"ACTUAL ECONOMY: LOCAL SOLUTIONS FOR GLOBAL CHALLENGES (ACE-16)" (Bangkok, Thailand)

Economic modernization of BRICS countries on their way to global creativity

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Блюдо «Перемешать докладчика»

The present-day economic upgrade is symbolized by the terms like “post-industrial economy”, “information economy”, “economy of knowledge”, “economy of diversity”, “emergement (virtual, synthetic) economy”, “innovation economy” “creative economy”, “economy globalization” etc.

One of the comprehensive indices to characterize the knowledge-based economy development level is the Knowledge Economy Index developed by the group of the World Bank in the framework of the dedicated programme “Knowledge for Development” for the evaluation of the countries’ capability to create, adopt and propagate the knowledge. The Index calculation is based on the system of 109 structural and quality indicators classified into four main groups: index of the economic and institutional regime, index of education, index of innovations, IT index. As per this Index, Russia’s standing is, for example, the 55th, Brazil’s – the 60th, the South Africa’s – the 67th, China’s – the 84th, India’s –the 110th. Top ten consists of mostly developed countries of the OECD

Knowledge Economy Index (KEI) 2012 Rankings

2012 Ranking	2000 Ranking	Country	Knowledge Economy Index (KEI)	Knowledge Index
55	64	Russia	5.78	6.96
60	59	Brazil	5.58	6.05
67	52	South Africa	5.21	5.11
84	91	China	4.37	4.57
110	104	India	3.06	2.89

KEI Rankings southeast Asia

№	Country/Economy	2012 Rank	KEI 2012	2000 Rank	Change from 2000
1.	Malaysia	48	6.1	45	-3
2.	Thailand	66	5.21	60	-6
3.	Philippines	92	3.94	77	-15
4.	Vietnam	104	3.4	113	9
5.	Indonesia	108	3.11	105	-3
6.	Cambodia	132	1.71	116	-16

The creative economy ideas in the BRICS countries were mostly elaborated in Brazil, in recent years China and Russia have been actively scrutinizing the creative economy principles.

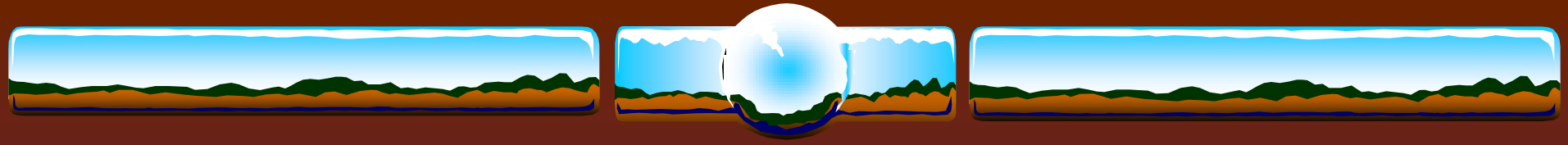
Geographic Breakdown of the World Trade in Creative Products in 2006-2012 (as percentage of the total)

	Import		Export	
	2006	**2012**	**2006**	**2012**
Worldwide	100.0	100.0	100.0	100.0
The USA	30.4	21.4	9.1	8.6
The UK	8.6	7.3	6.7	4.9
Japan	5.4	4.4	1.9	1.7
China	**1.3**	**1.4**	**15.8**	**20.8**
Russia	**0.1**	**1.3**	**0.4**	**0.4**

Rankings of he Countries' based on the Global Creativity Index, 2015

Rank	Country	Technology	Talent	Tolerance	Global Creativity Index
1	Australia	7	1	4	0.970
2	The USA	4	3	11	0.950
3	New Zealand	7	8	3	0.949
4	Canada	13	14	1	0.920
29	**Brazil**	**27**	**68**	**15**	**0.667**
38	**Russia**	**22**	**15**	**123**	**0.579**
39	**South Africa**	**30**	**62**	**57**	**0.564**
62	**China**	**14**	**87**	**96**	**0.462**
99	**India**	**52**	**92**	**108**	**0.292**

Source: Global Creativity Index Report 2015 / [Электронный ресурс]. – URL: www.martinprosperity.org; http://martinprosperity.org/media/Global-Creativity-Index-2015



A modernized society is a system of economic, political and cultural modernization.A number of countries makes an emphasis on certain modernization forms, for example, political ones; China initially separated economic reforms and political system, in Russia confidence in the fact that economic results cannot be attained without dramatic change of the political course dominated.

