&D)	+		+	+	+	
Nationalities, proportion of population born abroad (%)	+	+	+			+
<i>Environmental Policy</i>						
Waste management, energy use, emission of greenhouse gases (million ton carbon equivalent/1000 km ²)	+		+		+	+

Source: own construction

Settlement particularities in Hungary

- Special space structure due to geographical changes in the twentieth century
- Therefore no core cities, no larger urban zones
- 23 municipal towns; 3154 middle-sized and small towns and settlements
- More than 50.000 inhabitants: urban centre

Table 2 The distribution of Hungarian cities in terms of their size

	S (50.000- 100.000)	M (100.000- 250.000)	L (250.000- 500.000)	XL (500.000- 1.000.000)	XXL (1.000.000- 5.000.000)	Global city (5000.000- ...)	All cities	Commuting zone	Larger urban zone
	Number of cities according to the size of their urban centre:								
	Cities by urban centre size in population								
	Hungary	5	4	0	0	1			
EU	410	261	71	38	24	2			
	Share of population per country per city size and commuting zone, 2006:								
Hungary	5,3	6,9	0	0	16,8	0	29	20	49
EU	7,6	9,4	5,1	5,7	9,6	2,8	40	22	62

Source: own construction based on Dijkstra- Poelman (2012)



Figure 2: Agglomerations, Agglomerating regions and Settlement-groups in Hungary



Source: HCSO – Internet 1

Types of micro-regions /specific development phases/

(Lengyel-Szakálné Kanó):

- **Budapest and micro-regions around it**
urbanization advantages, many firms and employees
- **Manufacturing micro-regions**
significant export performance, labour productivity is low, foreign-owned companies
- **University towns**
excellent human capital
- **Stagnated urban micro-regions**
surrounded by rural settlements with low-level economic performance





Summary

- City-regions increasing importance → pressure on national economy
- Globalization- localization → competition among cities → some cities develop others decline
- Competitiveness among cities is analysed from different perspectives
- City-region is competitive if → policies and conditions that ensure high level of GDP per capita and its continued growth → attract and incubate new businesses, provide the growth of existing firms
- In Hungary → measuring the competitiveness of urban micro-regions



Thank you for the attention!

E-mail: horvath.saci.noemi@gmail.com



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