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# THE ROLE OF URBAN DEVELOPMENT IN FORMATION OF COUNTRIES' COMPARATIVE ADVANTAGES

#### Abstract:

Factors that increase the competitiveness of developed countries are very important aspects nowadays. The Nordic countries are increasing their competitiveness at the same time with the growth of the urban population. The paper analyzes the indirect impact of urbanization on countries' comparative advantages and the consequences of this relationship for business.

## Keywords:

Scandinavian countries, the Nordic countries, urbanization, comparative advantages, countries' competitiveness, Global Competitiveness Index, Human Development Index.

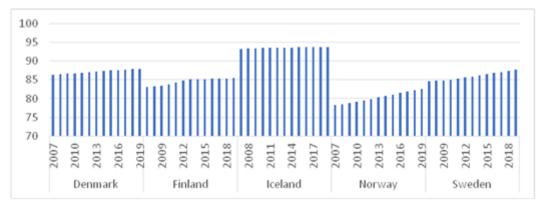
This paper examines the role of urbanization in the development of the Nordic countries and the formation of a higher level of their competitiveness in the 21st century, as well as the consequences of urbanization for business development. The main hypothesis tested in this paper is the hypothesis about the positive impact of urbanization on the development of the country and increasing its competitiveness, both directly and indirectly by increasing the competitive advantages expressed in human development and economic growth.

The Nordic countries are of particular research interest, as they belong to the group of rich developed countries, the main period of economic development of which occurred in the XVIII and XIX centuries and the industrial revolution, accompanied by their active urbanization[1]. Now the countries form the Northern Passport Union, which facilitates the migration of the population between them since it provides the right to work and enter the Union countries without special documents, and they are also part of the Northern Council, which is engaged in the development of NGOs and various social institutions[2]. The level of their urbanization is still growing, as can be seen in Graph 1, but the impact of this process on the country's performance is not clear. Due to changing factors of comparative advantage and changes in the overall economic environment, the role of urbanization remains open. This study used a combined set of research methods, including regression modelling of panel data and correlation analysis of indicators, as well as a theoretical analysis of the state's political strategy in the management of urbanization. For analysis, the following methods were used: correlation matrix analysis and fixed effect regression.

Thanks to a full-fledged analysis of scientific sources, I was able to identify the factors that most fully describe the country's competitiveness and comparative advantage factors. To assess the competitiveness of countries in this paper, I will use the Global Competitiveness Index (GCI), as it provides the most comprehensive view of the specific advantages of countries and allows you to analyze changes based on the rating compiled by the organization. Based on the studied sources, I chose the Human Development Index (HDI) and GDP per capita as indicators of comparative advantages that have a positive impact on the competitiveness of countries.

Two groups of models were implemented, the first of which is aimed at identifying the indirect relationship between urbanization and socio-economic development of the country, and the second main goal is to analyze the direct relationship between competitiveness and socio-economic

development of the Scandinavian countries. You can see the results of the best regressions for models of indirect connection in Table 1.



Graph 1 – Dynamics of urbanization growth in the Nordic countries in the period from 2007 to 2019 (in % of the urban population)[3].

Table 3 – Results of regression modeling of Group 1 models (URB-HDI; URB - GDP per capita).

|           | Model 1 (dependent variable – GDP per capita)  Fixed model fixed for heteroscedasticity and serial autocorrelation |                    |       |           | Model 2 (dependent variable – <b>HDI</b> )  Fixed model fixed for heteroscedasticity and serial autocorrelation |                    |        |
|-----------|--|--------------------|-------|-----------|---|--------------------|--------|
|           |  |                    |       |           |   |                    |        |
| Variables |  |                    |       | Variables |   |                    |        |
|           | Coef.  | Robust<br>Std.Err. | P>t   |           | Coef.   | Robust<br>Std.Err. | P>t    |
| UP        | -<br>.8733389  | .2903929           | 0.040 | UP        | .1230155  | .0221293           | 0.005  |
| Upsq      | .0052071   | .001756            | 0.041 | UPsq      | .0007849  | .0001311           | 0.004  |
| PD        | .0045269   | .0028435           | 0.187 | CO2PC     | .0018388  | .0006705           | 0.052  |
| PU14      | -<br>.0696495  | .0276087           | 0.065 | FR        | .0272219  | .0121477           | 0.089  |
| PO64      | .0201103   | .0060089           | 0.029 | LNGDPPC   | .0150819  | .0055206           | 0.052  |
| LNGCFpc   | .4948091   | .0495198           | 0.001 | GINI      | .0001368  | .000842            | 0.879  |
|           |  |                    |       | INF       | .0012774  | .0004685           | 0.053  |
|           |  |                    |       | LE        | .0020311  | .0010365           | 0.122  |
|           |  |                    |       | FDI       | -4.07e-14   | 1.96e-14           | 0.107  |
| _cons     | 44.54304   | 12.61228           | 0.024 | _cons     | 5.388106  | 1.02225            | 0.006  |
| R-squared | Within   | 0.8344             |       |           |   | Within             | 0.8939 |
|           | Between  | 0.1334             |       |           |   | Between            | 0.3356 |
|           | Overall  | 0.1970             |       |           |   | Overall            | 0.0199 |
| Prob>F    |  | 0.0000             |       |           | Prob>F  |                    | 0.0000 |

