Global Cities as Drivers of World Economy Globalization

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Abstract— Analysis of globalization dynamic in the world economy demonstrates some fundamental change associated with world economy transformation into a complex system of urban economies. Urban economies have become main actors of global production and trade; economic interests of some cities have spread far beyond their geographical boards and boards of the states to which they belong.

It indicates a formation of system of global cities with enormous potential of own competitiveness and with economic performance that is in many times greater than same criteria of national states.

The paper examines a process of system of global cities formation, a role of this process in trans-nationalization and networking of global economy. Paper also defines a framework of cities classification, depending on globality of their economic performance.

Keywords— globalization, urban economy, global city, transnationalization, networking of economy, external competitiveness

I. INTRODUCTION

DEVELOPMENT of the world economy demonstrates a significant growth of global economic role of the cities. Cities concentrate production, innovations, commercial potential and any international business activity. Today a share of hundred of the world major cities in a global GDP is bigger than 30%. Economical systems of the cities retain a strong growth even in conditions of world crisis.

It is caused, firstly, by internal features of urban economic systems organization, such as locality, better management, high domestic consumption, innovative and cultural potential, investment attractiveness and transport infrastructure, possibility for formation of new areas for business activity; and, secondly, by current trends of the globalizing world (such as growing urbanization, capital and labor mobilization, post-industrialization, expansion of transnational corporations, development of information and communication technologies).

Needs to consider causes, factors and possible consequences of formation and development of global cities system have identified a relevance of this study.

The purpose of the study - based on a theoretical analysis of factors for formation and development of global cities, on a role of global cities in the modern world economy to determine a basis for world's urban economies classification and possible prospects for system of global cities progress in the future.

II. GLOBALIZATION AS A CONDITION FOR TRANSFORMATION AN ECONOMICAL ROLE OF THE CITIES

Globalization (that’s regulation remains out of authorities of nation-states) became into the late twentieth century an objective condition for the world economy evolution due to rapid development of multinational corporations, liberalization of cross-border movement of productive factors (capital, technology and skilled labor), rapid flourishing of information and communication technologies, transformation of international and national regulating of economical and social processes.

The dynamics of globalization identified a number of fundamental transformations that changed a basis of world economic relations, a balance of power in the global production and distribution.

Firstly, a characteristic feature of economy globalization is a combination of processes of autonomy and integration (Naisbitt, 1994). This is broadly famous as a «paradox of Naisbitt»: higher level of economy globalization makes its smallest agents stronger.

Consequently, small and well-managed members of the world economy in the context of globalization have got a competitive advantage on a global scale, have became able to extend their own economic impact on the world market (due to the usage of transnational productive - distributive systems and opportunities of international markets of productive factors).

Secondly, globalization requires a maximum involvement of every subject (agent) into the world economical processes, its maximum integration in common economic space. This again increases a competitiveness of the small subjects of the world economy that are capable to develop own infrastructure for rapid development of foreign affairs and trade.

Thirdly, globalization and planetary dynamics of technological progress has highlighted the innovative and infrastructural factors of competitiveness (legal, economic environment, innovative potential of society, level of intellectualization of production, and so on), that can be effectively concentrated in current conditions of small (in
comparison with the states) socio-economic systems.

These patterns of a current stage of globalization determine a theoretical basis of transformation of economic importance of urban socio-economic systems; formation and development of new world economic agent - a global city.

For five-six thousand years of own evolution the cities developed from relatively small, simply organized and structured settlements to complex and large economic, social, political, cultural, religious, scientific, military and strategic centers and agglomerations.

As economic system the city can also be characterized by a number of features. Firstly, it has certain limits, that allowing existing independently from other units. The boundaries are defined by territory, name, organizational structure, etc.

Secondly, the city is characterized by a combination of applied resources, their quality, capacity and overall functioning.

Thus, the dynamics of globalization processes, giving to small economies a global competitive advantage, are allowing them to broadcast these advantages in a global economic scale, to encourage some transformations of the world economy structure. Due to these transformations cities as socio-economic systems with strong internal links, internal unity, and high potential of own economic progress, are more comfortable than National states for international integration and come to the forefront of the world economy.

III. LITERATURE REVIEW

Formation of theory of global cities has a long history. As a founder of modern research in this area we can name P. Geddes, who in "Cities in Evolution", (1915) started to use a category "global city".

