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ASSESSMENT OF INTEGRATION CLIMATE OF COUNTRIES AS TOOL FOR FORMATIONOF STRATEGIC BUSINESS PARTNERSHIPS

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Abstract

Predictive views on globalization can be combined into two scenarios: the strengthening of globalization as a result of the development of new technologies and the weakening of globalization as a result of the revival of national identity. In any scenario for the development of the world economy, priority is given to deepening the links in the sphere of high technology development. The creation of international integration business groups for any country in the current socio-political and economic conditions remains an instrument of involvement in global economic relations. Formation of strategic business partnerships in foreign economic activity is a defensive reaction to the possible negative consequences of globalization. The initial tool of the mechanism for forming strategic partnerships in an international format is to assess the integration conditions prevailing in the countries of the intended partners. The article proposes a methodology for assessing the integration climate of the country of business interaction partners. The evaluation system is based on the integration of the world ratings used to characterize various aspects of public life in states. Approbation of the methodology allowed dividing countries into three groups according to the degree of similarity of the integration climate. The expediency of choosing a business partner is determined by the similarity of the integration climate in the countries of functioning of entrepreneurs initiating a strategic partnership.

1. Introduction

The processes of globalization, developing from the second half of the XX century, contributed to the formation of a new model of global economic ties, where there is a deep interdependence of national models and the world economy. The competitiveness of national capital depends on the opportunities created by the state to be included in the financial and industrial corporative cores, into interfirm networks (Hagedoorn,&Duysters, 2002). At the same time, the countries themselves differentiate in many ways, including scientific and technical features (Stolyarova et al, 2015), in terms of the level of development of human capital (Chizhova, Davydenko,&Kazhanova, 2013), which creates the conditions for creating a specific economic structure (Glagolev,&Vaganova, 2013), where opportunities for integration are reduced.

One of the initial tools of the mechanism for forming strategic business partnerships is to assess the conditions of integration that have been developed in the region or country.

2. Problem Statement

The formation of strategic partnerships at the current stage of globalization of the economy has to take into account the possibility of cooperation with foreign organizations. Therefore, it is advisable to assess the integration climate of the partner country. There is no unique technique in the represented ones in open access sources. But all the methods have a rational grain.

3. Research Questions

The task of the research is to systematize the available methodologies for assessing the integration climate of countries and to identify their advantages for their further use in the author's methodology.It is also important to determine the relevant directions for assessing the integration climate.

4. Purpose of the Study

The purpose of the study is to group countries according to the degree of their attractiveness for integration.

5. Research Methods

As a result of the research of scientific literature, the authors systematized the methodical apparatus in this field.

5.1. The first group of methods

This group includes various options for assessing the level of globalization of countries. For example, there is a methodology for determining the Global Readiness Index (GRI), which allows assessing how a subject of the economy perceives its position in world markets. The calculation is based

on the integration of three indicators: 1) "Global mentality" or the propensity to global interaction (Global Mindset); 2) "Global Knowledge"; 3) "Global Business Skills" (Ball,&McCulloch, 1990).

The globalization index calculated by the KOF Swiss Economic Institute (The KOF Globalization Index, 2016)is estimated on the basis of political, social and economic indicators of countries' inclusion in the world economic system. It allows judging the slowing down of the processes of rapprochement of national economies. In 2015, in this rating Russia ranks 18th in terms of political globalization, 56th- in terms of social globalization, 111st- in terms of economic globalization (Figures 1, 2). The country's integral rating is 69.4 points (45th out of 207). Let us note that Japan is on the 48th position, and China is on the 73rd.
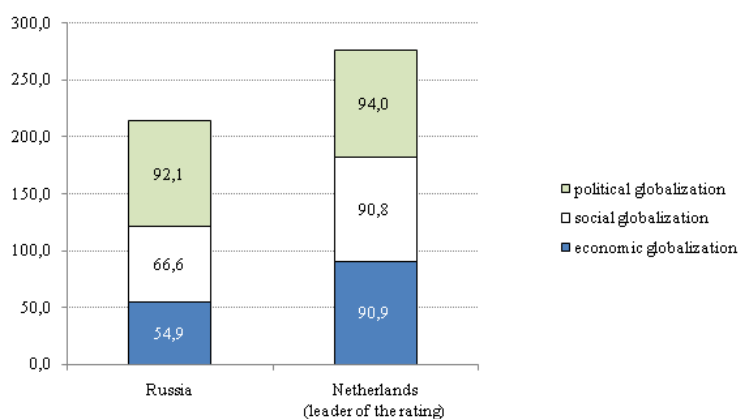