We see that our regression explains about 80-90% of the variation, which is a good value and implies that our model reflects reality accurately. Based on the results obtained at this stage, we can conclude that there is a relationship between urbanization and the socio-economic development of countries. It is also important to note that the hypothesis of the nonlinearity of this relationship is also confirmed at the 5% level. This result suggests that the growth of urbanization is initially associated

with lower levels of socio-economic development, but after reaching a certain point, the relationship becomes unidirectional.

Next, we needed to check the existence of a direct relationship between the above indicators of development, urbanization and the indicator of the country's competitiveness expressed in the Global Development Index. To do this, I analyzed the correlation matrix of indicators, as well as the regression group number 2, which included simple models of the dependence of HDI and GCI, GDP per capita and GCI, urbanization and GCI.

According to the results of the analysis, it can be argued that urbanization has a significant direct positive effect on the growth of the global competitiveness index of the Scandinavian countries, but the indirect relationship of urbanization with competitiveness through HDI and growth of GDP per capita has not been confirmed, which is contrary to many studies. From a theoretical point of view, the relationship between HDI, GDP per capita and GCI are absolutely obvious, since the calculation of GCI using the WEF method takes into account various factors of socio-economic development, including the level of education and GDP growth per capita, which are accelerators of competitiveness growth. However, the results of the study indicate that there is no relationship, which may be due to the limited methodological tools, the specifics of the development of these countries and the complexity of the factors considered.

According to my results, the role of urbanization in the formation of comparative advantages of countries, considered as an indicator of human development and socio-economic development, is significant. Today, for the Nordic countries, urbanization contributes to the growth of the human potential index, as well as to overall economic growth, but only after reaching a certain percentage of the countries' urban population. From a theoretical and methodological point of view, the development of human potential: an increase in the level of education, the life expectancy of the population, and also economic growth entails an increase in the competitiveness of the country. Urbanization, in turn, has a direct positive impact on the overall competitiveness of countries.

This effect of the impact of the growth of urban agglomerates on the development of the country and the improvement of its competitiveness is most likely due to the state policy on the preservation of the environment and the state strategy for the renovation of infrastructure in this sample of countries.

Urbanization strategies for the Nordic countries in the 21st century that promote competitiveness should focus directly on improving the quality of urban infrastructure. On the example of one of the capitals of the countries under consideration, one can see the possible results of applying a long-term strategy for the development of agglomerations, which can effectively offset the consequences of rapid growth.

In the early 2000s, the world-small capital of Denmark faced problems of urban population growth, accompanied by the uneven economic development of the metropolitan area and rising housing prices. All the main forces of the management (government) were focused primarily on establishing stable and high-quality contact with citizens, after which an active process of urban infrastructure development began. The decentralization of management decisions allowed maintaining a continuous dialogue and communication between the city authorities and citizens says the director of the Institute. Candidate of Social Sciences, RANEPA Sergey Zuev. In the absence of federal and private funds, it is the Copenhagen city authorities that have found funding models for the redevelopment of old industrial areas and infrastructure development, says Jens Kramer Mikelsen. The CPH City & Port Development State Corporation (95% owned by Copenhagen, 5% by the Federal Government) implements half of all redevelopment projects of the last decade [4].

