



Студенттер мен жас ғалымдардың
«ҒЫЛЫМ ЖӘНЕ БІЛІМ - 2018»
XIII Халықаралық ғылыми конференциясы

СБОРНИК МАТЕРИАЛОВ

XIII Международная научная конференция
студентов и молодых ученых
«НАУКА И ОБРАЗОВАНИЕ - 2018»

The XIII International Scientific Conference
for Students and Young Scientists
«SCIENCE AND EDUCATION - 2018»



12th April 2018, Astana

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The proceedings are the papers of students, undergraduates, doctoral students and young researchers on topical issues of natural and technical sciences and humanities.

В сборник вошли доклады студентов, магистрантов, докторантов и молодых ученых по актуальным вопросам естественно-технических и гуманитарных наук.

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	the markets with a seemingly constant stream of new products. Although many derivatives and advanced financial products have been maligned in the wake of the Great Recession, the fact remains that many of these instruments were designed to address and solve market demands and needs.
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Conclusion. It is important for investors to avoid “either/or” arguments regarding economics and finance; both are important, and both have valid uses and applications. In many respects, economics is “big picture” (how a country/region/market is doing) and concerned about public policy, while finance is more company/industry-specific and concerned about how companies and investors evaluate and price risk and return. Historically, economics has been more theoretical and finance more practical, but this has changed in the last 20 years.

It is interesting to note, though, that the two disciplines seem to be converging in some respects. It seems that academics in finance are trying to incorporate more and more theory into their work and appear more academically rigorous. At the same time, there is at least a movement within some schools of economics to lean more heavily on math and appear practical and applicable to everyday business and policy decision-making processes [4].

At some fundamental level, there will always be a separation, but both are likely to remain very important to the economy and financial markets for some time to come.

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UDK 465

ECONOMIC GROWTH AND NEW PARADIGM of CLUSTER DEVELOPMENT of SEZ (Astana new city)

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Transition of Kazakhstan to cluster approach of Special Economic Zones (SEZ) is caused, first, need to provide a sufficient variety of the made production in the country and increases in export. Secondly, it is predetermined by need of reduction of dependence on import of strategically important goods and innovative technologies. Thirdly, for realization of the priority strategic directions of the Message of the President of the country "Strategy 2050" entries into a 30 of the best countries of the world, improvement of quality of production from accounting of the international standards in the conditions of fierce competition, big role for development of national economy has formation and prospects of SEZ in cluster system.

The global character and priority of special economic zones and clusters acquire a special strategic importance at the present stage, becoming one of key factors of effective growth of national economy. In the strategy of industrial innovative development of Kazakhstan [1] need of further development of economic justification of territorial development of certain regions as important source of increase in competitiveness of the country is emphasized.

Creation of special economic zones is an important link in realization of the principles of open economy. Their functioning contacts liberalization and activization of foreign economic activity. The economy of SEZ has high degree of openness to the outside world, and customs, tax and investment regime is favorable for external and internal investments.

Today SEZ has received definition as definition of a form of state regulation of the economic processes proceeding in certain regions of the country, in which application of administrative methods of management is significantly limited. They contribute to the development of business activity, close integration of national economy into the system of world economic communications by attraction of foreign investments and granting customs:

- (1) Atyrau - "SEZ the petrochemical park" (Petrochemistry)
- (2) Aktau - "Seaport of Aktau" (Mixed)
- (3) Borovoy - SEZ "Burabay" (Tourism)
- (4) Karaganda - SEZ "Saryarka" (Metallurgy, metal working)
- (5) Shymkent - SEZ "Ontustik" (Textiles)
- (6) Pavlodar - SEZ "Pavlodar" (Petrochemistry)
- (7) Astana - SEZ "Astana — the new city" (Mixed)
- (8) Horgos - SEZ "Horgos" (Trade, Logistics)
- (9) Almaty - SEZ of "PIT Alatau" (an IT innovation)
- (10) Taraz - SEZ "Taraz" (Chemistry)

The cluster type of development of SEZ is created for a full cycle of production of hi-tech finished goods for export and for own consumption, at the same time for receiving and further introduction in productions of "partner cluster" on a zone of intellectual and innovative products on the basis of research institutes [2].

Besides, taxation of a value added tax of realization on the territory of SEZ of the goods which are completely consumed at implementation of the activity answering to the purposes of creation of such SEZ is carried out at the zero rate.