In the scientific literature the following modernization types are segregated: organic and inorganic. Primary (organic) modernization was implemented in the pacesetting countries and was conducted at the expense of the internal factors: drastic changes in the mentality culture, world outlook. Secondary (inorganic) modernization is a response to the external challenges from the more developed countries and is implemented based on the simulation tools, predominantly, under the influence of the borrowing of foreign technologies and production and society organization forms, invitation of international experts, staff training abroad, investment attraction. Russian modernization is related, first and foremost, to economic innovations and therefore may be classified as secondary modernization.

According to a different classification three modernization types are singled out:

- endogenous which the countries performed on their own basis (Europe, the USA);
- endogenous-exogenous which the countries perform both on their own basis and using borrowings (Russia, Turkey, Greece etc.);
- exogenous (imitation/ simulation) conducted mostly based on the borrowings.

The third-type modernization is, as a rule, characteristic, for geographically remote countries of the Old World.

In Russia 5 modernization areas are set: energy efficiency and energy saving (including development of new fuels); nuclear technologies; space technologies; medical technologies; strategic information technologies.

THE MOSCOW DECLARATION (the III meeting of the Ministers for Science, Technologies and Innovations of BRICS Countries, October 28, 2015) provides the establishment of the cooperation mechanisms and levels:

- cooperation in the framework of the largest research infrastructures, including “mega-science” projects;
- coordination of the existing large-scale projects of the BRICS countries;
- development and implementation of the BRICS Framework Programme on the financing of multi-lateral joint research projects, projects in the area of technology commercialization and innovative projects;
- creation of the Research and Innovative network platform of BRICS countries.

THE MOSCOW DECLARATION welcomed the following new initiatives:

- establishment of the Forum of young scientists of the BRICS countries (coordinating country – India);
- cooperation in the area of biotechnologies and biomedicine, including human health and neurobiology (coordinating countries – Russia and Brazil);
- cooperation in the area of information technologies and high-performance computations (coordinating countries – China and South Africa);
- cooperation on scientific and technological research of the ocean and polar areas (coordinating countries – Brazil and Russia);
- cooperation in the area of material studies and nano-technologies (coordinating countries – India and Russia);
- cooperation in the area of photo-electronics (coordinating countries – India and Russia).

The cooperation covers five topical areas previously outlined in the Brazil Declaration and supervised by each BRICS state, namely:

a) natural disaster prevention and termination supervised by Brazil;
b) water resources and fighting against water pollution – supervised by Russia;
c) geo-spatial technologies and application thereof – supervised by India;
d) new and renewable power-engineering, energy efficiency – supervised by China and
e) astronomy – supervised by South Africa. The works on these five areas will involve Research and Innovative network platform of BRICS countries to provide direct communication link between the countries concerned.

BRICS Work Plan on science, technology and innovations for 2015 -2018 partially eliminated controversy in different national documents and BRICS declarations.

Currently the most comprehensive and systemic research of the level of innovative development of the countries of the world is the study of international business school INSEAD (France) on the calculation of the Global Innovation Index. The Index is calculated as the weighted sum of evaluation of two indicator groups: 1. Available resources and conditions for innovations; 2. Attained practical results of the innovation implementation.

Rankings of the Countries of the World in terms of the Global Innovation Index 2014.

