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ISBN 978-0-9856672-7-6

Published by ICET
109 E Lamme Street, Bozeman, MT 59715. USA

Printed in the United States of America

Science: Integrating Theory and Practice. Part 2.

Materials of International Conference "Science: Integrating Theory and Practice". February 23-24, 2014.
ICET, Bozeman, MT, USA. 2014.

The large volume of actual problems of the Kazakhstan Science has been examined in the present collection of scientific articles. This book contains the research publications of Kazakhstan researchers.

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Influence of ecological factors is shown variously. The main pollutants of atmospheric air are the enterprises of power system and motor transport. The greatest level of pollution of atmospheric air is observed in Almaty (2012 average value of ACS is 16,7). Natural increase of level of atmospheric air pollution in cold months of year because of increase of volumes of heat production is noticed.

In real conditions the modern person is submitted to influence of tens and hundreds chemical compounds, including many heavy metals simultaneously. Therefore in practice it is not necessary to consider the isolated action of any one element on population health more often. Copper is necessary microelement for the person, a copper lack is connected with a moderate anaemia at the chest children, accompanied by the low content of copper and iron in whey of blood that is treated by additives of these metals, copper is necessary for iron recycling at haemoglobin synthesis. Toxicity of copper is not great. Copper oxides are much less toxic, than its salts. At peroral (through a mouth) taking of considerable quantities of salts of copper there are gastroenteric frustration, including vomiting which usually can be reversible at stopping of influence and treatment. It is known, that development of malignant process occurs together with infringement of regulation of exchange processes, active participation in which is taken by microelements: nickel, lead, zinc, chrome, molybdenum, cadmium and other metals that play the certain role in processes carcinogenesis. It has been found out blastomogenic activity of lead. Preventive deducing of lead from organism promoted decrease of these indicators [3].

Cancerogenic properties are possessed by: cadmium, zinc, cobalt, beryllium, and also nickel officially recognized in England as cancerogenic substance. Authors have shown, that with entering of this metal into organism with potable water in doses of 5,0 and 0,5 mg/kg activity of some fermental systems of thin intestines, and also process of absorption of calcium and magnesium in structural components of mucous membrane of gastroenteric path is broken.

The estimation of influences on environment leads to conclusion about positive influence of projected actions on situation in area and are the following: production of additional capacities in power supply system of RK and additional development of the electric power on Kerbulaksky hydroelectric power station; improvement of conditions in bottom pool for ecosystems because of elimination of negative consequences from week-daily non-uniformity of flow augmentations of Kapchagai hydroelectric power station by restoration of hydrological mode of the river Ili concerning to natural. The quantitatively-complex estimation of ecological consequences of projected actions shows, that the offered variant of actions leads to environment improvement, providing its satisfactory condition (65,6 % from optimum against 58,1 %) and allow to make correcting decisions on distribution of water resources in particular in condition of deficiency of water.

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INVESTMENT PROCESS IN KAZAKHSTAN IN CONTEXT OF COOPERATION WITH THE CUSTOMS UNION COUNTRIES

Gulnar Zhangutina, Laura Massanova

In a modern world of globalization a national economy of any country could not be developed on its own. It certainly concerns Kazakhstan even more than others because the

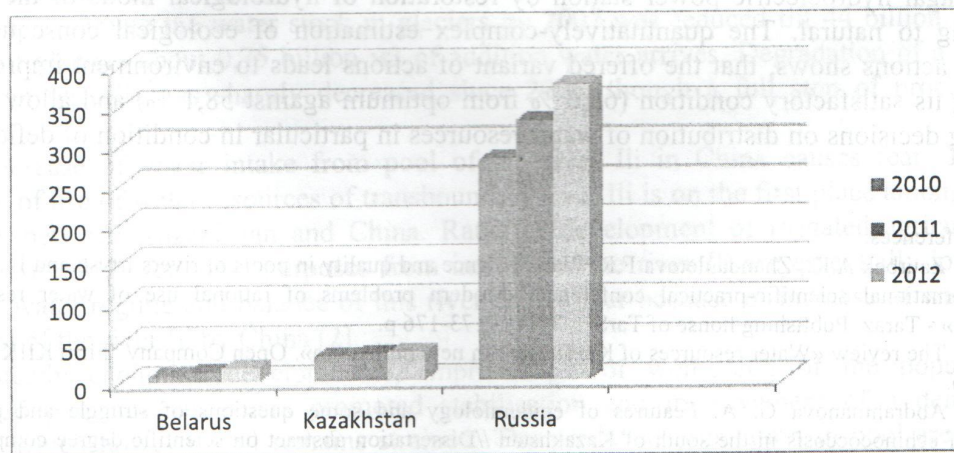
country is realizing a project of modernization breakout. That is why a regional and global integration is so important for Kazakhstan. On the current stage of development the investment integration is the most urgent. At this stage it is highly important to choose the ways to realize a few strategic missions by organizing and strengthening regional integration alliances, satisfying the urgent need of economical progress. Speaking about Kazakhstan this role could be played by the Customs Union and in perspective by the Common Economic Space of Russia, Kazakhstan and Belarus. These countries dispose considerable production resources, a rather high scientific research potential, and a capacious inner market.