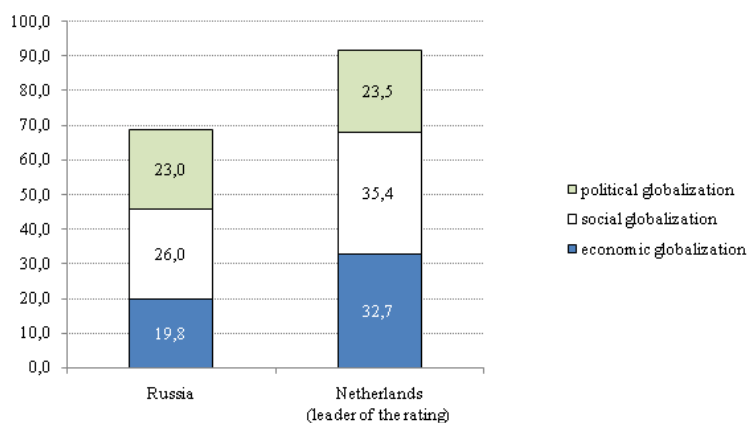**Figure 01.** Globalization Overall Rating, points

Figure 02. Weighted globalization rating, percentages

It should be noted that in this methodology, the components that determine the climate for globalization of the country are of unequal value: the weight of the economic component is 0.36, the social component is 0.39, the political component is 0.25.

5.2. The second group of methods

This group includes methods of structural and functional comparative analysis of economic systems.

In the method of Ya.V. Kulchitsky, B.V. Kulchitsky, S.M. Rogach (Kulchitsky, Kulchitsky, & Rogach, 2014) proposed groups of economic, socio-cultural, political, legal, environmental, information and communication criteria for the classification of modern economic macrosystems. There are several criteria for the class of economic. For example, the population and their educational and professional structure; the amount of intellectual capital; natural resources; the geographical and geopolitical situation; GDP of the country; the effectiveness of the economic system of society; annual GDP growth per capita; the state's participation in the economy; the ratio between the amount of public spending and GDP; investment climate; the volume of licenses sold for inventions; a degree of economic freedom. Socio-cultural criteria include social (national) values and mentality; the attitude of society towards women, children and the elderly; the share of the middle class of society; unemployment rate; a chance to get a job; indicators of health and life expectancy; the size of the consumer basket; indicators of social security and the degree of social protection of citizens. Political and legal criteria consist of the degree of completeness of human freedom; the level of ensuring social justice; the degree of formation of civil society; the effectiveness of the electoral system; the degree of stimulation of progressive economic changes in the legal system; compliance of legal laws of the state (economic system) with the norms of international law; participation of the country (economic system) in solving global problems.

Environmental criteria are the degree of environmental safety; the share of environmental expenditures in GDP; the degree of purity of the air and water basins; the amount of radioactive background; the degree of ecological compatibility of food products; percentage of afforestation in the total area; share of environmentally friendly technologies (using solar, wind, water); the degree of utilization of environmentally hazardous waste.

Information and communication criteria are the level of aggregate expenditures for basic and applied scientific research; the number of researchersper 10,000 people employed in the economy; the number of operating personal computers total and per 1000 citizens; the number of installed licensed PC software; the number of PCs connected to the Internet; the number of Internet cafes per 1000 citizens; the number of periodicals published in the country totally and per 1000 citizens; the number of public scientific and technical libraries; the general circulation of the published scientific and technical and popular scientific literature; total circulation of published scientific and popular literature per adult citizen of the country;the number of television and radio receivers per 1000 citizens; the number of mobile phones per 1000 citizens; the number of citizens with a higher education per 1000 population; the number of citizens with a higher technical education per 1000 population; the percentageof people with higher education in the total population under the age of 35; the number of scientific works published per year per 100,000 citizens of the country; the number of citizens who are fluent in English per 1000 people; the number of researchers engaged in R & D; the number of registered patents, etc.