Naturally, at the beginning of the twentieth century a combination of three criteria - political significance, economic strength and population size - was a main reason for any city to be named “a world center” (Geddes, 1915).

In 1966 Peter Hall published "World City". Where he defined the world cities as national and international centers of political power; centers of national and international trade, acting as focal points for their own, and also for neighboring countries; centers of professional activity; centers of consumption, information and diffusion of technology through means of mass communication, culture, entertainment and services industry (Hall, 1966).

One of the first researches, where global economic role of the cities and their financial importance were considered in deep relations, was conducted by H. Reed. He analyzed financial indexes in conjunction with geographical, political, economical and socio-cultural characteristics of 76 cities in 40 countries development in period from 1900 till 1980. Achieved findings allowed to establish a five-level hierarchy of international financial centers (with London on the top) (Reed, 1989).

J. Friedman tried to relate a process of world urbanization with development of capital’ transnationalization and internationalization, and to justify the objectives of the world's cities formation (Friedmann, 1986).

In authoritative study "The Global City: New York, London, Tokyo" S. Sassen focuses on a new aspect of the world economy - intense transition of main management, coordination and financing functions to high-end and high-tech companies.

As S. Sassen pointed, there are four key groups of high-tech activity in the service sector: financial and business services, power and influence, creative activities and tourism (Sassen, 1996).

Thus, a term "global city" currently means the city, where disproportionately high share of economic and political institutions focused. It gives to global cities abilities to make significant solutions for all regions of the world. Consequently, a global city has to have subjects, who make and produce these global solutions (such as headquarters of major multinational and global corporations, international political and financial institutions, world stock exchanges, largest international trade fairs and so on).

IV. GLOBAL CITIES IN DYNAMICS OF ECONOMIC INTEGRATION

Comparing the economic systems of cities and national countries, we can highlight main advantages of the cities as subjects of world economy. First of all, cities have a greater mobility of people and capital. They are much more predisposed to commercialization and generation of new knowledge and innovations (Velikhov, 1996).

Moreover, cities can be easier to connect to international trade; they have abilities to reduce transport costs, to increase investment attractiveness, and to form new types of business activities and forms of manufacture organization.

An average share of the cities in national GDP of India, Russia, Brazil and some countries in the Middle East and Latin America, is 5-10 % higher than their proportion in the population of these States. It indicates high efficiency of the urban economic systems compare with rural areas of considering countries and higher productivity of labor of urban population. Modern cities are also distinguished by a high rate of gross regional product’s (GRP) growth (this dynamic is 18-40% higher than corresponding countries have).

Maximum growth of gross regional product will occur in the cities of BRICS countries. This will significantly change a rating of economically largest cities of the world in 2025. In 2010 there were 13 US cities in TOP-30 economically largest cities. But in 2025 only 11 cities will remain this high position together with only three European agglomerations (London, Paris and Moscow). At the same time ranking of Sao Paulo (from 10th to 6th), Shanghai (from 25th to 9th), Mumbai (from 29th to 11th), Cairo, Istanbul, Delhi, Beijing will significantly increase.

V. ACTORS OF CITIES POSITIONING IN A GLOBALIZING ECONOMY

Based on the data from Table II we can divide explored cities on global and local leaders (as global cities we will
consider ones from TOP-24 of this ranking). After we can compare roles of municipal administrations in development of business environment and in deepening the city’s integration in world economy.

Role and effectiveness of municipal administration can be estimated on the basis of three indicators - level of corruption in city administration, quality of decisions and municipal acts, transparency of local government.

The index of corruption of local authorities is determined annually by international experts from the World Bank. Assessment of the quality of decision and municipal acts in the city we can take from the study of Lafen (2011) "The role of global cities".

The index of local government transparency was assessed on basis of analysis a level of urban e-government development (official web portals of local authorities, quality and quantity of on-line services). Here we used 100 - point rating system:

10 points – if city does not have any official representation on the Internet;
20 points – if an official portal of the city authorities just contains a basic information;
30 points - if portal provides information about the conditions of doing business, living, real estate purchase, and so on;
40 points – if portal has relevant information and analysis;
50 points – if portal gives abilities for on-line consulting by municipal officials;
60 points – if site offers a possibility of filling / downloading official forms and legal documents;
70 points – if site has information about official activities in the city with coordinates and contact details;
80 points – if portal contains information about main projects of municipality, discussions and relevant reports;
90 points – if portal provides information about the state / city procurements;
100 points - portal allows obtaining of certain government services in remote access (registration of insurance, grants, pensions, health care, educational services, and so on).