Ranking	Country	Index
1	Switzerland	64.8
2	the UK	62.4
3	Sweden	62.3
4	Finland	60.7
5	the Netherlands	60.6
6	the USA	60.1
29	China	**46.6**
49	Russia	**39.1**
53	South Africa	**38.2**
61	Brazil	**36.3**
76	India	**33.7**

1INSEAD research: The 2014 Global Innovation Index. [web-resource] // Centre for Humanitarian Technologies — July 18, 2014
URL: http://gtmarket.ru/news/2014/07/18/684

The modernization theory and, consequently, practice in the BRICS countries and Iran faces a number of issues requiring extra arguments:

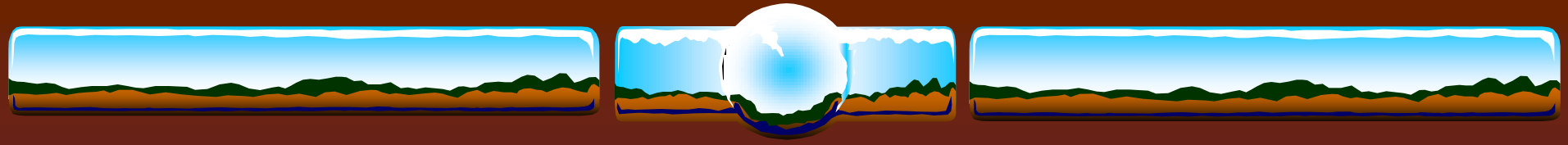
1. Is low systemic nature of the modernization in the conditions of limited financial and other resources admissible? It is known that economic growth without debt burden increase is impossible. Which is primary: investment or financial solutions? If there is no financial safety margin, it is difficult to implement global investment projects, in this connection the operation principles of the new BRICS Bank are of top importance.
2. It is not clear, what is subject to modernization in each of the BRICS countries – we have 5 countries and 4 civilizations: how should different civilization formats be accounted for and, if we also include candidate countries, we get Islamic and Buddhistic civilizations. Should Russia retain the leading role in the industrial knowledge generation including prototype fabrication which will be produced in mass scale by China?

3. Why the programmes do not account for the peculiarities of the relationships with the observers the list of which is open and is not ended by Iran; the relationships and effort coordination with the Shanghai Organization of Cooperation countries are not clear either.

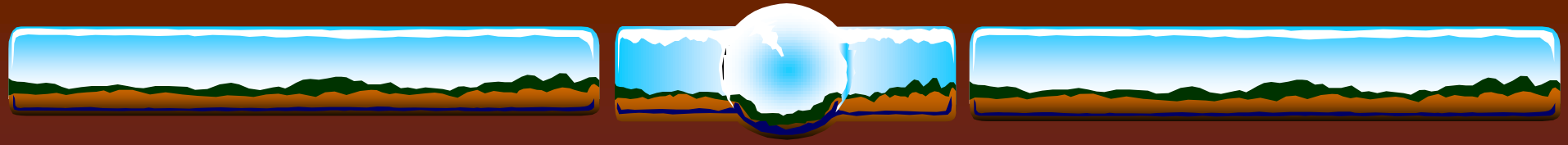
4. Does economy modernization suppose transformations of social policy and building new institutions for the support of the economically active population?

5. How is it possible to combine the policy of cluster development in the regions with the attempts of replacement of industry modernization programmes for target (cross-industry) programmes of economy modernization? What is the role of agro-industrial system sectors' modernization in certain countries.

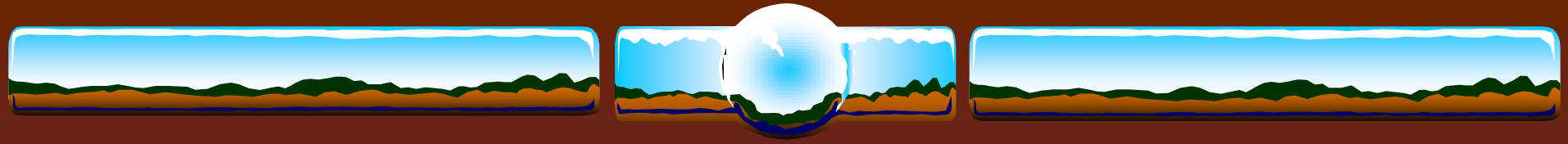
THE JOINT DECLARATION OF THE 5TH MEETING OF THE MINISTERS OF AGRICULTURE AND AGRARIAN DEVELOPMENT OF BRICS COUNTRIES (2015)



6. What are the controversies to be solved in the course of modernization? Innovation is the disaster for the manufacture which breaks the streamlined mechanism.
7. Is it right to believe that state corporations, state and municipal companies, joint-stock companies with the state share, joint ventures of BRICS member countries are the main “agents of modernization”? Can small venture business provide weighty assistance? Is there critical mass of civilized entrepreneurs in the countries?



