

Sustainable development of global entrepreneurship: infrastructure and perspectives

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Abstract Development of the modern global entrepreneurship is one of the most perspective and promising means of overcoming the consequences of the global economic crisis, as well as prevention of future crises of economic systems, as it ensures full level of optimization of production and distribution processes. The purpose of the article is to determine perspectives of sustainable development of the global entrepreneurship. For determining the level of sustainability of development of the modern global entrepreneurship, the authors use the methods of statistical analysis of time rows (method of horizontal and trend analysis). The authors perform a complex analysis of dynamics of development of global companies and performed evaluation of their sustainability. Also, the necessity for changing the model of managing the development of modern global entrepreneurship for increasing its sustainability is substantiated. As a result, it is concluded that modern global entrepreneurship is developing in the unstable way, and practical recommendations are offered for solving this problem. A perspective model of sustainable development of the modern global entrepreneurship is developed and presented. A certain limitation of the results of the performed research is the framework character of the offered recommendations.

Keywords Sustainable development · Global crisis · Global entrepreneurship

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Introduction

Development of modern global entrepreneurship is one of the perspective and promising methods of overcoming the consequences of the global economic crisis and preventing and leveling future crises of economic systems – as it ensures the highest level of optimization of production and distribution processes.

In the age of globalization, national economies become more integrated into the global economic system. Geographical borders are erased, production becomes global, and entrepreneurial structures cease to concentrate on a specific territory, entering the world markets. With development of international trade, powerful economic bases on the territories of foreign countries are created and expanded. Due to this, the need for global infrastructure of entrepreneurship arises, for it is the basis of functioning and development of transnational business.

Under the influence of globalization, national economies become more open and interdependent with other countries. On the one hand, this opens wider possibilities, on the other hand, it increases the necessity to fight for resources, investments, and capital. One of the most important factors of global competitiveness and methods of attracting international business for modern economic systems is development of business infrastructure. Due to this, topicality of development of global infrastructure of entrepreneurship and its popularity among all members of international economic relations grow.

However, despite the importance and significance of such infrastructure, it does not conform to the requirements of modern international business as to quantitative (growing deficit) or qualitative (quick aging) characteristics. This is a serious scientific and practical problem, as without the corresponding infrastructure the level of development of transnational entrepreneurship and the growth rate of global economy are reduced.

The working hypothesis of the research is the authors' idea that the reason for the existing situation and for emergence of this problem is presence of contradictions in development of infrastructure of entrepreneurship in world markets. Development of infrastructure is a guarantee of sustainable development of global entrepreneurship. The purpose of the article is to verify the offered hypothesis, to study infrastructural aspects of sustainable development of global entrepreneurship, and to determine its perspectives.

Main text

The topic of development of international business is very popular in the modern scientific environment. The notion, essence, and specifics of functioning of entrepreneurship in world markets are studied in a lot of works of modern scholars and experts – e.g., (Bhanumurthy and Singh 2013; Bozkurt et al. 2015; Teekasap 2014; Caporale and Spagnolo 2012; Gehringer 2014; Jahfer and Inoue 2014; Md. Al and Sohag 2015).

The issues of creation and management of global business infrastructure are discussed by the scientific community as well. Theoretical & methodological and practical peculiarities of infrastructural provision of transnational entrepreneurship are studied in the

following works: (Borožan et al. 2017; Catozzella and Vivarelli 2016; Espinosa et al. 2004; Fernández-Serrano and Romero 2014; Klapper et al. 2015; Soriano et al. 2010; Namazi and Namazi 2017; Szomolányi et al. 2017; Morkovina et al. 2016; Litvinova et al. 2016).

Conceptual provisions of the theory of public-private partnership, methodological approaches to its organization and measuring its success, and practical examples of implementing the infrastructural projects in the form of public-private partnership are reflected in the works of such experts as (Alcaraz-Calero et al. 2018; Biygautane et al. 2018; Grigg 2018; Iossa and Saussier 2018; Oktavianus et al. 2018; Aragón et al. 2014; Emmoth et al. 2015; Gallié et al. 2013; Malyshkov and Ragulina 2014; Mihajlović 2014; Nica 2010; Popkova 2014; Reveiu and Dârdală 2015; Skiter et al. 2015; Vanka et al. 2012; Xavier Molina-Morales et al. 2015).

The performed analysis of publications on the topic of the research showed that they view only certain aspects of the studied problem, while contradictions of infrastructure of entrepreneurship in world markets are not studied sufficiently, and methods of solving them are not determined. This does not allow solving the set problem and leads to the necessity for conducting further studies in this sphere.