In this techniqueas well as in previous approaches, the authors take into account the inequality of the groups of evaluated criteria, giving more weight to the information and communication class. However, the proposed criteria are suitable for a comparative assessment of the opportunities and competitiveness of a country in the global economy.

The authors would like to highlight the technique of G.N. Makarova (2014) who is focused on taking into account unique characteristics that are significant for the translation of national economic,

political, social and other values. This, in particular, is the degree of adequacy of the country's human, economic and technical potential for guaranteeing economic security and attracting the world community; possession of deep knowledge and cultural traditions that allow one not to lose cultural and educational potential in conditions of active interaction with other countries; the presence of a common national idea, which supports historical optimism and is perceived as progressive and necessaryby the population of the country; the degree of sufficiency of national defense to preserve the independence of the country; the level of country's authority in world politics and the ability to influence the global political decisions; the level of "coherence" of the system of national institutions.

The calculation of global competitiveness index supplements (The Global Competitiveness Report, 2016) the methods of this group.It is based on evaluation of sub-indices of basic requirements (institutions, infrastructure, macroeconomic environment, health, primary education), sub-indices of performance factors (higher education, commodity market, labor market, financial market), sub-indices of factors of innovation and development (business development, innovation).

5.3. The third group of methods

This group includes tools for assessing the similarity of integratingmacrospacesthrough evaluating the degree of co-interest in the mutual use of the territorial resources. A variant of such assessment is the definition of the coefficient of integration attractiveness (Baginova, Sharaldaeva,&Falileeva, 2015):

$$K_{int} = \sqrt{K_{un} \cdot K_{eq}} \qquad (1)$$

K_{int} – coefficient of integration attractiveness, K_{un}- coefficient of uniformity of the macroregion economic space, K_{eq}– coefficient of equivalence of the macroregion territories development.

Indicators of the uniformity of the economic space are natural resources per capita, the cost of extracting natural resources, the unit value of fixed assets and the degree of their usefulness, the length and coverage of roads, the length and generated capacity of power lines, the area and volumes of water resources and agricultural land. The index of equivalence of territorial development reflects the possibility of replacing certain resources in the specialization of territories within the limits of achieving the same macroeconomic results. As noted by the group of Russian authors (Vertakova, Mihajlov,&Poljanskij, 2009), the principle of similarity of territorial objects acquires special significance in the situation of strategic planning.

In the authors' opinion, all the methods presented have a rational grain. In the first case, the use of ratings is attractive for the purposes of this research, in the second one - the inclusion of different directions in the assessments, in the third one - the orientation toward assessing the similarity of countries (or regions) in the integration.

6. Findings

The authorsproposethe methodology for assessing the integration climate which is an attempt to combine the advantages of the three methodological approachesdescribed above. The aim of the methodology is to group countries according to the degree of their attractiveness for integration. The closer the integration climate (the conditions for integration) of the countries, the easier the process of

business integration and cooperation. It is proposed to build an evaluation system based on the existing and used in world practice ratings, which will facilitate the process of gathering information.

The proposed scheme for assessing the integration climate of countries of potential strategic business partners is shown in Fig. 3
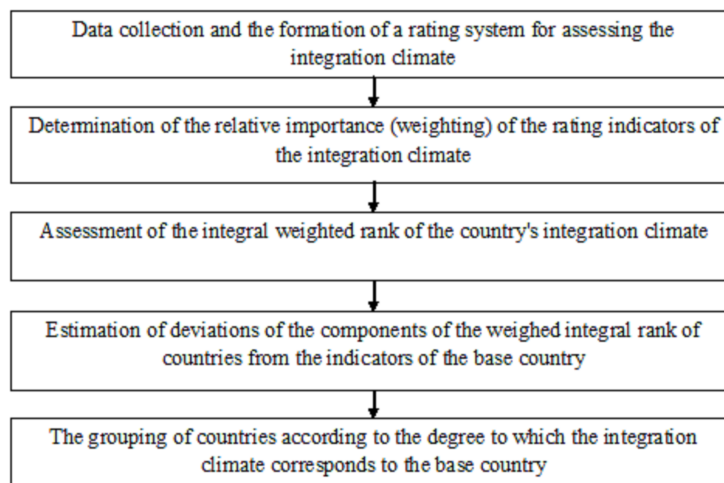