Development of SEZ at the new qualitative level has begun with start of the state program for the forced industrial innovative development (SPFIID). Within new industrial policy the system of development of special economic zones has been completely reconsidered. Within new industrial policy the system of development of special economic zones has been completely reconsidered. The new Law «About SEZ» [5] has been adopted, the list of privileges for their participants (the privilege on the VAT, a package of privileges for the Park of Innovative Technologies (PIT) "Alatau", etc. is returned) is expanded, the possibility of creation of SEZ on the private earth is provided. There was a possibility of attraction of the qualified management to management of SEZ. Volumes of budgetary funds for development of infrastructure of SEZ have increased. Total amount of tax assignments by participants of SEZ for the entire period was 28 billion tenges, including: Astana – the new city – 12,5 billion tenges, the sea port of Aktau – 9,5 billion tenges, PIT – 3,3 billion tenges, National industrial petrochemical science and technology park (further – NIPST) - 2,16 billion tenges, Pavlodar – 0,12 billion tenges, Ontystik – 0,06 billion tenges, Burabay – 0,05 billion tenges. We will note what exists 10 SEZ in RK:

Table 1 - The characteristic 2 stages of development of SEZ and 1 stage of formation of clusters in Kazakhstan (as of 01.01.2015)

Name SEZ, reference to the legal document	Sectoral orientation	Date of creation and action of SEZ	Location	Territory (hr)
Astana-new city [2]	Administrative and business center, construction,	29.06.2001 till 2027 - 25 years	Astana, Left bank of the Ishim River	7562,3
Seaport of Aktau [3]	Industry, transport and logistics	26.04.2002 till 2028 - 26 years	Mangystau Region, Aktau	2000

Park of information technologies [4]	Innovative technologies	18.08.2003 till 01.01.2028 - 25 years	Almaty, Medeu district, Alatau	316
Ontystik [5]	Textile industry	01.07. 2005 till 01.07.2030 - 25 years	Southern Kazakhstan area, Sayram District	200
National industrial petrochemical science and technology park [6]	petrochemical production	19.12.2007 till 31.12.2032 - 25 years	Atyrau region	3475,9
Burabai [7]	Tourist infrastructure	15.01.2008 till 01.12.2021 - 9 years	Akmola region, Shchuchinsk district	370
SARY-ARKA [8]	Metallurgical industry	24.11.2011 till 01.12.2036 r – 25 years	Karaganda region	534,9
Horgos ast gate [9]	Logistic infrastructure	29.11.2011 till 2035 - 25 years	Almaty region	5740
Pavlodar [10]	Chemical, petrochemical	29.12.2011 till 01.12.2036- 25 years	Pavlodar reion	3300
Chemical Taraz park [11]	Priority kinds of activity in the territory of SEZ production of products of chemical industry	13.11.2012 till 01.01.2037 - 25 years	Shchuchinsk district of the Jambyl region	505
1 stage of cluster development				
7 pilot industrial and service clusters [12]	Metallurgy, oil and gas, mechanical engineering, textile industry, transport and logistics, tourism, food industry, construction materials	2005 year	In the territory of RK	-
Note - It is systematized and made by the author on the basis of [2-12]				

The state program of social and economic development of the city of Astana until 2005 approved by the Decree of the President of the Republic of Kazakhstan of March 19, 2001 №574 has defined a package of measures for harmonious development of the capital as administrative and business center of the country. These measures are directed to increase in the consolidating role of Astana in social and economic and spiritual life of Kazakhstan. In the long term in Astana it is planned to construct the administrative, business, welfare and scientific and educational centers which will conform to standards of the capitals of the developed states of the world as SEZ «Astana New City» [3].

The mission of SEZ "Astana New City" is ensuring development of the new administrative business center of the capital and new industrial zone of the city of Astana by means of attraction of

the investments promoting opening of new jobs and the enterprises for production with high value added.

Priority kinds of activity in the territory of SEZ «Astana New City» are:

- 1) production of other nonmetallic mineral products;
- 2) production of cars and equipment;
- 3) production of household electric appliances;
- 4) production of rubber and plastic products;
- 5) production of products of chemical industry;
- 6) production and technological complex of LLP «Astanaprom»
- 7) production of the electric equipment, including electric lighting equipment, plant on production of photo-electric modules «Astana Solar», production of complete transformer substations of LLP «Spetselektra»;
- 8) production of glass components for lighting instruments, energy saving double-glazed windows of LLP KSS-Astana , a product from glass of LLP «Steklyanny dom»;
- 9) production of food;
- 10) production of wood pulp and cellulose, paper and cardboard;
- 11) production of furniture of LLP «Avalon-K»;
- 12) production of vehicles, trailers and semi-trailers, the plant on production of car tires and creation of the material resources on restoration of buses of all-metal cords of LLP «TD Kama Kazakhstan»;
- 13) production of railway locomotives and rolling stock, production on release of Talgo cars;
- 14) production of air and space aircraft;
- 15) production of the main pharmaceutical products and medicines;
- 16) production of electronic details, electron-optical devices of LLP Kazakhstan ASELSAN Engineering;
- 17) LLP «Tau-Ken Altyn refinery»;
- 18) production on release of electric locomotives on the French technology;
- 19) release of the multipurpose Evrokopter helicopters;
- 20) production of wall panels and stained-glass windows of LLP «Com Invest Group».

