

## FROM COMPETITIVENESS OF ENTERPRISES TO COMPETITIVENESS OF CITIES – A THEORETICAL REVIEW

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**Purpose:** The aim of this paper is to present international studies concerning competitiveness, focusing on competitiveness of cities.

**Design/methodology/approach:** First a review of literature is provided referring to multifaceted definitions of competitiveness. Next selected approaches to city competitiveness are presented. Methods applied to measure city competitiveness are described, while examples of studies on city competitiveness both on the international and national scale are given. The article did not impose any restrictions regarding the time or territorial scope of scientific literature.

**Findings:** Rankings provide cities with a certain potential for promotion and marketing among similar entities. They need to be considered a key tool for the understanding of processes related to urban transformation. Quantitative studies concerning city competitiveness are not only attempts to identify the competitive position, but rather they represent the need for continuous identification and utilization of the competitive potential of cities.

**Originality/value:** The findings serve as both a theoretical resource for researchers. The research examples indicated can serve as a point of reference for competitiveness indices being developed at national and international level.

**Keywords:** competitiveness, city competitiveness, cities, measurement of competitiveness.

**Category of the paper:** Literature review.

### 1. Introduction

Competitiveness is a problem extensively discussed in terms of both theoretical and empirical aspects. It is considered to be a multifaceted phenomenon in view of the scope of its implications. Due to global changes and the evaluation of the approach to competitiveness it is now discussed not only when referring to enterprises or specific branches of the economy, but also to territorial units at varying aggregation levels such as regions, cities or rural areas.

It is generally acknowledged that the early 1900s mark the beginnings of research on competitiveness. At that time in the USA studies on enterprises were initiated to compare their economic standing, with competitiveness being associated with the maintenance of efficiency (Borowiecki, Siuta-Tokarska, 2015; Lee, Karpova, 2018). The 1980s was the period when competitiveness gained popularity in the context of territorial units (Podlińska, 2015; Ketels, 2016; Martin, Simmie, 2008). At that time competitiveness started to be investigated in the context of individual countries (as the capability to maintain prosperity), while since the late 1980s interest in competitiveness was extended to the scale of regional economy.

They review available research on competitiveness using available domestic and foreign literature. The literature review was conducted without any time constraints. The outline of the article is as follows. The initial section provides a theoretical overview of the matter of competitiveness, taking into account the various levels of competitiveness. The next section focuses on territorial competitiveness, particularly urban competitiveness. Furthermore, a review of research into the competitiveness of cities in different countries is provided.

## **2. Literature review**

### **2.1. From competitiveness of enterprises to competitiveness of cities – theoretical connotations**

Interest in the problem of competitiveness may be originally ascribed to Krugman and Porter, who initially referred to competitiveness of enterprises. The definitions presented by those authors showed differing approaches to competitiveness. Krugman stressed that competitiveness is an attribute, which may be associated only with firms and it is determined by microeconomic factors. Criticism of competitiveness in reference to countries resulted from the incompatibility of assessment of the competitive position or conditions affecting competitiveness of a national economy (Zielenkiewicz, 2016; González Catalán, 2021). In turn, Krugman claimed that competitiveness takes the form of a dangerous obsession disseminated in the analysis of socio-economic phenomena in reference to territorial phenomena (Krugman, 1994). In the opinion of Krugman, countries and firms do not compete in the same manner. This was supported by an argument that an uncompetitive firm is eliminated from the market, whereas in the case of an uncompetitive country this is not the case (González Catalán, 2021). In turn, a different approach was presented by Porter, who acknowledged the importance of the territory and the socio-economic environment as significant conditions of competitiveness in the case of enterprises (Begg, 1999; Kresl, 2013; Vegara, 2016), thus indicating that the environment in the form of local authorities or the local community influences improved outputs of firms. In turn, he justified competitiveness of national economies by the fact that since the competitive advantage of an enterprise from one country is evident when compared

to a firm from another country, it needs to be determined what results from the fact that in a given country it is easier to run economic activity, leading to a level constituting competitive advantage (Porter, 1990; Frączek, 2009). Porter and Krugman agreed that productivity may be considered as a factor generating the standard of living for local inhabitants (González, Catalán, 2021).

Since the evolution of research on competitiveness from the point of view of various aspects of economic life has led to its categorization, in scientific literature on the subject various scales have been distinguished, within which this problem was systematized (Borowiecki, Siuta-Tokarska, 2015):

- meta (the level of the future),
- mega (the level of international economies),
- macro (the national economy),
- meso (the level of industries, branches, sectors of the economy, regions),
- micro (the level of enterprises),
- micro-micro (the level of goods and services).