The methodology of the research is based on using the method of systemic and problem analysis, analysis of causal connections, synthesis, induction, deduction, formalization, and modeling of socio-economic systems for preparing the model of development of entrepreneurship's infrastructure in world markets.

It is possible to distinguish three most important contradictions of infrastructure of entrepreneurship in world markets. The first contradiction is related to increase of the gap between the levels of development of entrepreneurship's infrastructure in developed and developing countries with growth of globalization and integration processes in the world economy.

This is confirmed by annual increase of the value of the index of economic globalization (KOF Index of Globalization) according to ETH Zurich (Swiss Federal Institute of Technology), KOF Swiss Economic Institute, and by growth of underrun of the group of developing countries from the group of developed countries as to the value of the index of business infrastructure according to the Global Competitiveness Report 2015–2016, World Economic Forum (Table 1).

Table 1 Dynamics of values of the index of economic globalization and index of business infrastructure in 2000–2015

Indicators	Values of indicators for the periods			
	2000	2005	2010	2015
Index of economic globalization on average in the world, %	55.06	58.38	60.06	61.1
Index of business infrastructure on average for developed countries, points	4.35	4.4	4.42	4.46
Index of business infrastructure on average for developing countries, points	2.89	2.92	2.93	2.95
Underrun of developing countries from developed countries according to the index of business infrastructure, %	33.56	33.64	33.71	33.86

Source: compiled by the authors based on: (Dreher and Sturm 2016; Schwab 2016)

As is seen from Table 1, index of economic globalization on average for the world grew by 10.96% in 2015 as compared to 2000, constituting 61.1%. At the same time, underrun of developing countries from developed countries as to index of business infrastructure grew annually over the studied period, constituting 33.86% in 2015. This contradiction is a reason for limited possibilities of optimization of the system of placement of production in the global economy and low effectiveness of the work of distribution networks.

The second contradiction is caused by preservation of the domination of state regulation of the processes of creation and functioning of the main objects of infrastructure of entrepreneurship, despite the common market conditions. In other words, in most countries of the world state is the owner of the objects of business infrastructure, and state conducts the management of these objects.

This is confirmed by excess of 50% share of state business infrastructure in its general structure according to the Global Competitiveness Report 2015–2016, World Economic Forum, despite its gradual reduction, and by growth of the values of Economic Freedom Index on average in the world in dynamics of recent years according to the Global Finance Magazine (Table 2).

As is seen from Table 2, despite the fact that the share of state business infrastructure in its general structure in 2015 reduced by 9.24%, as compared to 2000, it exceeded 50%, constituting 79.5%. Over this period, the index of economic freedom on average in the world grew by 12.11%, constituting 65.7 in 2015. Inflexibility of the state is often a reason for low quality of the objects of business infrastructure. Limited assets of state budget reduce possibilities for its development, which leads to increase of its deficit.

Its main reason lies in the third contradiction, caused by simultaneous belonging of infrastructure of entrepreneurship to public and private benefits. Thus, on the one hand, infrastructure is usually the objects of mass use, the access to which cannot be limited. In this case, business infrastructure is a public benefit. Here we speak primarily of the transport & logistical and institutional infrastructure.

On the other hand, in certain cases business infrastructure is the objects the access to which is provided individually, which allows their providers to gain commercial profit. In this case, business infrastructure is a private benefit. This is true primarily for the financial and human infrastructure.

The determined contradictions are a reason for emergence and deepening of the problems of development of entrepreneurship's infrastructure in world markets, the most important of which consists in difference between the current level and possibilities of the global business infrastructure and actual needs of international entrepreneurship, despite its active and dynamic development.

Table 2 Dynamics of the share of state business infrastructure and the index of economic freedom in 2005–2015

Indicators	Values of indicators for the periods			
	2000	2005	2010	2015
Share of state business infrastructure in its general structure, %	87.6	84.1	82.3	79.5
Index of economic freedom on average in the world, points	58.6	61.2	63.4	65.7

Source: Compiled by the authors based on: (Schwab 2016)

Based on the performed analysis, it is possible to conclude that delay in development of business infrastructure in world markets is caused by the determined contradictions. Deeper analysis shows that its main reasons lies in strictly limited and insufficient participation of private business in creation of infrastructure of entrepreneurship in world markets.