Construction and commissioning of infrastructure facilities, hospitals, polyclinics, schools, kindergartens, museums, theaters, the highest and average educational institutions, libraries, palaces of school students, sports complexes, administrative and inhabited complexes according to the design and estimate documentation [4].

Formations and creation of SEZ "Astana New City", shows that an opportunity is born a consequence of his functioning:

- to increase competitiveness of production;
- to attract direct foreign investments;
- to increase the export potential of production with high value added;
- to reduce costs of acquisition of import production;
- to accelerate development of production of new products and services on the basis of use of the new, advanced equipment and technology;
- to unite and in a complex to use the state, commercial and foreign capital;
- to develop at the modern level of business, municipal and economic, legal and financial infrastructure.
- to effectively use natural resources;
- to provide the accelerated development of economy of the region and country in general.

It is in the long term supposed that the necessary solution of the next ways for effective activity of SEZ "Astana New City":

- to raise to interest foreign investors for more fruitful work in SEZ by means of standard, the acts giving to foreign investors more preferential terms for business. It is possible only at increase in period of validity of SEZ up to 30-35 years;

- SEZ "Astana New City" shall develop practically in cluster system, it appears, that the Resolution of the government of RK of October 11, 2013 №1092 will give new pulse for development taking into account financial, scientific and practical support of the state;

- in SEZ "Astana New City" - it is capital SEZ which includes "The industrial park" therefore it has a strategic importance and cannot have only limitation 2 clusters – a cluster of alternative power engineering and a transport and logistic cluster though it is actually necessary to make production of different branches of economy and reduces the development mechanism of the enterprises which entered SEZ without cluster development;

- in SEZ the synergetic effect isn't considered, i.e. there is no DNA spiral – the business state - science.

SEZ "Astana New City" provides receipt of the foreign capitals, technologies, "know-how", creation of new jobs, also protects local producers from the direct competition to foreign firms (in case of export of production), contributes to the development of import-substituting production (in case realization of the made production happens in the national market) [5].

At the same time it is worth to remember that identification of the strategic development plan for SEZ "Astana New City" has shown underestimation of two major circumstances:

1. Entries of SEZ "Astana New City" into cluster development;
2. Achievements of effect of a threefold spiral: investments of the state, science, the enterprises in EXPO-2017 which will give in the future synergetic effect, the submitted tables and drawings reflected in.

Also accounting of the fact that in world practice the following structure of sources of the attracted capital is recommended for SEZ in developing countries is much important: direct budgetary investments – 2-3%, direct financing from local budgets – 12-15%, the soft state loan - 30-35%, financing at the expense of commercial structures and foreign investors of 47-56%.

Besides SEZ in developing countries are involved in export and production, raw types. Therefore for increase in appeal of SEZ "Astana New City" and realization of actions for carrying out EXPO-2017 and development of SEZ it is offered to add with the following:

1. To carry out 30% of financing at the expense of commercial structures and foreign investors;
2. pryamoye financing from state budgets – 70%;
3. lgotny the state credit – under 7-9%;
5. to increase period of validity of SEZ "Astana New City" up to 30 years;
6. to introduce research and development with the state budgetary financing.

All actions will give synergetic effect and will increase income of SEZ.

EXPO-2017 in Astana 3 months - will last from June 10 to September 10, 2017. 2,08 million visitors are expected; 5,08 million visits.

It is expected that part in her will be taken by about 100 countries of the world and about 10 international organizations. The special territory under holding an exhibition which total area will be 113 hectares whereas the area of the most exhibition hall is 25 hectares is already allocated.

Considering special importance of problems of power and ecology, Kazakhstan has offered the subject "Energy of the Future" for holding an exhibition. This subject will allow to cover widely a problem of energy saving and introduction of alternative energy sources.

For these purposes on January 15, 2013 the Resolution of the government of the Republic of Kazakhstan has approved the National plan of the organization and carrying out EXPO-2017 (further – "The national plan"). In the National plan the extensive list of the actions of administrative, organizational, legal, economic and technical character connected with preparation for holding an exhibition has been defined.

Besides, in January, 2013 JSC Astana EXPO-2017 National Company has been created with absolute participation of the state in authorized capital which will carry out the main coordinating role in realization [6].