Competitiveness of cities is included in the meso level, which comprises competitiveness of various territorial systems. Due to the multifaceted character of competitiveness this phenomenon does not have one precise definition. Thus, Table 1 presents a synthesis of individual concepts together with the competitive perspectives.

**Table 1.**  
*Selected definitions of competitiveness*

Level of competitiveness	Definition	Authors
micro, meso, macro, mega	„... the ability of companies, industries, regions, nations or supranational regions to generate, while being and remaining exposed to international competition, relatively high factor income and factor employment levels on a sustainable basis”	Hatzichronoglou (1996, p. 20) (OECD definition)
	„the capability of enterprises, industries, nations or supra-national regions to permanently establish relatively high factor earnings and relatively high employment level while being exposed to global competition”	Martus (2013, p. 128) after Lukovics (2008, p. 8)
macro, mega	„an internationally competitive economy is such an economy, which when faced with free trade conditions and free flow of production inputs (particularly capital) is capable of relatively fast growth and long-term development”	Radło (2008, p. 78)
meso, macro, mega	„the degree, to which a region under free competition conditions is capable of producing goods and services, which are attractive to buyers on international markets, while simultaneously increasing prosperity for its inhabitants”	Łaźniewska et al. (2012, p. 28)
macro	„the ability to sell enough products and services (to fulfill an external constraint); at factor incomes in line with the (current and changing) aspiration level of the country; and at macroconditions of the economic, environmental, social system seen as satisfactory by the people”	Aiginger (1998, p. 164)

Cont. table 1.

macro, meso	„a set of institutions, policies and factors that determine the level of productivity of a country”	Szwab, Porter (2007)
	„the expected level of efficiency per person in the working age population, considering the overall quality of the country as a place of business”	Delgado et al. (2012, p.7)
	„an economy’s ability to achieve a high standard of living through the combination of income growth and qualitative change (new technologies, social and ecological transformation, etc.)	Peneder, Rammer (2018, p. 208)
	„the capacity to offer an attractive and sustainable living and work environment for firms and inhabitants”	Dijkstra et al. (2011, p. 4)
meso	„refers to the presence of conditions that enable firms to compete in their chosen markets and that enable the value these firms generate to be captured within a particular region”	Huggins et al. (2013, p. 156)

Source: the author’s study.

Definitions given by Hatzichronoglou (1996), Lukovics (2008) or Radło (2008) present a consistent approach fitting for many levels of competitiveness, such as e.g. regions or transnational regions. They indicate an increase in productivity and enhanced capital levels. These definitions are attempts at providing a synthesis for the concept, its generalization to encompass various levels of competitiveness. Both countries, regions and smaller territorial systems strive to increase prosperity of their populations by improving the economic sphere. This process occurs in different scales at various competitive perspectives.

As a rule, competitiveness is a set of mutual relationships between distinguished levels. International competitiveness may be referred to the national economy, by comparing the economy of a given country to the global economy. It is also a characteristic, which may be attributed to enterprises. In this context it refers to relations between micro and small enterprises and the national economy. Such connections are developed when an enterprise has generated an increase in its value, at the same time becoming a competitive entity (Józefowicz, 2024). Thus it may be stated that lower aggregation levels for competitiveness (regions, cities and other territorial units) provide better understanding and improvement of competitiveness at higher levels (macro competitiveness).

As it was stated e.g. by Komasi et al. (2023), Saygin (2023), or Hu (2015), initially researchers focused on the economic aspect of competitiveness; however, with time other aspects of competitiveness have gained recognition, such as the society, culture or the environment. It was recognized that regional competitiveness (and not only that) is best measured in terms of advantages of the business environment (Malecki, 2007).

In recent years degradation of the natural environment and climate change have become a significant problem. This has resulted in an evolution of this concept, with its redefinition including also environmental issues. This has extended outside the economic prosperity of the population and incorporated current directions related to improved quality of life for the inhabitants.

An important contribution to the creation of competitiveness at various levels has been associated with digitalization, which was analyzed in their studies e.g. by Dabbous et al. (2023). It results from their findings that the digital transformation plays a key role in attaining sustainable competitiveness and development.

Another approach is manifested at the level of meso competitiveness, and thus the reference of competitiveness to smaller spatial systems (regions, counties, cities, communes). As a consequence the framework of competitiveness has been expanded and territorial competitiveness has been distinguished, within which it is assumed that territorial units (similarly as enterprises) compete with one another to maximize profits and ensure economic growth. In the context of territorial units the attained profit, or rather the principal benefit, is related to an improved quality of life, while economic growth is generated through actions attracting investors, providing skilled labor force or creating an innovative environment, thus ensuring the expected desirable outcomes (Brenner, Wachsmuth, 2012).