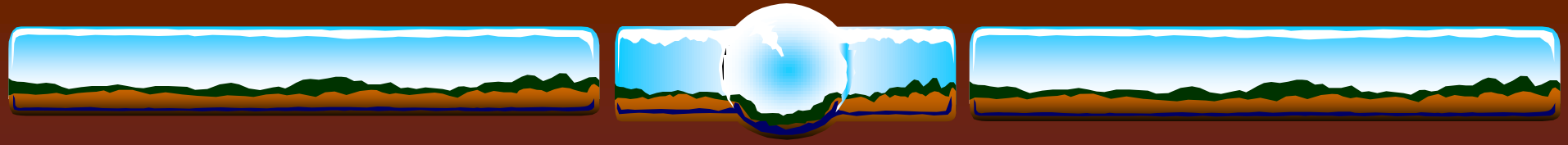
8. Is the modernization of Russia possible at the expense of the raw-material system in the conditions of falling efficiency of oil and gas industry with a significant cost inflation and reduced production capital intensity and oil prices? It is necessary to depart from the populist idea of shift-over from the raw-material trend in the Russian Federation to deep conversion of oil and gas with the acknowledgement of the industry capable of development based on the innovation premises.
9. Is it theoretically possible to define the modernization aim tree in the conditions when the world economy is in the lowest point of all the known economic cycles (Kondratiev waves, Kuznets swings, Jugler cycles, Kitchin cycles)?



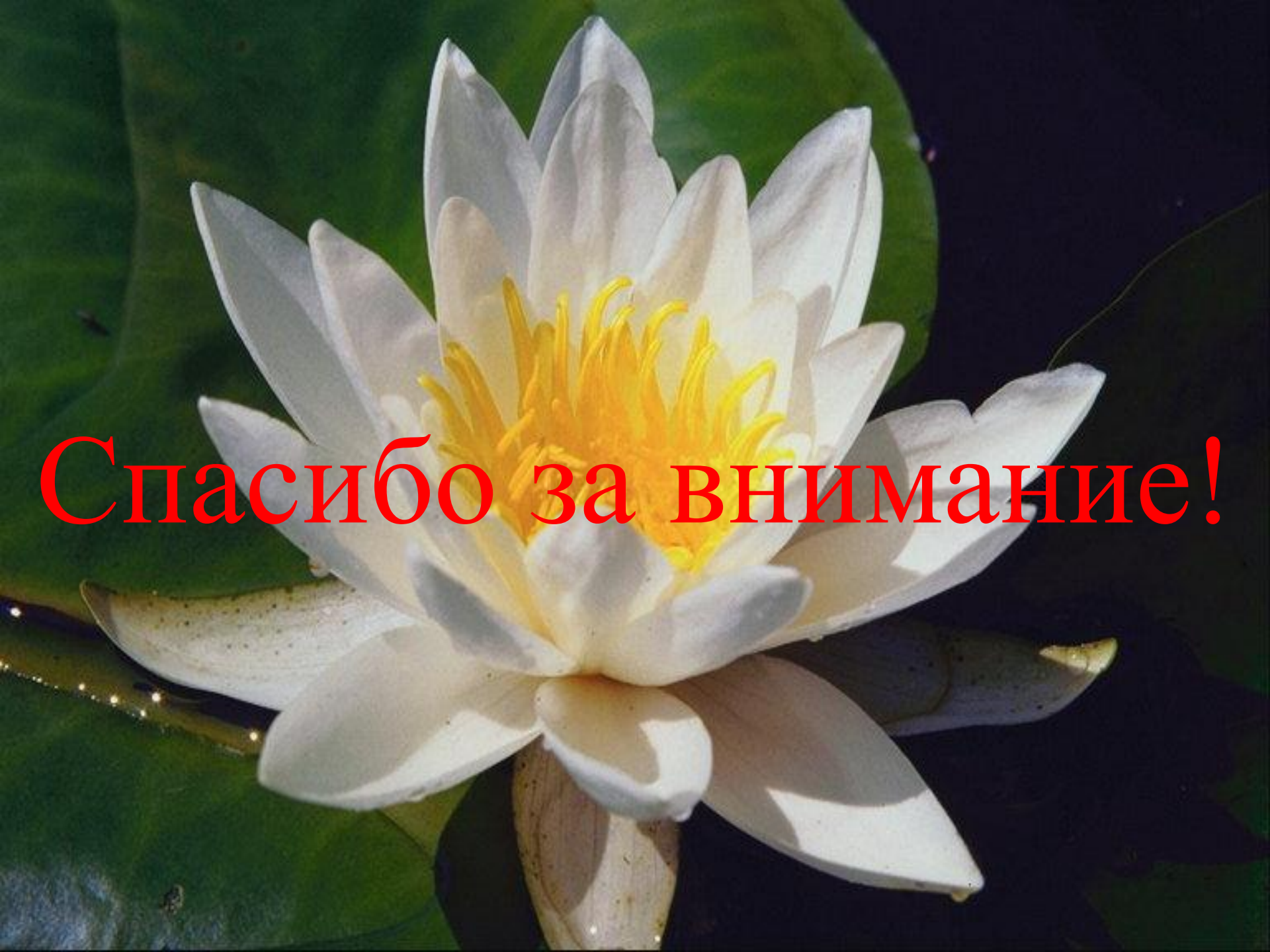
10. What are the prospects of economy modernization in case of erroneous modernization task setting? Can Russia set the global task of changing the GDP structure, shift accents from resource-based economy to the manufacture of technically and technologically complicated products? Should Russia conduct the policy of industry diversification reducing the share of fuel and energy system in the GDP; is it possible to change the present-day agricultural and trading structure of the economy towards a more technological and service side. It would be wrong to suppose that the fuel and energy economy sector is not science-intensive.
11. What are economic export solutions under the continued world financial crisis and economic sanctions?