Figure 03. Scheme for assessing the country's integration climate

The steps of the proposed methodology are consideredin detail below.

6.1. First stage

The first stage is collecting data on a set of rating indicators for a comprehensive assessment of the degree of country's inclusion in the global economy, which reflects the integration climate. The authors consider that the following ratings reflect the economic, political, social and technological spheres, which, according to theoretical analysis, are significant in current globalization processes:

- The ICT Development Index, which is a combined indicator calculated by the International Telecommunication Union (http://www.itu.int/) methodology.
- The Environmental Performance Index, defined by the Yale Center for Environmental Law and Policy (http://epi.yale.edu/).
- The Legatum Prosperity Index (http://www.prosperity.com/), which is combined and consists of separate indices: economic prosperity; the degree of development of entrepreneurship; management effectiveness; the level of education; the level of health; the security level; the degree of personal freedom; development of social capital.
- Corruption Perceptions Index, calculated by the methodology of the international non-governmental organization "Transparency International", based on a combination of publicly available statistics and global survey results (http://cpi.transparency.org/).
- The index of economic freedom, measured by the experts of the Heritage Foundation (http://gtmarket.ru/news/ 2016/02/01/7293).
- The Human Development Index, which is annuitely submitted by experts from the United Nations Development Program (http://hdr.undp.org/).

- The Global Competitiveness Index, calculated according to the methodology of the World Economic Forum (http://www.weforum.org/ issues / global-competitiveness).
- The Global Innovation Index, defined as a weighted sum of estimates of two groups of indicators: available resources and conditions for innovation (Innovation Input) and practical results of innovation (Innovation Output) (http: //www.globalinnovationindex. org);
- The Index of the Potential of International Influence, which is included in the rating system of the project "Political Atlas of Modernity" (http://worldpolities.org).

6.2. Second stage

The second stage is conducting a survey among representatives of government, business and science to assess the relative importance of the proposed rating indicators.

6.3. Third stage

The integral weighted rank of the country's integration climate is determined as weighted averagemark:

$$R_{IC} = \frac{\sum r_i \cdot a_i}{\sum a_i} \qquad (2)$$

r_i – rank of the country in accordance with the *i-th* rating; a_i – weight of the *i-th* rating in the overall assessment of the integration climate.

6.4. Fourthstage

The assessment of deviations of the components of the weighted integral rank of countries from the indices of the base country:

$$\sum (r' \cdot a_i - r'' \cdot a_i) \qquad (3)$$

r', r'' – rank of the countries being compared in the *i-th* rating.

The base country is one that acts as a comparison object for the firm searching for a foreign strategic partner.

6.5. Fifthstage

The fifth step is grouping countries according to the degree of compliance of the integration climate. Countries are sorted by the magnitude of the deviation from the weighted rating.

The division of countries into groups according to the degree of similarity of the integration climate allows entrepreneurs to assess the simplicity and convenience of business cooperation at the international level.