As it was stated at the beginning of this chapter, competitiveness in the territorial perspective since the 1980s has been considered a primary problem in the context of local economic development (Krakowiak-Bal, 2019; Brenner, Wachsmuth, 2012). In the theoretical context, territorial competitiveness is directly associated with the concept of meso competitiveness and it is “the capacity of a town or region to generate high and growing income and improvement of living conditions for their inhabitants” (Mitrică et al., 2021, p. 2). Territorial competitiveness is a component of competitiveness at a higher aggregation level (e.g. competitiveness at the macro level), while it is modified also by competitiveness at a lower aggregation level (competitiveness at the micro level) (Józefowicz, 2024). City competitiveness gained popularity in the wake of the World Economic Forum in 1979, when “the best practices and conclusions drawn for the national competitiveness councils” were presented (Abusada, Elshater, 2021).

At present competitiveness in the context of cities is a natural phenomenon, modified by globalization, information technologies and structural transformations (Martin, 2005; Metaxas, 2010). Cities have been competing with one another since they were first established; however, the scope and dimensions of this competition have also been changing. Thus the concepts of city competitiveness have also evolved in response to the identified and emphasized changes (table 2).

**Table 2.**

*Selected definitions of city competitiveness*

<b>Definitions of urban/city competitiveness</b>	<b>Authors</b>
„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”	Storper (1997)
„the capacity of a city to utilize or create a comparative advantage, and thus to generate high and sustainable economic growth in relation to its competitors”	D'Arcy, Keogh (1999)

Cont. table 2.

„ability of an urban region to produce and market a set of products (goods and services) that represent good value (not necessarily lowest price) in relation to comparable products of other urban regions”	Webster, Muller (2000)
“the capacity of a city to attract resources, manufacture products and services, control the market, effectively generate wealth and the ability to ensure prosperity to its inhabitants in the process of competition and development compared to other rivals”	Pengfei, Qinghu (2006)
„ability of city population to maintain competitive position within a specific area (market) of competition among other cities of similar type and pursuing similar aims by conserving resources and improving wellbeing of city members by management of factors of external and internal environment”	Sinkiene (2009)
„the capacity to generate relatively high income and employment level”	Łaźniewska (2010)
„a set of factors – policies, institutions, strategies and processes – that determines the level of sustainable productivity of a city, where sustainability encompasses economic, environmental and social issues”	McKinsey Global Institute (2012)
„ability to attract capital, business, talents and visitors”	Economist Intelligence Unit (2012)
„ability to attract capital, businesses, talent and visitors as a holistic concept, the environment and natural hazards are considered a determining factor”	Hu (2015)
„ability of a city to optimize the allocation of resources in its subordinate large area for its own development, so as to obtain the sustainable growth of urban economy, which is created and maintained under the comprehensive action of many factors such as society, economic structure, values, culture, system and policy”	Zhao et al. (2023)

Source: the author’s study.

According to Metaxas (2010), the concept of city competitiveness should not be limited solely to enterprises operating within its area, but rather reflect the entire reality of urban economy and its capacity to function. This is because a city is not only an economic unit, but a comprehensive socio-economic system constituting the urban environment, where the sphere of economic activity is only one of its segments (Jiang, Shen, 2010). As it was indicated in an earlier part of this paper, initially the problem of competitiveness focused on the economic aspect, but eventually global changes have led to an extension of its scope. It is also manifested in the manner, in which city competitiveness is defined. City competitiveness, identified as the ability to increase productivity and economic growth, is frequently referred to in the cited definitions. It is fully justified, since this is where success, attractiveness and competitive advantage of cities (as well as other entities) is found.

A city is competitive by providing economic entities with opportunities to maximize profits, thus increasing competitiveness of firms. It is an indirect process, in which enterprises operating in a city to some extent generate the quality of life for its inhabitants. On the other hand, it is the urban policy, which while aiming at increasing attractiveness of the city, in turn enhances the quality of life for its inhabitants (Szczech-Pietkiewicz, 2013; Józefowicz, 2024).

## 2.2. City competitiveness in view of selected international and national indexes

Rankings devoted to cities first appeared in the 1970s. One of the first indexes was established by the Swiss bank, UBS. At that time it focused on 72 cities worldwide and on the purchasing capacity of their inhabitants (Szczech-Pietkiewicz, 2019). Those indexes were

primarily concerned with the evaluation of the largest cities, while smaller towns were disregarded in that research.