The evaluation of correlation of city governance quality and city role in the global economy, led to a number of conclusions about the sources of modern economic importance of the city. Are these sources more related with internal (quality of city management, business environment, mode of management) or external (city's importance in the National economy, urban population, city location, availability of resources, and so on) factors? For responding this question we classified cities for 4 types.

Results of analyze of world largest cities’ economical role (depending on cities positioning in a global economy and quality of city governance) are shown on Table III.

As we can see on Table III an economic role of effective-managed global cities in their countries, in general, is the lowest among all analyzed categories. The economies of these cities don’t act as "locomotives" and main drivers of National economics’ development; are not significantly outstanding within the frames of national economic system. High quality of urban governance in these cities forms their ability to be regulators of the global economy, not only to serve as a "gateway" to the National economic systems.

![Table I](image-url)

**Table I**

<table>
<thead>
<tr>
<th>Nr</th>
<th>Index</th>
<th>Methods of Calculating</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>City’s position in a global hierarchy</td>
<td>Results of GaWC study were used. Alpha++ cities got 12 points. Gamma cities – 2 points. Cities out of GaWC ranking got 0 points.</td>
</tr>
<tr>
<td>2</td>
<td>City's role in national economy</td>
<td>City share in national GDP, national export and import, foreign investments flows, local stock exchange capitalization were used</td>
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<tr>
<td>3</td>
<td>Demographic potential of the city</td>
<td>Share of the city in national population, comparison of urban and national unemployment and wages</td>
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<td>4</td>
<td>Conditions for running a business in the city</td>
<td>Based on cities rankings (Moody’s Global Rank, 2012 and Ex-Im Bank-2012), process of license obtaining (number of required documents for construction, time required for obtaining a license for construction), process of property registration (number of required documents, of registering officials, time required for obtaining a property rights).</td>
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4.1 Law and political conditions for running a business (10% share in final evaluation) Calculating based on process of new business registration, liberality of labor law, custom regime. Results of ‘Doing Business/ Global Cities Report - 2012’ were used

4.2 Financial stability of the city (22% share in final evaluation) Calculating based on process of obtaining a credit, cities credit ranking (Mastercard Worldwide, 2012), process of closing a business (Doing Business, 2012), transport infrastructure of the city, passenger and freight traffic, number of international flights in local airport per day, number of 5 stars hotel rooms per capita, share of population living in high-rise buildings (over 10 floors).

4.3 Index of innovativeness of the city (16% share in final evaluation) Calculating used – number of universities, MBA programs, issued patents, Internet traffic per capita, number of publishing science magazines, local population access to Internet and mobile nets

4.4 Living standards in the city (10% share in final evaluation) Calculation used results of UN-Habitat research in 2012 (Livability Indexes)

4.5 City’s attractiveness for tourism and business Calculation used – number of arrived tourists in 2012, city popularity as a tourist and business tourism center