The proposed methodology was applied for identifying the integration climate of the countries and for assessment of the conditions of international business cooperation that existed in the states. Data on the indicators of the integration climate were collected in a single form, the size of which does not allow presenting it in this article. The results of the expert poll are shown in Fig. 4.
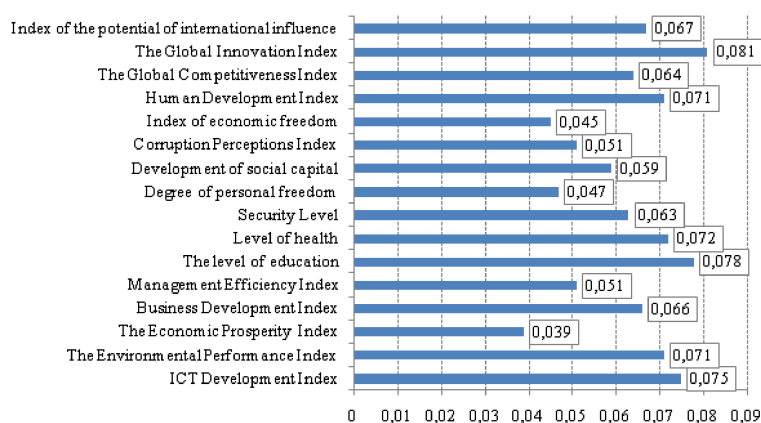
Figure 04. The relative importance of the rating indicators for assessing the country's integration climate

The estimation of the integral weighted rank of the country's integration climate was carried out according to formula (2). As a result of assessing the deviations of the components of the weighted integral rank of countries from the indicators of Russia, the countries of the world were divided into six groups by the similarity / divergence of the integration climate with Russia (Table 1).

Table 01. The grouping of countries by the similarity of the integration climate with Russia

Group	Countries	Prospects of integration
1A	Poland, Slovenia, Israel, Portugal, Malta, Estonia, Italy, United Arab Emirates, Chile, Slovakia, Lithuania, Saudi Arabia, Malaysia, Latvia, Hungary, Cyprus, Uruguay, Kuwait, Costa Rica, Greece, Bulgaria, Romania, Croatia	Countries that have the maximum similarity in terms of social, technological, economic and political development. Integration of business partners from these countries is relatively simple because of the similarity of priorities and the level of development of industries and markets
1B	Thailand, Panama, Argentina, Brazil, Montenegro, China, Trinidad and Tobago, Kazakhstan, Serbia, Colombia, Macedonia, Mexico, Turkey, South Africa, Ukraine, Jordan, Azerbaijan, Jamaica, Georgia, Sri Lanka, Indonesia, Vietnam, Armenia , Philippines, Peru, Mongolia, Morocco	
2A	Norway, Netherlands, Canada, USA, Australia, Great Britain, Germany, Finland, New Zealand, Singapore, Ireland, Austria, Japan, Luxembourg, Iceland, Belgium, France, Spain, Czech Republic, South Korea	Countries that have uncritical differences from the integration climate of Russia. Cooperation with partners from these countries is possible in the framework of mutually beneficial projects
2B	Botswana, Moldova, Albania, Tunisia, Ecuador, Lebanon, Bosnia and Herzegovina, Algeria, El Salvador, India, Namibia, Guatemala, Paraguay, Venezuela, Iran, Bolivia, Ghana, Egypt, Rwanda, Senegal, Nicaragua, Honduras, Kenya	
3A	Switzerland, Denmark, Sweden	Integration with counterparties from these countries is difficult and may be due to the mutual availability of unique resources or technologies
3B	Zambia, Nepal, Cambodia, Bangladesh, Côte d'Ivoire, Uganda, Nigeria, Benin, Cameroon, Pakistan, Mali, Tanzania, Ethiopia, Mozambique, Malawi, Zimbabwe, Angola	

Countries which ratings are higher than Russian ones are included in subgroup A; countries which ratings are lagging behind Russian ones are included in group B.

As can be seen, Russia's main partners in BRICS are included in the group with the most favorable integration climate.

Some limitations in the use of the methodology should be noted. First, not all ratings are unambiguous in terms of the composition of the countries participating in them. Therefore, the results of calculations include only those countries that are represented in all sixteen used ratings. Secondly, despite the proximity of countries based on ranking results, there are a number of special conditions (such as sanctions) that can impede the development of strategic business partnerships. In particular, despite the fact that Ukraine is included in the group of the most favorable integration climate for Russia, the formation of integration entities in the industrial sector between these countries is currently difficult due to a number of political decisions.

7. Conclusion

The integration climate is understood as the set of conditions that form the environment for the formation of corporate entities with foreign partners.