Such rankings, indexes and evaluations of city competitiveness are prepared by specialized firms, as well as researchers in various scientific centers. Examples of rankings provided by the former group include e.g. Benchmarking Global City Competitiveness (the Economist Intelligence Unit (EIU)), the Global Cities Index (Kearney), the Global Power City Index (Institute for Urban Strategies) and the UK Competitiveness Index (Robert Huggins Institute). These analyses comprise mainly comparisons of competitiveness for the largest cities worldwide. However, there are also examples of reports focusing on cities within a given country, such as the UK Competitiveness Index (UKCI), the India City Competitiveness Report (ICCR) or the Smart City Index in Italy. These in turn are prepared by scientists representing universities or research institutions (more on the subject in Józefowicz, 2024).

Apart from the above-mentioned examples there are also some studies, in which their authors analyze competitiveness of selected cities, typically within a given country (table 3).

**Table 3.**

*A review of selected empirical studies concerning city competitiveness*

Study	Spatial scope (country)	Area of competitiveness (number of indicators)
Sáez, Periañez (2015)	159 cities over 100 thousand inhabitants from 26 EU countries	attract investment (31)
Dönmez, Atalan (2019)	30 cities located in 15 countries worldwide	general (38)
Rosa et al. (2020)	497 cities (Brasil)	competitiveness for the PV installation (18)
Bruneckiene et al. (2010)	24 cities (Lithuania)	general (30)
Bulu (2011)	81 cities (Turkey)	human capital and life quality (14), branding capability and innovation (7), trade capability and production potential (11), accessibility (10)
Józefowicz (2024)	112 small towns (Poland)	social (23), economic (16), environmental (10), general competitiveness
Cabrero Mendoza et al. (2009)	60 cities (Mexico)	general (45)
Hu (2015)	18 cities over 100 thousand inhabitants (Australia)	general (4)
Singhal et al. (2013)	5 cities (India)	general (32)
Kresl (2012)	23 cities (USA)	general (13)
So, Shen (2004)	215 cities (China)	social (20), economic (20), environmental (5)
Zhang et al. (2021)	13 mega-city regions (China)	economic (1), population (3), infrastructural (4), international (3), scientific and technological (4), sustainable (7)
Zhao et al. (2023)	35 cities (China)	general (27)
Guo et al. (2019)	75 cities (China)	tourism (13)
Komasi et al. (2023a)	15 cities over 500 thousand inhabitants (Iran)	environmental (9)
Komasi et al. (2023b)	15 cities over 500 thousand inhabitants (Iran)	socio-cultural (12)

Source: the author's study.

City competitiveness comprises complex components, which may be generally classified to groups of social, economic and environmental factors. In most above-mentioned examples the analysis of city competitiveness focuses on the general approach to the investigated phenomenon (e.g. Bruneckiene et al., 2010; Singhal et al., 2013; Hu, 2015; Dönmez, Atalan, 2019; Zhao et al., 2023).

Investigations concerning selected cities worldwide, conducted by Dönmez and Atalan (2019), showed cities from Europe, the Far East and the USA to be most attractive for investments (e.g. Tokyo, Paris, New York).

In a study on Lithuanian cities conducted by Bruneckiene et al. (2010) it was shown that the geographical location of cities does not have a marked effect on competitiveness of cities. The group of most competitive cities included both industrial, port, university and resort towns. Moreover, a connection was observed between competitiveness of cities and regions. Cities being most competitive are located in the regions, which are also classified as the most competitive.

In turn, a study by Zhao et al. (2023) showed that results of competitiveness measurements for some Chinese cities to a certain extent correspond to the regional economic development and technological innovativeness. Beijing, Shanghai, Shenzhen and Guangzhou were considered to be the most competitive. Considered differences were observed between these key cities and the other ones included in that analysis.

In other cases studies were devoted to a selected aspect of city competitiveness (e.g. Komasi et al., 2023a; Komasi et al., 2023b; Józefowicz, 2024; Rosa et al., 2020; Guo et al., 2019; Bulu, 2011; So, Shen, 2004). Among other things, such an approach made it possible to observe that in the analyzed cities in China (So, Shen, 2004) a lesser cohesion occurred between environmental competitiveness and economic or social competitiveness. In some cities economic or social competitiveness does not necessarily ensure environmental competitiveness. In their studies those authors observed that the advantage of the most competitive cities was based on their high economic and social position.

In the investigations conducted by Józefowicz (2024) a certain regularity was found for competitiveness of small towns in Poland. The environmental aspect was a supplementation to social and economic competitiveness of those towns. Moreover, in the analyzed periods an increased social, economic and environmental integration was reported in the competitiveness of small towns.