4.6 Political power of the city Results of research - Global Power City Index, 2012 by Institute for Urban strategies

1 Was identified based on number of web-sites founded by Google.com for requests in English - «Exhibitions in…», «Conferences in…», «Tourism in…»
production and distribution constructs; monopolize a foreign on transnational economic relations. Such cities (for example, all national resources within urban economy) their influence located), including capital, natural and human resources. abilities and potential of countries (where these cities are performing mostly as coordinators of National industries development. These cities are influenced by global economy significantly vary from each other by type of their hierarchy in the world economy. Based on this we can assume a presence of global cities DEPENDING ON QUALITY OF CITY GOVERNANCE 1 1.1 Chicago 15,5 15,5 49,8 49,8 69,2 45,2 10,9 10,9 2 2.1 Barcelona 4.2 New – York 15,5 49,8 69,2 15,5 2.2 Dubai 49,8 49,8 69,2 49,8 2.3 Kuala-Lumpur 32,4 32,4 36,6 32,4 2.4 Rome 7,9 7,9 11,2 7,9 2.5 Stockholm 32,4 32,4 8,98 32,4 2.6 Melbourne 17,9 17,9 10,17 17,9 Average in group 1 17,9 17,9 11,2 17,9 Average in group 2 24 24 14,5 24 Average in group 3 24 24 11,7 24 Average in group 4 30 30 13 30 1.1 Effective-managed global cities 2 1.2 New – York 15,5 49,8 69,2 15,5 1.3 London 49,8 49,8 69,2 49,8 1.4 Shanghai 32,4 32,4 8,98 32,4 1.5 Paris 27,1 27,1 16,2 27,1 1.6 Seoul 24,2 24,2 20,3 24,2 2 Effective-managed local cities 2.1 Barcelona 15,5 49,8 69,2 15,5 2.2 Dubai 45,2 45,2 36,6 45,2 2.3 Kuala-Lumpur 2,17 2,17 6,8 2,17 2.4 Rome 7,9 7,9 5,6 7,9 2.5 Stockholm 52 52 8,98 52 2.6 Melbourne 24 24 17,9 24 Non-effective-managed global cities 3.1 Moscow 15,5 15,5 7,4 15,5 3.2 Mexico 24,6 24,6 17,33 24,6 3.3 Sao-Paulo 21,6 21,6 9,8 21,6 3.4 Mumbai 6,8 6,8 1,7 6,8 3.5 Delhi 5,4 5,4 1,4 5,4 3.6 Buenos-Aires 69,2 69,2 32,4 69,2 Non-effective managed local cities 4.1 Santiago 42,7 42,7 34,3 42,7 4.2 Jakarta 10,9 10,9 3,9 10,9 4.3 Manila 49,8 49,8 12,8 49,8 4.4 Rio-De-Janeiro 10,9 10,9 6,12 10,9 4.5 Cairo 36 36 15,3 36 4.6 Ho-Chi-Minh 25,4 25,4 6,13 25,4 Average in group 1 15,5 15,5 10,17 15,5 Average in group 2 24 24 14,5 24 Average in group 3 24 24 11,7 24 Average in group 4 30 30 13 30 2 Calculated by authors. Data of World Bank and UN-Habitat, 2012 was used. 3 6 cities were considered within each group. Singapore and Hong-Kong (city-states) were not considered

On the other hand, a share of non-effective-managed local cities in the national economies is maximal. Differences between the city’s share in national GDP and in national population show a high productivity of urban labor force comparing with rest of the country (the average labor productivity in non-effective-managed local cities is in 2.8 times higher than in surrounding provinces).

This suggests that these local cities received their status in a global economy only due to concentration within them of big productive and trade potential of countries (Brazil, Egypt, Philippines, Indonesia, and so on). In the global economy, these cities serve as the coordinators of regional production and distribution systems; as portals of National economies connection to the systems of transnational goods, services and factors of production transfer. However, these cities do not have any impact on the functioning of transnational economic interactions, and keep the function of "entrance gate" for multinational business.

Cities of the third category have a global status, and have ability to influence on the world economy progress. However, taking in account a low quality of their urban governance, we can suggest that global impact of these cities is only based on abilities and potential of countries (where these cities are located), including capital, natural and human resources.

The relatively high share of these cities in the structure of national economies can multiply (due to the concentration of all national resources within urban economy) their influence on transnational economic relations. Such cities (for example, in the case of Russia, Thailand, Argentina, Mexico) are often the only one ability for connection to existing transnational production and distribution constructs; monopolize a foreign trade and transnational entrepreneurship.
but local in their world economic role are much less dependent on business environment in own countries and are under bigger impact of global cities and world economy. Finally, cities of 1 type are operating in transnational system of goods and services production and distribution and retain a small dependence on their own states, attract international resources and productive factors (capital, information, labor), acquire opportunity to influence on the world economy functioning.

This trend confirms an argument that if the city cannot have a global economic role, city has to rely more on its own regional role, to serve domestic territory. Therefore this city needs to grow fast to meet the needs of regional economy.

VI. CONCLUSION

Thus, results of the study demonstrate a presence of four types of global and local cities in the world economy. These cities are varying by quality of internal governance and by their role in transnational production and distribution system functioning.

This allows identifying a hierarchy of world cities, to predict interactions between cities and international economic institutions, national economic systems.

In any case, the presence of cities hierarchy implies an existence of certain patterns of forming of economic interactions between modern cities, a formation of global cities network that is more and more concentrating almost all world economy.

REFERENCES