Equally important is the development of eco-friendly technologies, which for these countries have a significant effect on the indicator GCI. The relationship is not linear and there is a positive effect only when a certain level of pollution is reached. The case of Sweden can be considered here. With the growing level of urbanization, its effect on the country's competitiveness becomes positive. In this case, the main actions of the department were mainly aimed at reorganizing industrial sectors and energy. Almost all industrial enterprises in Sweden are constantly implementing innovative solutions to increase efficiency and reduce energy consumption at the same time. In 2005, the

Government introduced tax incentives for energy-intensive industries — in exchange for their development of measures to reduce energy consumption[5]. Also, the factor of decentralization of management and established communication with the urban population played a significant role. Each municipality currently has an energy adviser that people can turn to for help and guidance. However, it is also important to note that the pattern of efficient urban development is also similar to that of Copenhagen, as the country has been undergoing a process of reorganizing urban infrastructure and rebuilding unused industrial premises since the early 2000s[4]. Also, the policy Decentralization of management has a positive impact on the development of education in Sweden.

The emerging environment, in turn, attracts a large number of international companies, as it creates conditions for their sustainable growth and development in the long term. The state provides favorable conditions for the activities of companies that are responsible for the environment (their activities use environmentally friendly technologies, energy conservation), providing various tax incentives and various forms of state support, such as subsidies. The decentralization of power, as well as the established communication between citizens and the state, gives a clear understanding of the needs and relatively higher mobility and flexibility of decisions. Under these conditions, a company that adheres to an organic approach to management will perfectly fit into the overall system and comply with the overall state strategy. The strategy of urban infrastructure development with a significant share of private enterprises gives businesses new opportunities for international development and at the same time has a positive impact on countries.

However, the policy of eco-urbanization and the development of urban infrastructure has its negative aspects for business. The most important of them is the large dependence of barriers to entry for businesses to the country's market on the overall development strategy of the states. For companies operating in the field of industry, heavy production, or simply for international companies located in countries with an excellent strategy of state participation in the socio-economic life of the country, activities in the territory of the Scandinavian countries can either be prohibited altogether, or they are endowed with huge costs, which are one of the barriers to entry[6]. One example is the incident in 2016 when the Norwegian authorities banned the activities of 15 energy companies, which included firms from the United States and China. Taking into account the negative impact on the environment, the Norwegian Parliament voted in June 2015 to sell shares in mining and energy companies that produce more than 30 per cent of their products from clean fossil fuels, and subsequently, 15 companies lost the opportunity to work in the country[7]. The development of urban infrastructure does not have such negative consequences for business development, but it is important to note that this significantly raises the bar for companies wishing to engage in any business on the territory of the country. Higher technology, full use of spaces, provides an opportunity for businesses from countries at a similar level of development, but for less developed countries, business ideas will lag.

To sum up, it can be argued that urbanization still plays a significant role in the development of the Nordic countries and the formation of their competitiveness. Accompanied by an environmental state policy and the development of urban agglomerates, it entails high-quality development in the long term and also forms a predominantly favorable environment for business development.

## **References:**

- 1. O'Салливан А. Экономика города //M.: ИНФРА-М. 2002. Т. 706.
- 2. Пронякина Е Д «Северное сотрудничество» в условиях глобализации: опыт и перспективы интеграции Скандинавских государств // ПОЛИТЭКС. 2012. №3. URL: https://cyberleninka.ru/article/n/severnoe-sotrudnichestvo-v-usloviyah-globalizatsii-opyt-i-perspektivy-integratsii-skandinavskih-gosudarstv (дата обращения: 20.04.2021).
- 3. "World Development Indicators database (WDI)" [Online]. Available: https://databank.worldbank.org/source/world-development-indicators.
- 4. РБК "Лидеры урбанизации" URL: https://plus.rbc.ru/specials/modern urban policies in russia (дата обращения: (20.04.21)).

- 5. "Экология: как шведы заботятся об окружающей среде?" URL: https://ru.sweden.se/ljudi/ekologiya-kak-norma-zhizni/ (дата обращения: (20.04.21)).
- 6. Никифоров A A. Юридическая ответственность за нарушение экологических норм в странах Северной Европы // Труды Института государства и права PAH. 2013. №2. URL: https://cyberleninka.ru/article/n/yuridicheskaya-otvetstvennost-za-narushenie-ekologicheskih-norm-v-stranah-severnoy-evropy (дата обращения: 20.04.2021).
- 7. "Норвегия запретила деятельность 15-ти угольных компаний из-за экологических нарушений" URL: https://www.steelland.ru/news/mining/8023.html (дата обращения: (20.04.21)).