In turn, a study by Bulu (2011) concerning Turkish cities revealed regional disparities between cities from eastern and western Turkey. Moreover, in terms of the analyzed aspects of competitiveness considerable differences were observed in the levels of the investigated phenomenon between the cities. Compared to the other cities Istanbul proves to be exceptional. The level of competitiveness for the cities ranking next was markedly lower.



Irrespective of the scale of the analyses and the entities preparing the research results, a common element consisted in the groups of factors, to which the applied indicators may be classified. Both the international and national rankings comprise indicators related to education, entrepreneurship, public health, infrastructure or culture, i.e. areas reflecting the conditions and standard of living in cities. As it was reported by Bruneckiene et al. (2010), the concepts of urban, regional and national competitiveness are closely interrelated. The same tools, methods and benchmarks as in the analysis of regional and national competitiveness may be applied to describe and analyze the concept of city competitiveness.

The analysis conducted by Rosa et al. (2020), which focuses on the aspect of competitiveness in the context of investments in solar energy in cities, represents a distinct departure from the previously mentioned research examples. Concentrating on the attractiveness and competitiveness of cities in this particular region can prove to be a valuable tool, particularly for politicians. The outcomes obtained may aid in focusing resources, such as financial aid, on areas that possess significant potential in this particular domain. The analysis carried out indicated areas with favorable locations for the use of this energy source.

It is also worth mentioning that the review of empirical studies on urban competitiveness covered scientific publications published between 2004 and 2024. Although examples of studies from the past 20 years were identified, no significant changes were observed in terms of either the spatial scope or aspects of competitiveness. Research interests focused on a general approach. In terms of territorial scope, the largest cities represent the largest area of interest regarding competitiveness within an urban context (in example Hu (2015), Shan et al. (2012)).

The significance of large cities was recognized in the studies conducted by Bulu (2011) and Józefowicz (2024). Bulu (2011) found that the largest cities were the most competitive, while Józefowicz (2024) found that small towns located near large cities often achieved high competitive positions.

As it was indicated e.g. by Komasi et al. (2022), quantitative studies concerning city competitiveness are not only attempts to identify the competitive position, but rather they represent the need for continuous identification and utilization of the competitive potential of cities. Obviously a significant or even a primary obstacle in the comprehensive approach to this measurement is connected with the availability of quantitative data, which may have possibly resulted in the focus on the general evaluation of city competitiveness (as indicated e.g. by Bruneckiene et al. (2010)).

### 3. Concluding remarks

For a long time now the problem of competitiveness has no longer been connected with the micro level (enterprises), becoming rather a point of interest referring to countries, regions or cities. Competitiveness has proven to be a commonly investigated notion and considered, among other things, to be the foundation for the socio-economic development of countries (Dabbous et al., 2023). Competitiveness is seen fully justified at the meso level in view of the role played e.g. by cities in providing firms with competitive environmental conditions or facilitating accumulation of knowledge. In recognition of the growing importance of the human capital, including knowledge, in the generation of economic growth and competitiveness it should be stated that the importance of territorial competitiveness, primarily cities, will be maintained. This is because the concentration of labor and knowledge resources is highest in cities.

Based on a thorough review of selected scientific publications, it is imperative to articulate the necessity for research in the domain of medium-sized and small towns. Socio-economic changes are also reaching these areas. It is frequently the largest cities that are responsible for the transformation of smaller towns. They can lead to a reduction in socio-economic functions in cities located far from regional centres or a remodelling of the functional structure in cities located close to the largest cities. These cities are also involved in a process of competition.

The literature review indicates that there are two approaches to research city competitiveness: general and partial. The general approach compares different socio-economic features and then determines the level of competitiveness using various statistical methods. The partial approach focuses on selected aspects, such as culture, economy, and environment. However, it is worth noting that the research by Rosa et al. (2020) allows us to identify another approach, which involves focusing on a selected segment of a given aspect. This opens up opportunities for a more thorough approach to assessing city competitiveness.

As it was stated by Kresl (2012), rankings provide cities with a certain potential for promotion and marketing among similar entities. They need to be considered a key tool for the understanding of processes related to urban transformation. However, both the merit and sense are intrinsically related to the analytical interpretation and thus, identifying factors determining competitiveness of a given city. As a consequence, they constitute a source of information, which sometimes provides outcomes differing from initial assumptions. Although the evaluation of city competitiveness at least at the national level may be hindered by many problems related to reliable measurements, updating the proposed indicators is necessary and crucial in order to facilitate identification of the city potential.

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