The integration potential gives a strong pulse for development of the investment cooperation of Customs Union participating states, in which connection the creation of a common investment space inside the union is necessary, for free attraction of capital and guaranteeing the rights of those who make investments into the economy of Belarus, Kazakhstan and Russia.

In our opinion, it is a largely fair statement that only unified efforts of Customs Union countries could form a complete cycle of science-intensive production with adequate fundamental studies to organize a mass release of a new production [1].

A modern process of integration development is taking place in difficult economical conditions of post-crisis stagnation. In 2012 a GDP growth of the Customs Union countries was 3,5%, while the world economy growth was 3,2% (International Monetary Fund), including the growth of 1,4% in OECD countries, 2,3% in the USA and reduction of 0,4% in Eurozone countries. At the same time, the economic growth of Customs Union participating states remains unstable. In general, members of the Customs Union and the Common Economic Space shows a deceleration of gross domestic product growth to 3,5%, volume of industrial production to 2,5%, cargo transportation to 5,2% (less than 2,3% in Belarus), investments into the fixed capital to 5,8% (reduction of 9,8% in Belorussia), and the reduction of agricultural production to 5,6% related to bad weather conditions (growth of 6,1% in Belarus) [2].

However, the investment process in countries of the Customs Union remains rather sustainable, what could be demonstrated by the dynamic of attracted investments into the economy of Belarus, Kazakhstan and Russian in 2010-2012.



Pic. 1 – Investment dynamic in countries of Customs Union in 2010-2012.

Reference data-base: Statistic Committee of Commonwealth Independent States (billion USD).

In 2012 all investments (including all financial sources) into the fixed capital of Customs Union countries was 429,0274: Belarus – 17,678864, Kazakhstan – 36,188139, Russia – 375,1604 billion USD. Russia is the strongest economy of the Customs Union; investments into Russian economy are almost 20 times bigger than into Belorussian and 10 times bigger than into

Kazakh economy. At the same time the investment growth tempo is the highest in Belarus, it has almost tripled in 2010. In Russia the growth rate remains high as well, while in Kazakhstan the growth rate is the slowest.

Integration process inside the Customs Union gave more possibilities for the growth of mutual investments between state-parties. At the end of 2012, all mutual foreign direct investments between CIS countries and Georgia reached almost 54 billion USD, what represents 32% growth rate in three years. Mutual foreign direct investments of Customs Union countries were not at the same growth dynamic, but they turned to be most intensive in the region: 27 billion USD, or 42% of all mutual foreign direct investments between CIS countries and Georgia.

Table 1 – Investments of Customs Union countries

| Indicator | 2010 | 2011 | 2012 |
|--|------|------|------|
| Accumulated mutual foreign direct investments of Customs Union countries, billion USD | 18.9 | 22.7 | 22.7 |
| Accumulated foreign direct investments from Russia, Belarus and Kazakhstan into other CIS and Georgia economies, billion USD | 23.0 | 25.5 | 27.8 |

Monitoring of mutual investments in CIS countries – 2012. – Saint-Petersburg: Center of Integration Researches, Eurasian Development Bank, 2013 – 56 c., P. 26.

According to the provided information, the Customs Union countries had more actively invested into other CIS countries, rather than inside the Union. In 2012 accumulated mutual foreign direct investments of Customs Union countries didn't show a growth dynamic by staying on the level of 2011.

Russia is the biggest investor among not only Customs Union countries, but although among all CIS state-parties; at the end 2012 – beginning 2013 her total direct investments constituted 44,51 billion USD. Russian companies play a key role for foreign direct investments inside the CIS. In 2012 they represented 82,7% of accumulated capital investments. There were 71 Russian projects among 98 foreign direct investments projects that costed more than 100 million USD. Kazakhstan occupies second place in this rating with 5,61 billions USD of total direct investments. They are followed by Ukraine and Azerbaijan. Belarus has a fifth place with 0,40 billion USD.