It is determined that there are methods for assessing the level of globalization of countries, for comparative analysis of macroeconomic systems, for assessing the similarity of integrative regions. A kernel of good sense in the first group of methods is the use of ratings, in the second one - the inclusion of different areas of evaluation, in the third one –assessing the similarity of countries. An attempt to combine the advantages of the three methodological approaches is the proposed methodology for assessing the integration climate.

The purpose of the proposed methodology is to group countries according to the degree of their attractiveness for integration. The closer the integration climate of countries is, the easier it is to unite organizations of these countries in business. The methodology is based on the construction of an assessment system based on existing and used in world practice ratings. The rating system includes ratings reflecting the level of ICT development; ecological efficiency; prosperity; perception of corruption; economic freedom; human development; global competitiveness; global innovation; the potential of international influence. The procedure of expert evaluation of their relative importance for the characteristics of the integration climate was carried out.

Three groups of countries have been identified as a result of applying the methodology. Each group contains subgroup A, which includes those countries which ratings are higher than Russian ones (they have positive deviations from the indices of Russia), and subgroup B which includes those countries which ratings are lagging behind the Russian ones.

Acknowledgments

References

Baginova, V.M., Sharaldaeva, I.A., & Falileeva, N.V. (2015) Formirovanie mezhregional'nyh transgranichnyh makroklasterov kak instrument social'no-jekonomicheskogo razvitija prigranichnyh regionov v uslovijah jekonomicheskoj globalizacii. *Vestnik Burjatskogo gosudarstvennogo universiteta, 2*, 235-238.

Ball, D.A.,&McCulloch, W.H. (1990) *International Business: introduction and essentials*. Boston, MA: BPI Irwin.

Chizhova, E.N., Davydenko, T.A. and Kazhanova, E.Y. (2013) Improving of human capital assessment methodology as a basis for improving the management of human resources in new economy. *Middle East Journal of Scientific Research*, *15(12),* 1866-1870. doi: 10.5829/idosi.mejsr.2013.15.12.70102

Glagolev, S.N., &Vaganova, O.V. (2013) Specific determinants for structuring the economy, taking into account the factor of integration.*World Applied Sciences Journal*, *24(10)*, 1322-1329. doi: 10.5829/idosi.wasj.2013.24.10.7008

Hagedoorn,J,&Duysters, G. (2002) Learning in dynamic inter-firm networks: The efficiency of multiple contacts.*Organization Science*, *23(4),* 525-548. doi: 10.1177/0170840602234002

Kulchitsky, Ja.V., Kulchitsky, B.V., & Rogach, S.M. (2014) Porivnjal'nij analiz suchasnih ekonomichnih sistem v umovah ïh ekologizaciï ta globalizaciï: sproba matematichnoï formalizaciï. *Naukovi praci Lisivnichoï akademiï nauk Ukraïni: zbirnik naukovih prac*, *12,* 210-215.

Makarova, G.N. (2014) Kriterii konkurentosposobnosti stran v uslovijah globalizacii, *Izvestija Bajkal'skogo gosudarstvennogo universiteta*, *2*, 89-96.

Stolyarova, V.A., Kupriyanov, S.V., Stolyarova, Z.V., Saldanha, H.F.D., & Sukhraj, R.A. (2015) The role of science as a factor of integration of countries in the context of globalization. *Asian Social Science*, *11(7)*, 278-283.

The KOF Globalization Index (2016). *Netherlands Beat Ireland and Belgium*. Retrieved from http://globalization.kof.ethz.ch/

Vertakova, Ju.V., Mihajlov, A.N., & Poljanskij, R.B. (2009) Strategicheskoe planirovanie razvitija territorij s uchetom ih differenciacii po sootvetstviju urovnej jekonomicheskogo i social'nogo razvitija. *Izvestija Jugo-Zapadnogo gosudarstvennogo universiteta*, *4(29)*, 96-103.

World Economic Forum (2016) *The Global Competitiveness Report.* Retrieved from https://www.weforum.org/reports/the-global-competitiveness-report-2016-2017-1.