12. How will the problems of engineering and technological cooperation be solved in real world with the remote location of Brazil and South Africa? Undoubtedly, there are profitable cooperation areas in South Africa on the expansion of the railway network, thermal power stations' upgrade, armaments etc.
13. In which direction will the strategy of socially oriented innovative development will be transformed in the "dormant giant" (Brazil) based on the claimed BRICS priorities? Is it possible to modernize the observer (Iran) based on the modernization democratic model or based on thee socio-cultural background and Islamic principles of business, Islamic banking, their application mechanics it is possible to speak of Iranian modernization model. Only one method of conduct is possible: authoritarian power mobilizing all the required resources; what are the tasks of the ruling elite on the modernization implementation?

18. What is the way to neutralize clan ties, corruption in making business decisions, state purchases etc. What is the mechanics of priority setting for BRICS country companies' participation in the state purchases of the partner countries?
17. How are the development areas and economic burden on the territories accounted for, primarily, in China?
16. What are the expected modernization results?



In terms of theory, if we acknowledge that social-market economy with the socio-cultural specific features is the model of industrial economy, we have to answer the question: what is the “ideal” model of economy of knowledge and which type of modernization to select. How will the model selected fit the expansion of the economy openness and, consequently, vulnerability to the world financial crises; degree of infrastructural transformations, including those in the bank sector, hereby, what is the share of banking sector which may fall on the Islamic banking products, what is the sustainable small business sector and landmarks in the privatization policy. The reduced influence of the West in the world policy and economy, including the growing potential of China, India and Russia, independent foreign economic policy of a number of countries cannot but provoke the irritation of the USA. Among the newest concepts of the post-industrial development are the outlines of the creative economy theory based on the intellectual activity, this theory is characterized by the increase of the creative values in the society by means of the creative work development and establishment of favourable condition for its implementation. Therefore, the BRICS countries are searching for their own way in the epoch of the geopolitical configuration change.


Спасибо за внимание!