Russian MNC largely identify mutual foreign direct investments of the CIS, especially between the trinity of the Customs Union. Telecommunications are the leading industry of all mutual foreign direct investments of CIS countries and Georgia; they represent 16% of total accumulated foreign direct investments. Oil and gas industry, including their transportation and sales, represents more than 10%. Banking and electro-energetic spheres follows them. Among three countries of the Customs Union Russian foreign direct investments into gas transportation and sales in Belarus occupies the first place. Then goes considerable Russian foreign direct investments into the oil and gas production and non-ferrous metallurgy in Kazakhstan.

At the same time, there are few spheres, where Kazakh investors show a high activity; Kazakhstan have considerable capital investments into the hotel-business and constructing inside the Customs Union.

The geography of foreign direct investments from CIS and Customs Union countries is diversified in Kazakhstan, where oil and gas, and capital regions are dominating without particularly standing out. Biggest part of direct investments stays in Mangystau region (24,7%). The second place is occupied by Aktyubinsk region – 18,4%, after them Pavlodar (11,5%) and South-Kazakhstan region (10,3%). Akmola region and Astana city have a similar part of 4,3% each. And, then goes East-Kazakhstan (2,7%), Kostanaj (2,6%), and Almaty region with Almaty city (2,1%). Other regions represent a very little part of investment volume.

The key investor in Mangystau region is “LUKIOL” and some companies from non-ferrous metallurgy in Aktyubinsk region, such as “Mechel” and “Russian Copper Company”.

The next two regions have their own industry specifications: the leading investor in Pavlodar region is "RUSAL" which finance the coal production and "INTER RAO UES" which participate in Ekibastuz GRES-2 Power Station project; in South-Kazakhstan region it is "ARMZ Uranium Holding Co." with capital investments in uranium mines.

The majority of ten biggest investment-projects that cost more than 1 billion USD is provided by Russian investors. Only one Kazakh project is situated at the top-list of attracted foreign direct investments; it is the construction of "Metropolis" trade-center by "Capital Partners Group". However, in 2013 this project was sold to an American investor.

We can although note a considerable difference between direct investment's industrial structures among the Customs Union state-parties. Comparing with common indexes for the CIS, capital movements between Russian, Belarus and Kazakhstan modestly concern telecommunication and electro-energy industries. On the other hand, they concern much more non-ferrous metals production, plant cultivation and some other spheres.

The Customs Union gave a new stimulation to Kazakh-Russian investment cooperation. These two countries have already realized some major investment projects in oil and gaze, mechanical-engineering, space and other spheres. With the deterioration of world economic state of market big investment projects became much more prudent; that is why in 2012-2013 total volume of mutual investments remains relatively small. However, some agreements about few perspective projects between Kazakhstan and Russia were reached; this fact marks a turning-point in a negative tendency [3].

The biggest project of Russian investors in the post-crisis period became the construction of fertilizer production factory in Zhambyl region by "EuroChem" agrochemical company. This project was represented in 2008, but his realization was started only in 2012 when the government of Kazakhstan approved an investment program for 2 billion USD. This new factory will permit "EuroChem" to take a leading position on Central Asia market. On the other hand, Kazakhstan could transform from importer to exporter of nitrogen, phosphor and complex fertilizers.

In the end 2011 "AvtoVAZ" and Kazakh car assembly plant "Azia Avto" have started negotiations on the construction of a car production plant in Kazakhstan. First output of 60 thousand units per year is planned in 2014 (Lada Granta and Lada Kalina). The construction cost is estimated at 400-500 billion USD.

Russian fuel and energy companies operations remain active while their first capital investments began in the second half of 1990th. However, if earlier almost all investments were directed into the extraction segment, the tendencies of current years show increased interest to the oil refining. In January 2013 "Gazpromneft" bought TOO "Bitumnij zavod" [Bitumen plant], situated near Shymkent city in South-Kazakhstan region.

From the point of view of activation of investment cooperation, Kazakhstan and Russia should reinforce the innovation component inside mutual foreign direct investments, diversify their investments by concentrating on the processing and agricultural sectors. Moreover, the geography of mutual investments should be extended by covering not only frontier, but although inner regions of both countries.

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