As a result, lack of state financial resources and impossibility of attraction of private investments lead to quantitative lack of business infrastructure, and absence of commercial interest leads to its low quality and weak innovational development. All this leads to impossibility to implement the existing potential of internationalization of entrepreneurship in full, which is shown by Fig. 1.

As is seen from Fig. 1, the level of satisfaction of the needs of international entrepreneurship in the global business infrastructure in 2015 reduced by 22.09%, as compared to 2000, constituting 67%. This shows the large underrun of current possibilities of development of entrepreneurship's infrastructure from growing demands for its and its deepening with time.

Thus, modern global entrepreneurship's development is not stable due to absence of the necessary infrastructural provision. In order to solve this problem and to eliminate the determined contradictions, the authors offer the following recommendations for development of infrastructure of entrepreneurship in world markets in the interests of sustainable development of global entrepreneurship. Firstly, it is necessary to create conditions for transition of the objects of business infrastructure from the group of public into the group of private economic benefits.

This supposes institutionalization of ownership right of private investors for created objects of business infrastructure – i.e., creation of the corresponding normative and legal basis, as well as start of the effective system of distribution of permits for creation of such objects on a competitive basis.

Secondly, it is important to ensure high investment attractiveness of the projects on creation and development of business infrastructure. While previously the possibility of gaining profit from such projects was discussed, not focus is made on maximization of this profit – for ensuring profitability of investments and growth of income.

This requires establishment of favorable business climate in the sphere of creation of business infrastructure. In particular, it is related to tax stimulation fo private investors for financing of infrastructural projects, development of the insurance system, provision of state guarantees of investments return, etc.

The basis for implementation of the developed recommendations should be the corresponding model, which reflects the essence and logic of the offered approach to development of infrastructure of entrepreneurship in world markets (Fig. 2).

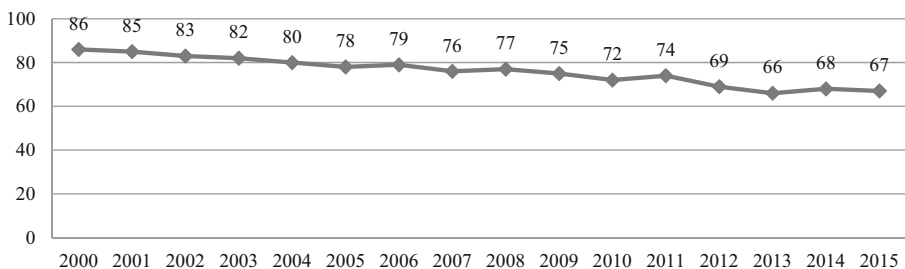


Fig. 1 Dynamics of change of the level of satisfaction of the needs of international entrepreneurship in the global business infrastructure in 2000–2015, %. Source: Compiled by the authors based on: (Schwab 2016)