Among key actions of the National plan it is possible to note the following:

1) in October, 2013 development of offers on determination of the necessary volume of investment into the EXPO-2017 organization and also by definition of sources of financing among which mechanisms of public-private partnership will prevail is complete;

2) in September, 2013 the bill on some questions of carrying out EXPO-2017 is drafted. Procedures for document flow and obtaining licenses and permissions are simplified;

3) in March, 2013 development of drafts of the concept of carrying out EXPO-2017, the master plan and the outline sketch of the exhibition territory with involvement of the international consultants has begun (possibly, design bureaus). In May, 2013 study of a question of development of a design assignment of building of the territory EXPO-2017 has begun. At the same time in February, 2013 the issue of modification of the master plan of building Astana will be resolved, and in October, 2013 the concrete list of objects and communications which construction will be necessary within holding an exhibition is defined; to document flow and obtaining licenses and permissions;

4) in the territory of Astana and in its suburbs a number of objects which will be is among the exhibition hall, эko - and etnoderevn in a radius of 30 kilometers from Astana, hotel complexes and rest houses, points of service, shopping centers will be built. Besides, construction of inhabited arrays under the general name "EXPO CITY" is planned;

5) in June, 2013 offers on development of infrastructure of motor, railway and air transport within holding an exhibition after which approval construction of the corresponding objects will begin are developed. A number of actions are also planned taking into account the main scope of an exhibition – "Energy of the future", in particular, is planned development of the Comprehensive plan of development of energy of the future for 2013-2017.

Thus, it is obvious that in the shortest possible time it is planned to create standard and legal base and to develop active preparation for carrying out EXPO-2017 within which large-scale actions for construction, development of infrastructure, development of small business and tourism will be realized. From the budget of 435 billion tenges it is allocated funds for the EXPO-2017 which are shown in table 40 where budgetary funds and the raised funds for the EXPO are considered-2017.2013-2017 years.

On preparation and holding the International exhibition "EXPO-2017" in 2015-2017 funds in the sum of 435 billion tenges are allocated. From them in 2015 – 164 billion tenges, other means - in 2016 and 2017. For this period, proceeding from his forecasts, to Astana there have to arrive 5 million guests [7].

On the basis of stated above it is possible to expect what EXPO-2017 will become one of key events in the contemporary history of Kazakhstan, and holding this action will make a huge contribution to formation of image of our country, development of economy and culture.

In particular, considerable inflow of investments is expected to the sphere of tourism, infrastructure of Astana and adjacent territories, construction of transport objects and objects of the commercial real estate, development of services industry of the population.

A founder of JSC Astana EXPO-2017 National Company is the Government of the Republic of Kazakhstan represented by Committee of the state property and privatization of the Ministry of Finance of the Republic of Kazakhstan.

As a result I would like to note that:

- merges of SEZ in cluster system has the cooperation, information, network, innovative, disruptive and integration oriented specifics which influence each subject of a cluster and, in the end result, leads to new demanded innovative production with synergy effect, in comparison with the similar enterprises of the country;

- development of SEZ at cluster approach is based on development of international relations, improvements of branch, the region, increase in demand for the competitive innovative production based on effect of synergy – business, science, the state.

- merge of SEZ in cluster system in RK is connected with experience of the best progressive developed countries which apply cluster approach of SEZ to effective development of branches as the most effective form of development of economy. Experience and scientific concepts, offers and

the recommendations of scientists and practitioners need to be used taking into account features of the country [8].

Respectively, within SPFIID the system of development of SEZ was completely reconsidered. At the same time the new Law "About SEZ", the law on clusters therefore the list of privileges for SEZ was expanded (the privilege on the VAT, a packet of privileges for the PIT, etc. is returned) was adopted, the possibility of creation of SEZ on the private earth is provided. Besides there was a possibility of attraction of the qualified management to control of SEZ and separation of budgetary funds for development of infrastructure of SEZ increased and favorable conditions for investors are created.

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KAZAKHSTAN AND NEW SILK ROAD: OPPORTUNITIES AND POSSIBLE THREATS

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You've likely known about the Silk Road, the old exchange course that once kept running amongst China and the West amid the times of the Roman Empire. It's the means by which oriental silk initially made it to Europe. It's additionally the reason China is no more unusual to carrots.

Furthermore, now it's being revived. Declared in 2013 by President Xi Jinping, a fresh out of the box new twofold exchange passage is set to revive channels amongst China and its neighbors in the west: most eminently Central Asia, the Middle East and Europe.

As indicated by the Belt and Road Action Plan discharged in 2015, the activity will envelop arrive courses (the "Belt") and oceanic courses (the "Street") with the objective of enhancing exchange connections in the locale fundamentally through foundation speculations.