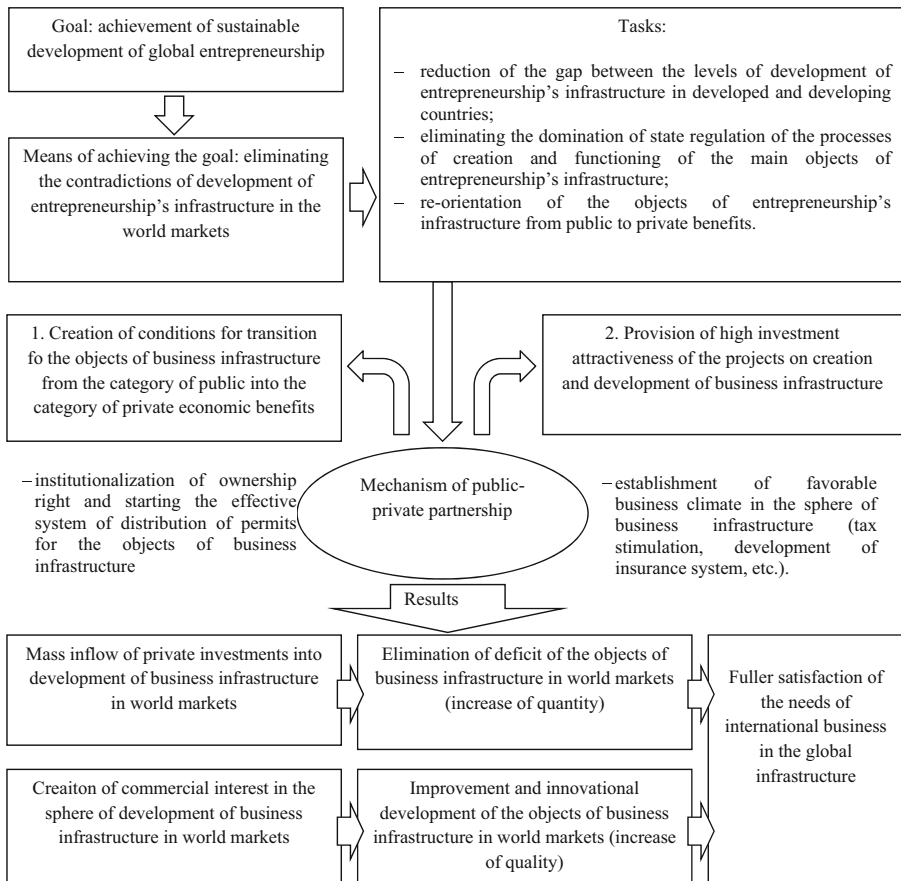


Fig. 2 The model of development of entrepreneurship's infrastructure in world markets in the interests of sustainable development of global entrepreneurship. Source: compiled by the authors

As is seen from Fig. 2, the offered model seeks the goal of development of entrepreneurship's infrastructure in world markets, which is achieved with the help of eliminating the contradictions of development of entrepreneurship's infrastructure in world markets. This supposes solving the following tasks: reduction of the gap between the levels of development of entrepreneurship's infrastructure in developed and developing countries, elimination of the domination of state regulation of the processes of creation and functioning of the main objects of entrepreneurship's infrastructure, and re-orientation of the objects of entrepreneurship's infrastructure from public to private benefits.

The core of the offered model is the mechanism of public-private partnership. The developed recommendations are the tools for achieving the set goal. Implementation of this model will lead to large inflow of private investments into development of business infrastructure in world markets, which in its turn will lead to elimination of deficit of the objects of business infrastructure in world markets (increase of quantity).

Also, it is possible to expect commercial interest in the sphere of development of business infrastructure in world markets and improvement and innovational

development of the objects of business infrastructure in world markets (increase of quality). As a result, fuller satisfaction of the needs of international business in the global infrastructure, development of transnational entrepreneurship, and acceleration of the rate of the global economic growth are achieved.

It should be noted that in the conditions of market re-orientation of modern economic systems, the essence of a lot of economic benefits, including business infrastructure, are reconsidered and transformed. This creates preconditions and additional stimuli for activation of the process of commercialization of infrastructural provision of entrepreneurial activities in world markets.

This emphasizes correspondence of the offered recommendations to the spontaneous processes that take place in the modern global economic system and their harmonious combination with global tendencies in the economic sphere. Based on this, it is possible to expect positive reaction and quick implementation of the developed model of development of entrepreneurship's infrastructure in world markets.

Discussion

As compared to the previous works on entrepreneurship, the results of the performed research showed that the main factor of sustainable development of entrepreneurial structures is modern, highly-effective, and dynamically developing (according to changing needs of business) infrastructural provision. That is, instead of the traditional emphasis on the necessity for optimization of internal managerial processes, focus is made on importance of external – state – regulation of market processes through the prism of entrepreneurship's infrastructure.

Conclusions

Thus, in the course of the research the working hypothesis was proved and it was confirmed that modern entrepreneurship's infrastructure in world markets is peculiar for systemic contradictions caused by deepening differences between the levels of development of entrepreneurship's infrastructure in developed and developing countries with increase of globalization and integration processes in the global economy, preservation of domination of state regulation of the processes of creation and functioning of the main objects of entrepreneurship's infrastructure, despite the common market conditions, and simultaneous belonging of entrepreneurship's infrastructure to public and private benefits.

They negatively influence the development of international business, being a reason and stimulating the increase of underrun of the current level and capabilities of the global business infrastructure from actual needs of the international entrepreneurship. This leads to unsustainable development of the global entrepreneurship. For solving this problem, the authors offer a model of development of entrepreneurship's infrastructure in world markets in the interests of sustainable development of global entrepreneurship, based on the mechanism of public-private partnership, and develop the corresponding recommendations.

It should be concluded that despite the applied character of the offered recommendations, they are of the general character. This allows using them for development of entrepreneurship's infrastructure in different countries of the world – primarily, in developing economic systems – but at the same time requires their more detailed elaboration and adaptation to specific economic conditions, which is a perspective direction of further scientific research in this sphere.

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